

THE ARIKARA TRIBAL TEMPLE

The Arikara nation is one of a group of racially and linguistically related tribes or nations collectively called the Caddoan stock. Other nations are the Pawnee, Wichita, Waco and Caddo. The remote ancestors of the tribes of Caddoan stock came from the southwest out of Mexico, or from the borders of Mexico. The Caddoan peoples, no doubt, were superior in culture to any other tribes north of Mexico, and it was through them that the science and arts of agriculture were introduced to the ruder tribes which they encountered in their migration toward the northeast. By their influence the conditions of life among these ruder tribes were ameliorated. The architecture of the Caddoan peoples and many other arts of their life, as well as their civil and religious institutions, were borrowed by these other tribes, which acknowledged the superiority of the Caddoan peoples from whom they derived so great benefits.

It is a curious fact that many of the other tribes have received from observers considerable notice and very favorable comment and recognition for the very traits which they have borrowed from their Caddoan teachers and superiors, but the Pawnee, Arikara and other Caddoan peoples have been left unnoticed and almost unknown. The Caddoan nations are conscious of this slight and sensitive to it, as I have had evidence from comments made by some of my Arikara friends.

Of all the Caddoan tribes, the Arikara have extended their northward migration the farthest. Their latest movement places them as far north as the parallel of 48 degrees north latitude, on the upper Missouri River in the area now comprised in western North Dakota. In all this northward advance into the regions of shorter and yet shorter growing seasons they have still bravely retained their agriculture. By careful plant breeding they have succeeded in acclimatizing in the cold north their corn, beans and squashes, plants all originally of tropic habitat. They have also retained their architecture, pottery and other arts, and have taught them to the tribes whom they had as neighbors.

In the aboriginal life of the Arikara tribe, there was one type of public building, the Holy Lodge, which we might designate as the tribal temple, because its purpose was to provide a suitable place and a structure wherein the public functions connected with religious rituals might be celebrated. This building

was erected at public expense by voluntary contribution of labor by the people in providing and making ready the materials and in erecting it.

The kind of materials, the manner of their preparation, the form of the building, and the method and place of its erection were ritualistically prescribed. The materials used in the construction of the Arikara Holy Lodge and of their dwelling houses likewise were first a framework of timbers, on which pole rafters were laid, next a mat of slender willows, and upon this a thatch of long prairie grass, *Andropogon furcatus*, commonly called bluestem grass, and over all a thick layer of earth.

In August 1926, I obtained instructions relative to the materials, methods and the ritualistic procedure for the construction and dedication of a Holy Lodge of the Arikara, from Four-rings, a priest or custodian of one of the Sacred Bundles of that nation.

In the northward migration of the Arikara nation during the centuries, along the course of that river which we call the Missouri, but which the Arikara called the Holy, Mysterious, or Wonderful River, whenever the advance caused the abandonment of an old town and the building of another, there was the consideration of providing for the location and erection of a new Holy Lodge.

The dictate of the sacred tradition was that the Holy Lodge should stand in the center of the village and that there should be left all about it an open space in which no dwelling houses should be built; and it also directed that a broad open space or plaza should be left in front of the Holy Lodge to give room for the religious processions and dances and dramatic representation pertaining to the celebration of the religious festivals of the seasons.

When a Holy Lodge is built, it should be so planned and constructed that it will represent to our sight and recall to our minds the natural world in which we live, its beauties and wonders and mysteries. It should make us think of the Chief Above and of Mother Earth, and of all the Aides of the Chief Above, which reside in all the four quarters of the world about us. For these reasons the Holy Lodge is built upon a circular ground plan, for when we stand upon the prairie and look about us, we see the earth extended equally far in all directions. And, when we look up we see the sky above equally distant from us at all points, like a bright bowl inverted. Therefore, the wall and roof of the Holy Lodge shall be of the form to

remind us of the sky around and above us.

The main support of the structure shall be four posts to stand in the four quarters of the circle of the lodge. And these four posts are to remind us of the four principal Aides which stand in the four quarters of the world and do the will of the Chief Above in supporting the order and system which we see all about us. Of these Aides the first one stands at the southeast; that is Sunlight, which supplies energy to every living creature. The second is in the southwest, Thunder, the giver of the water of life, without which no creature can exist. The third is in the northwest, Wind, the breath of life, which imparts motion to all things. The fourth is in the northeast, Night, which brings rest and refreshment.

The main posts also have another meaning. They remind us of those creatures, which are our friends and companions and helpers in the world. The first of these friends is Vegetation, the earliest of living things in the world. When we look at the southeast post, we think of Vegetation in all its beauty over the earth, its useful gifts to mankind and the friendliness it showed to our ancestors in the beginning of the world. The second class of friends includes the tribes of animals, of which the buffalo is chief. When we look at the southwest post we are reminded of the wise ways of these friends of ours, and what they have done for us. The third class of friends includes the creatures of the air. When we look at the northwest post, we think of our friends the birds. When we look at the northeast post, we are reminded of the many and great blessings which Mother Corn, our friend and leader, has brought to us, and that she has guided our people from the dim past to the present time and that she will lead us always.

