

Article VII.—SYMBOLISM OF THE ARAPAHO INDIANS.

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During the past summer the writer undertook an investigation of the Arapaho Indians, now settled in Oklahoma Territory, on behalf of the American Museum of Natural History. The means for this expedition were provided through the generosity of Mr. Morris K. Jesup. Some of the results of this investigation are contained in the following paper. The Arapaho Indians speak a language belonging to the Algonquin family. In culture they belong to the Plains Indians.

In investigations of the art of primitive tribes from different parts of the world, it has several times been shown that geometric ornaments that are apparently merely decorative are conventionalizations and abbreviations of pictorial designs. The same is true among the Arapaho. Even what seems most purely ornamental is readily shown, by inquiry, to be realistic. It can be stated that every decorative design of the Arapaho is also pictorial. This is confirmed by the direct statements of the Indians themselves.

Primitive pictorial art, setting aside its purely decorative aspect, may be said to consist of the reproduction of a few salient features of the object to be represented. Two tendencies can cause a change from this state. There may be a seeking after fidelity to nature. This will cause the art to be more realistic, more imitative. Or there may be a tendency to further emphasize and exaggerate the salient features; that is, to think the object, instead of see it. This will cause the art to be more symbolic. The first tendency develops into art as we know it; the second ultimately into writing.

Arapaho art is strongly imbued with the second of these, the symbolic tendency. This, its most marked feature, is the subject of this paper.

The media of this symbolic art are embroidering with colored beads, quills, or fibres; carving in outline or bas-relief; and painting. Pottery and textile fabrics do not occur. There is practically no three-dimensional carving (sculpture). In appearance

the art resembles closely that of the Siouan tribes. Its decorative value is mediocre.

To discuss the symbolism of Arapaho art, it will be convenient to classify the symbols into representations of animals, of plants, of physical nature, of objects made by man, and of abstract ideas.