There shall be a fireplace in the exact center of the lodge. Precisely in the apex of the roof, exactly above the fireplace, there shall be a circular opening, which will admit light from the sky and allow the smoke from the fireplace to escape. There shall be a doorway on that side of the lodge, which is toward the rising sun, and at the opposite side of the fireplace, against the wall on the side toward the setting sun, there shall be an altar, where the Sacred Bundles shall be opened when mysteries are celebrated and ceremonies are performed.

When a village has been laid out and the approximate location of the Holy Lodge has been determined, the procedure to determine the exact location and precise outline of its ground plan is as

follows. At sunrise a man stands at the approximate center of the proposed site and faces toward the rising sun. Now, if we think of a line extended from the point where the man is standing and directed forward to the point where the sun is rising, and backward to the point where the sun goes down at evening, we shall have divided the circle of the earth into halves; one-half circle at the right, and one-half circle at the left. Again, a line drawn through the man's stance and extended to right and left in the directions of his two hands until it meets the circle of the earth will also divide that circle into halves; so that we may think of the circle divided into quarters. Now the man turns his gaze from the line toward the sunrise to a point on the ground midway between that line and the line of his extended right hand. At this midway point he directs his assistant to set a peg in the ground, which marks the place where the southeast main post of the Holy Lodge is to be set. As we have already seen, there are four main posts in the structure, one for each quarter of the circle, and the first of these is at the southeast quarter. When this spot has thus been found and marked by the setting of a peg, the man goes to it and turns so that he faces toward the direction in which his shadow lies (west). He sets his heel against this peg and walks in this direction, along the line of his shadow, for a distance of six regular steps. At this point a second peg is set to mark the position of the post of the southwest quarter.

The man then returns to the peg, which marks the place for the first main post at the southeast. Here he once more sets his heel against the peg as a starting point, but this time he faces toward the north and takes six regular steps, and there another peg is set to mark the place for the main post at the northeast quarter. He sets his heel against this peg and faces toward the direction where his shadow lies (west) and takes six regular steps. Here the fourth peg is set to mark the tentative position of the northwest main post. This position is still tentative for the reason that the four posts must form the corners of a perfect square on the ground. To determine whether the point thus found tentatively is correct, or whether it may be a little too far north or a little too far south, the distance along the west line of the square must now be measured from the peg already set at the southwest quarter to this point at the northwest, equalizing the line at the west side with that already drawn at the east side. When this is done, the true position thus determined for the post for the northwest quarter is marked by the fourth peg.

In this manner, the positions of the four main posts have been found and marked. These points mark the corners of a perfect square, which is measured by six regular steps from one corner to another on each of the four sides. Now the center of the square must be found, for there is to be the fireplace, and upon it depends the proper position for several other features of the lodge. In order to find the center a thong is tied to the peg, which marks the place for the southeast post, stretched to the peg at the northwest, and tied. Another thong is stretched from the peg at the northeast to that of the southwest. The point of intersection is the center.

In a circle, a certain distance from the center, outside the space enclosed by the four main posts and circumscribing it, there must be twelve shorter posts to support the sloping wall and roof of the lodge. To find the locations for them a peg is set at the point, which was found to be the center of the fireplace. To it a thong is tied, which is then stretched in a straight line to the peg which marks the spot where the southeast main post is to be, and a distance of three steps beyond it. At this point, a peg is set to mark the position of the first one of the circle of shorter posts, which will support the wall. Then the line is extended again one-step in a direct line and another marker is set. This shows where the foot of the slanting wall will rest at the southeast. This last point will be the start of the outside circular line, which is the base of the lodge wall.

The method of finding the locations of the twelve outer posts is as follows. A median line is drawn through the lodge from east to west, through the middle of the doorway, the center of the fireplace and the middle of the altar. It will be found that the distance from this line at the midpoint of the doorway to the southeast main post is a measure of six steps. It will be observed also that the arc subtended by this line is one-half of the quadrants of the circle; therefore the full quadrant would be measured by twice six, or twelve, steps. Since the number of posts in the circle is twelve there will be three posts in each quadrant of the circle. This will give a space of one third of twelve steps (the measure of the quadrant), or four steps between each two of the outer posts. So to locate the position of these posts a thong as long as the radius of the lodge is attached to the peg, which marks the center of the fireplace and extended to the first outer post at the southeast, as already found. From this point, the end of the thong is carried four steps in the direction

of the sun's movement, that is, to the left, and there is marked the location for the second post of the circle, and so on round the circle until the location of each of the twelve outer posts has been marked. When the approximate locations of these posts have been found in each quadrant by this method they are definitely fixed by equalizing the distances between the positions of the posts.

The circular line, which is to be the base of the sloping wall of the lodge, is found by the use of a long thong attached to the peg, which marks the true center of the lodge. The thong is carried in a direct line from this peg to the location of the southeast main post and to that of the first one of the twelve wall posts, which is three steps beyond the main post, and then it is carried directly on to a point one-step farther in a straight line. At this point, a peg is set as a marker for the point of beginning of the base of the wall. Then the man walks to the left entirely round the circle of the lodge, back to this place of beginning, setting markers all the way to indicate where this wall circle is to be, at all points equally distant from the true center, as measured by the length of the thong from the center of the place of beginning of the wall.

After the circle has been found for the foot of the sloping wall, and also the location of the twelve posts which support the wall, the next thing is to fix the exact location of the two doorposts, one on each side of the doorway, which is on the side of the lodge toward the sunrise. In order to exactly locate the doorposts, the median line of the doorway must first be found, which is done in the following manner. A man again takes in hand the thong by the use of which the circle of the wall was found, and having it still attached to the peg which marks the true center of the lodge, where the fireplace is to be, he takes position so that his shadow at sunrise will fall in line with the peg at the southeast, showing the location for the first of the four main posts. This position is marked. Then he goes, still holding the thong attached to the true center, and takes position so that his shadow at sunrise will fall in line with the peg which marks the position of the northeast main post. Now, with a thong he finds the distance between these two points, and he brings the two ends together. It will be seen that the doubled thong will reach just midway between these two points. The point thus found is exactly in the median line of the doorway. We locate the two doorsteps by reference to this median point. A man takes one and one-half steps to the south, and the point in the circular line of the wall which is even with this measure is the location for the south doorpost. Then

a distance of one and one-half steps to the north, and that point in the circular line of the wall which is even with this measure is the location for the north doorpost. Thus we have found the location for the two posts of the door, and the width of the door is the measure of three regular steps.

The entrance to the lodge is through a vestibule, which is walled and roofed in the same way as the entire lodge. After we have already found the locations of the two door posts, the distance between, which is three steps, the dimensions of the vestibule are found in the following manner. From the peg, which marks the location of the south doorpost, a man takes three steps outward, and there sets a peg to mark the location of the post for the south side of the entrance to the vestibule. Likewise, he finds the location of the post for the north side of the entrance by taking three steps from the north doorpost. So, we have the floor dimensions of the vestibule, a perfect square, three steps long and three steps wide. Its height is equal to its width and the roof is flat, so that the vestibule is a perfect cube.

The four main posts shall be of seasoned driftwood, which has been reclaimed from the channel of the Holy River. They shall have a strong fork at the top to hold the heavy joists or cross-timbers to support the roof. The length of these posts shall be six regular steps and a good arm-reach more, measured from the fork to the base, for the holes into which the posts are set shall be dug one arm-reach in depth.

The four cross-timbers, which are to be laid in the forks of the four main posts, shall be of new cottonwood, peeled and seasoned. It will be observed that each of the four quadrangular planes bounded by two main posts, a cross-timber and the plane of the floor is a perfect square, whose length is six regular steps and whose height is equal to its length. The space enclosed by the posts is likewise a perfect square whose length and breadth are each a measure of six steps. Furthermore, the plane enclosed by the four cross-timbers is a perfect square equal in its dimensions to the square on the floor enclosed by the four main posts, and these six planes enclose the volume of a perfect cube whose dimensions are equal to six steps.

The twelve shorter posts, which stand in a circle to support the top of the sloping wall of the lodge and to help support the roof, shall be newly peeled and seasoned cottonwood. They shall be in length three regular steps and one arm-reach more, measured from the fork at the top to the base of the post, for the holes into which they are set shall be dug one arm-reach in depth. The cross-timbers to be laid in the forks of

these posts shall also be newly peeled and seasoned cottonwood. The timbers for the construction of the lodge shall be cut and prepared in the winter previous to the summer in which the lodge is to be built. The rafters to support the roof shall also be newly peeled and seasoned cottonwood. The timbers shall be cut and carried and set up by men; the peeling of the bark is to be done by women.

The rafters must be cut to measure so that the base shall rest securely on the lower joist, while the rafter crosses the upper joist and extends above it to the circumference of the opening for the skylight at the apex of the roof. The method of finding the location of the circumference of the ventilator skylight is as follows. First a ring is made of slender sand-bar willows, rolled and twisted up like a rope in mud and grass. It is made of the same circumference as the ventilator skylight opening is to be. Four long thongs are tied to it at equal distances from one another. These thongs are drawn over the forks of the four main posts in such manner that the ring is suspended over the fireplace in an exactly horizontal position. A measuring pole is now run up from the lower joist until its upper end is in vertical line with the suspended willow ring, as sighted from a point directly below at the edge of the fireplace. When the length has been thus determined, the pole is marked at the base to be cut off so that it will just rest safely and firmly on the lower joist. This pole will be the measure for cutting all the rafters.

The support of the circular wall of the lodge is of peeled cottonwood slabs, all of equal length and as nearly equal in width as possible. The length of the slabs is found by attaching a thong to the top of one of the wall posts and then stretching it slanting down to the ground at a distance of one step from the base of the post. A pole made of this length is the measuring stick by which are cut all the timbers which are to be split into slabs for the wall. Of old, a wedge for splitting the timbers was made from the heavy thigh bone of the buffalo. The large round head of this bone, which fit into the socket of the hip joint, formed the head of the wedge, and the lower end was made into a wedge shape by grinding on a rough stone. A heavy wooden maul fashioned from a burl of a tree was used to drive the wedge in splitting the timbers.

These slabs were then set in place side by side with their flat split sides inward, their bases on the ground on the circular line marked out for them, and their tops resting against the cross-timbers, or joists, which were laid in the forks of the twelve wall posts. The slabs were thus set closely together all the way

round.

The altar shall be at the west side of the lodge, against the wall. The median point of the altar is found by projecting a line from the median point of the doorway, which has already been found in the manner described, through the point in the center of the fireplace, the true center of the lodge, to the wall at the west. At this point a man stands and fully extends both arms, the double reach of which determines the length of the altar from the south front corner to the north front corner. The width of the altar, that is, the distance from its front line back to the base of the lodge wall, is determined by the space required for a man to sit on his knees and heels and have room in front of him to lay out the Sacred Bundle.

The altar is built of puddled clay mixed with short fine grass to temper it. The tempered clay is built up and made smooth with the hands; it is level on top. The height of the altar is the length of the hand from the wrist line to the tip of the middle finger.

There is a post at each of the two front corners of the altar. They are of peeled and seasoned cottonwood; their height is the same as that of the twelve wall posts. The circumference of each altar post shall be exactly the circumference of a circle made by a man in joining the thumbs and middle fingers of both hands. Their tops touch the joist or cross-timber, which rests on the two wall posts of this section of the lodge wall.

During the celebration of mysteries in the Holy Lodge, such as the Mother Corn ceremony, or that of the Holy Cedar Tree, there is placed upon the ground at the base of the south post of the altar a tobacco cutting-board made of the shoulder blade of a buffalo, and on this are laid a pipe and some Arikara tobacco (*Nicotiana quadrivalvis*). At the base of the north post of the altar is placed a buffalo skull facing the fireplace, the doorway and the sunrise.

To set the four main posts the holes are dug to the depth of one arm-reach. The first post to be set is at the southeast, the second at the southwest, the third at the northwest, and the last at the northeast. When the hole is made ready, a post is carried and placed with the base at the mouth of the hole. Then a pipe is filled and lighted, and smoke offerings are made toward all four quarters, to Mother Earth and to the Chief Above. Then there is placed in the bottom of the hole an offering which consists of a small bit of an

enemy scalp, a pinch of Arikara tobacco and a small morsel of food. When all this has been done, the tall heavy post is erected and slid into place. Then the earth, which has been removed from the hole, is replaced and firmly tamped. Each of the other three main posts is set with similar ceremony.

After the four main posts and the twelve wall posts have been set, the joists are lifted up and laid in place in the forks of the posts, and then the roof timbers or rafters are put in position. The rafters are laid close together. All the timbers are securely bound in their places with rawhide thongs.

After the rafters, or roof timbers, are cut and laid in place and secured, a layer of willow mats is laid on them and bound in place with rawhide. The women go down to the low ground near the river and take their knives and cut the slender sand-bar willows (*Salix fluviatilis*), which grow about the thickness of the thumb. They transport these slender willows in bundles, such as they could carry in their burden-straps, on their backs to the place where the Holy Lodge is in process of building. There the willows are loosely plaited into mats, so that they can be laid on the roof timbers and tied there so as to cover the entire roof surface.

After these operations a thatch of a tall species of grass, *Andropogon furcatus*, is laid over all. When the grass thatch is secured, the whole structure is covered with earth to a sufficient thickness to prevent the rain and snow water from washing it away. For this purpose, the men dig the earth with their knives and bone spades, and carry it on their backs in buffalo hides. Thus the earth is banked up firmly against the wall and over the entire roof. When the structure is completed, and the earth covering well settled, the grasses and flowers grow over it in a friendly manner. So, our kind Mother Earth, the friendly Vegetation, and the Holy Lodge are not disunited. We have seen in a previous paper¹ that, when man first came upon earth and was ignorant and bewildered, and knew not yet what was good for his use, and when a Mysterious Voice was heard which gave him welcome into the world of living beings and spoke words of encouragement to him, he learned that it was the voice of Vegetation which thus spoke to him.

The circular fireplace in the true center of the lodge is prepared by digging out all the soil down to

¹Gilmore, M. R., "The Arikara Book of Genesis," *Pap. Mich. Acad. Sci., Arts and Letters*, 12: 95-120.

the hard subsoil, with bone knives made from buffalo ribs. Both men and women work at preparing the earthen floor. With their knives, they cut off at the roots all vegetation, which is gathered up and carried out. The women bring water from the river in water bags and sprinkle the floor. Then on their knees, they even the surface and smooth the floor by hand.

The door of the lodge is made of network, or mat, of sand-bar willows in a frame which is hung from the lintel, to which it is attached by rawhide thongs, so that it can swing inward or outward as one enters or leaves the lodge. The willow matwork is wattled with clay well tempered by puddling and mixing with fine grass. The wattle work of the door is smoothed by hand.

When the structure of the Holy Lodge is finished, the people are called together for its dedication. Two important functionaries on any public occasion are the waiter and the herald. The official station of the waiter is a place near the southeast main post; that of the herald is near the one at the northeast. The master of ceremonies for any function may be any man who is a custodian of Sacred Bundles, of which there were originally twelve, one pertaining to each of the twelve villages of the Arikara nation. The waiter and the herald must be in attendance first and in good time to make everything ready. The waiter must see that fuel is available, that a fire is laid in the fireplace, and that pipes and a supply of Arikara tobacco (*Nicotiana quadrivalvis*) are provided. He must also see that the food for the feast is made ready. He prepares and fills and tends the pipes for all the smoke offerings. He and his assistants serve the food for the feast. The waiters are chosen for their dignity and good standing in the community, since their office is highly honorable.

On the morning of the day of dedication, the herald comes out and sets a ladder against the wall on the north side of the vestibule. This is a cottonwood timber with steps cut in it. By it he mounts to the roof and takes a sitting position there, just above the line between the southeast and the southwest main posts. So sitting, facing toward the sun and down the stream of the Holy River, he addresses all the powers and elements of the earth in the drainage basin of the great river and all living beings in the valley, proclaiming to all that this Holy Lodge is ready to be dedicated. He calls upon the sun and the earth, the rocks and hills and valleys; upon all vegetation, the trees and grass and flowers; upon the waters, the springs

and streams and lakes; upon the buffalo and all the animals; upon the winds, the storms and the gentle breezes; upon the birds and other flying creatures; upon the night, the time of rest; and upon Mother Corn, our leader. He begs all these mysterious and wonderful beings to look upon the labor and sacrifice of the people in the building of this Holy Lodge, and to have compassion and give their assistance. He proclaims that today smoke offerings and a feast are to be given and this Holy Lodge is to be consecrated to all the powers of the four quarters of the earth.

Then he turns to the southwest and makes a similar proclamation, and likewise to the northwest and the northeast. Then he descends and goes into the lodge for a while. As preparations in the lodge have progressed, he goes out again and ascends to the roof as before, and again makes proclamation to the four quarters, but now he announces that the door is open, the fire is lighted, the pipe is before the altar and the food is cooked. He bids the people to get ready and to come in. Then he descends, goes back into the lodge and makes smoke offerings toward all the four quarters about the circle of the fireplace.

After this, he comes out and ascends upon the roof the third time, and makes the same proclamation in the four quarters except that this time he announces that the mysterious powers are now present in the Holy Lodge. He descends and goes inside and makes smoke offerings again. Then he comes out and ascends upon the roof the fourth time and announces this time, not to the mysterious powers, but to the people, telling them that all is ready, and bidding them to come in and to bring their children and their aged and feeble.

Now the people hasten to come and seat themselves on the floor of the lodge arranged according to their proper positions in the tribal organization. The Sacred Bundle which is to be used on this occasion lies open upon the altar with all its sacred relics there exposed in proper order, and its custodian, who is the head priest or master of ceremonies, is seated back of it and his four assistants with him, two at his right side and two at his left. The relic pipe from the Sacred Bundle has already been filled with Arikara tobacco and rests in its place on the south side before the altar. On the opposite side before the altar lies a bunch of wild-sage (*Artemisia gnaphalodes*), with its tip toward the altar and butt toward the doorway.

When all things are in readiness, the head priest rises and makes a short oration in which he

announces to all the mysterious powers that the Holy Lodge has been built and prepared by the people and that it is now dedicated, and he invokes the blessings of all the mysterious powers that all may be in order within it, as all the world outside is in order.

The waiter lights the pipe and hands it to the priest, who receives it and announces that the time has come to offer smoke, praying to all the powers of the four quarters for their protection of this Holy Lodge. He declares that our own bodies are made an oblation with the smoke of the pipe, and offers the pipe in turn toward all the four quarters, first to the southeast, then the southwest, northwest and northeast, praying the blessing of all these powers. Then he empties the pipe before the altar and sits down again in his place back of the center of the altar.

Then his four assistants receive the pipe in succession and make smoke offerings to the four quarters, beginning with the southeast. Each one, after making the offerings, returns and empties the pipe before the altar and sits down again in his place, and the next one in order performs the act. The first takes his position at the southeast post to make his offering, the second at the southwest, the third at the northwest, and the fourth at the northeast. Last of all the head priest receives the pipe and carries it round the fireplace, making smoke offerings in all the four quarters, beginning at the southeast main post, and then at each of the other three in turn, ending with the northeast main post. He then empties the pipe formally before the altar, and lays it in its place of rest again at the south side of the space immediately in front of the altar.

After these acts, the food for the feast is blessed. For this purpose each of the priests in turn, beginning with the one who represents the southeast quarter, and continuing with those representing the southwest, the northwest and the northeast, takes a pinch of food and places it at the base of each of the four main posts, beginning at the southeast. Finally, the head priest likewise makes these food offerings in the same manner.

When all this has been done, the herald goes out and ascends the roof and proclaims to all the quarters, beginning with the southeast, that Mother Corn has made smoke and food offerings and that now this lodge is consecrated and holy. He announces that those who wish to make a sacrifice may come with

their gifts and bring their children that they may be blessed. So, the people begin to come up before the altar with gifts, which are usually made by parents in the name of a child. They hand them over to be laid in a heap before the altar at the south side, and present the child to the priest, as the putative giver of the gift. The priest stands before the altar facing toward the doorway, and holding in his hand the bunch of *Artemisia* before mentioned, turns the child to face the doorway, and with the *Artemisia* brushes it down the right side, the back, the left side and then the front, praying that it may be cleansed of all fault and kept from error, and may ever walk in the right way of life. The same ceremony is made with each giver of an offering.

When no more gifts are brought to the altar the people all seat themselves again in their places. The food is now announced to be served. The people set their bowls and cups before them and the waiters pass along and distribute the food and drink. After the people have finished eating, but before they have been dismissed, the head priest rises and takes the bunch of *Artemisia* in his hand and passes by the north side of the lodge to the side of the fireplace toward the doorway and goes to the southeast main post. He brushes it on its four sides, beginning with the south side. Then he brushes each of the other main posts likewise in their proper order, finishing with the one at the northeast. When he has finished with the four posts, he likewise brushes the doorposts, first the one on the south side of the door, then the one on the north. Then he walks back by way of the south side of the lodge to the Holy Place. With the bunch of *Artemisia* he brushes the altar post, which stands on the south side of the altar, then the one on the north. After this is done, he likewise brushes the wall posts, first those on the north side of the lodge, beginning with the one nearest the altar; then he crosses the doorway and brushes those on the south side of the lodge, beginning with the post nearest to the door and ending with the one nearest to the altar. After all the twelve wall posts have been brushed with *Artemisia* he lays down the bunch of *Artemisia* again before the altar, as it was at first, with the butt toward the doorway.

Then he speaks and says that the people have brought these gifts which are before the altar and have gladly given them to the powers of the earth according to custom. And now since the powers have been pleased with these gifts and with the food and the smoke offerings, they now in turn have given the gifts to him.

Since these goods are now his own personal property, he can dispose of them as he will. Therefore it is his wish to distribute them to those who may have need of them. Then he calls out the names of the persons to whom he intends to give them, the poor, the sick and the old, widows and orphans and other unfortunates. As their names are called the recipients, or their representatives, come and take them away. When the goods have been distributed, the people are dismissed, and they rise and go home.

Arikara Tribal Temple

SUPPLEMENTARY ACCOUNT OF THE CONSTRUCTION
OF THE ARIKARA TRIBAL TEMPLE

To the forging account of the construction of the Arikara tribal temple as told by Four-rings I wish to add as a supplement the substance of some information upon the same subject contributed by an Arikara named Frank Hart. Mr. Hart's information agrees essentially with that given by Four-rings, but he uses different units of mensuration and somewhat different methods of determination of points, angles, lines, curves and planes. He gives equivalent measures, however, so that units of one may be translated into the other. His description of the main timbers and the methods of their placement also differs somewhat from that by the other informant.

Frank Hart, never having attended the white man's schools, speaks no English, but he has sent his children to school so that they may be prepared for their necessary contact with white people, and he has given them good home training. He is a competent farmer and a worthy citizen. He is only a few years past sixty, but he has made research into the ancient ways of his people, and he is conservative of their lore and customs. From long acquaintance with me, he understands my purpose and methods, and he is desirous of giving full and cordial cooperation to preserve as accurate and full a record as possible of the ancient culture of the Arikara.

In giving me the following information he took the trouble to go with me to a suitable situation on the prairie and make the measurements and stake out upon the ground the plan of the Sacred Lodge.

He begins with the location of the fireplace, which was the center of the lodge, by which all other parts are oriented. This point was marked by the setting of a peg. The diameter of the fireplace was the measure of the double-arm reach of a man from the finger tips of one hand to the finger tips of the other. To find four points in the circumference of the fireplace he first lay prone with head to the south, the center point under the middle of his chest and arms outstretched east and west. A peg was set at the fingertips of his left hand to mark the east rim of the fireplace, and a peg at the fingertips of his right hand to mark the west. Then he likewise lay with head to the east and two points in the south and the north were similarly marked. He said that, as we see the figure of the circle dominant in everything, so in the plans of the Sacred Lodge (see Figs. 1-2) the fireplace is circular, the floor of the lodge itself is circular, the posts of the lodge are circular in cross-section, and the mystic societies sit in circles ranged on both sides of the great circle of the lodge. The circumference of the fireplace was marked out by drawing a circuit with a thong of the same length as the radius, which was the distance from the point first determined to one of the pegs marking the edge of the fireplace.

Next, the locations of the four pillars or main posts to uphold the roof were determined. The southeast main post was the first located, then the southwest, the northwest and the northeast in that order. The position of the main post at the southeast was at a distance of two double-arm reaches (or four steps) from the southeast edge of the fireplace. Similarly, the positions of the other three main posts were determined by measurement from their respective arcs of the circumference of the fireplace.

The doorway was in the middle of the east quadrant of the circumference of the lodge. In order to locate it exactly, and also the altar, which was exactly opposite the doorway and at the west side of the circumference of the lodge, a median line was drawn from east to west through the center of the fireplace. We already have this line through the fireplace, namely, the diameter drawn from the point in the east side of the circumference, through the point marking the center, to that in the west side of the circumference. Now if this line be projected sufficiently far to the east and the west it will run through the middle of the doorway in one projection and the middle of the altar in the other. On the eastward projection of the line, at a distance of three and one-half double-arm reaches (seven steps) a peg is set to mark the middle of the

doorway. The width of the doorway is one double-arm reach (or the length of a man), so that we measure one half this distance on the south side of the middle point and we have the location of the south doorpost; a like measure on the north side gives the location of the north doorpost.

Now we must find the location of each of the twelve shorter posts, which stand in a circle supporting the sloping wall of the lodge and, together with the four main posts, uphold the roof. The first to be located is that at the southeast. It is found by the use of a thong attached to a peg, which marks the center of the fireplace. This thong is extended to the point found in the middle of the doorway. The end of the thong was carried to the left, the direction in which the sun moves, a distance equal to three double-arm reaches, or six steps, from the middle of the doorway. This point will be found to be in alignment with two other points already found, namely the point at the center of the fireplace and the point of location of the southeast main post. Since this distance is one half of the quadrant, the full quadrant will measure twice that distance, or twelve steps. As there are twelve posts in the circle of the lodge there will be one fourth of twelve posts, that is, three posts in each quadrant. Therefore, the distance between these posts will be one third of twelve or four steps. The other posts of the circle are then located by means of the thong which measures the radius of the lodge circle. This is carried to the left, a peg being set at each measure of four steps to mark the locations of all the posts.

After the positions for the twelve posts of the circle are found the position of the altar was located. Mr. Hart walked to the west side of the lodge circle and there laid himself prone upon the ground with his head to the south, his body at right angles to the median line, which was drawn east and west through the lodge circle, and with half his length on the south side and half on the north side. The altar was a square of the measure of a man in each dimension. Thus a peg set at the crown of his head and one at the soles of his feet will mark the limits respectively of the right and left sides of the altar. The distance from the front to the back of the altar was measured by lying prone on the median line of the lodge with the soles of his feet at the intersection of this line with the lodge circle, and a peg was set in the median line at the crown of his head. Or, these measures might be taken by means of the double-arm reach, for a man's double-arm reach is equivalent to the height of his body. The height of the altar was the length of the hand from the tip of the

fingers to the wrist joint. The altar was constructed of puddled clay tempered with the blades of bluestem grass (*Andropogon furcatus*).

The posts of the structure, both the four main posts and the twelve outer posts, were of seasoned driftwood from the Missouri River, and the holes in which they were set were dug to a depth of one arm length. The twelve outer posts were of the length of one and one-half double-arm reaches above ground, and had a circumference equal to the circle of a man's two arms joined at the fingertips. The height of the four main posts was the measure of three double-arm reaches above ground, and their circumference was somewhat greater than a man could enclose in both arms. Both the main posts and the outer posts were made flat on top. The joists, which rested on the outer posts, were cut at the ends in such manner that they fitted together upon the tops of the posts. The joists, which rested upon the four main posts, were not thus cut to make their ends fit to each other on the tops of the posts, but one pair was laid upon the tops of the posts and the ends of the second pair were laid upon the ends of the first pair. They were hewn in such a way as to lie flat and firm in place. Thus, the first joint was laid with one end resting upon the top of the southeast post and the other end upon the top of the southwest post. Next, a joist was similarly laid upon the tops of the northeast and the northwest posts. Then the east joists was laid upon the east ends of the south and north joists as they rested upon the tops of the pillars. Likewise, the west joist was laid upon the west ends of the first two.

A vestibule was built at the door of the lodge. The doorway was three steps wide, and the vestibule was extended to an equal distance from the line of the doorway, thus making its floor area a square. The roof of the vestibule was flat and of equal inside area with the floor. These dimensions of length and breadth were equal and of the same measure as the height of the wall posts of the lodge, one and one-half arm reaches; the vestibule formed a cube.

As a support for the earth covering of the sloping wall of the lodge, slabs were set up with their tops resting against the joists which were laid upon the tops of the twelve outer posts. These slabs were close-set, with their edges touching. They were set slanting with their bases at a distance of one double-arm reach, i.e. the length of a man, from the bases of the posts.

The timbers of the structure of the lodge were cottonwood. The posts were of cottonwood logs of driftwood from the floods of the Missouri River. The other timbers were of cottonwood, cut, peeled and seasoned. The rafters were laid very close together, their bases set on the lower joists, resting upon the upper joists and their tapering length extending upward toward each other at the apex of the dome, being cut to leave there a circular opening whose circumference was equal to the circumference of the fireplace and directly over it. This opening in the dome of the roof provided ventilation and a place of escape for the smoke from the fireplace. It also gave illumination within the lodge as a skylight.

The rim of this skylight was made by twisting together sandbar willows, together with puddled clay tempered with blades of bluestem grass into a rope-like circular frame of exactly the same circumference as the fireplace. This circular willow and mud frame were tied to the upper ends of the rafters in a horizontal position precisely over the fireplace.

All the timbers of the structure were bound in place with thongs. Mats were made of sandbar willows woven together with thongs, and these mats were bound upon the rafters over the whole roof to hold the thatch of dry bluestem grass. Over all was laid a thick covering of earth, so that when finished the house resembled a hemispherical earth mound. The men transported in buffalo skins the earth, which was used upon the walls and roof, using spades made from shoulder blades of the buffalo for digging. Bluestem grass was used in the roofing because it was found by experience that this species of grass resisted mold, while other species would mold and decay.

The door of the lodge was made of woven sandbar willows and wattled with puddled clay tempered with blades of bluestem grass. This door was suspended from the lintel by rawhide thongs, so that it could be pushed open for entry and exit.

The fireplace was dug to a depth such that the original level of the ground would be at the waist of a man standing within it, and the earth excavated from the fire pit was laid in a circular ridge about it until a man standing within could just see over it. New fire was laid for the first ceremonies in springtime each year. The ashes were removed, but accumulated from the successive fires of the ceremonies of spring, summer and autumn, when the ceremonies of the harvest home, the thanksgiving for the full ripe harvest of

all the crops, concluded the agricultural festivals of the Arikara year. The old ashes were removed the next spring when preparation was made for the spring ceremonies.

During the celebration of the public ceremonies, one of the Sacred Bundles of the tribe was laid open upon the altar, and all the others were suspended upon the west wall, back of the altar. The custodian of the Sacred Bundle which was opened was the master of ceremonies. He sat upon the altar back of the open Bundle, with his four assistants, two on each side of him. The eight mystic societies sat in their stations, four on the south side and four on the north side of the lodge, to right and left of the altar, that is, in the southwest and northwest quadrants of the circle of the lodge. On the south, beginning with the one farthest from the altar, there were the Ghost, the Deer, the Buffalo, and the Cormorant societies. On the north side of the lodge in like order there were the Bear, the Sioux, the Owl and the Duck societies. It is said that the principal societies are the Ghost and the Buffalo, the Bear and the Owl, and that in very ancient times there were only these four, two on each side of the lodge.

Near the southwest main post was the station of the Fire Chief or Chief Waiter. His was an honored and dignified position, and his duties were to tend the fire, see to a supply of fuel, fill and serve the pipes, see to the serving of the food at the feast, receive the gifts and sacrifices for the altar from the donors and assist the priests in other ways as required.

The herald had his station near the northeast pillar. His duties were to make all the public announcements. Most of the time he was seated at this post, but when he made the announcements he mounted upon the roof and called aloud from a position there just above the northeast main post. A short log was placed at this position on the roof for his use as a seat.

Thus was the Sacred Lodge constructed and such were the arrangements for the celebration of the ceremonies in the olden times.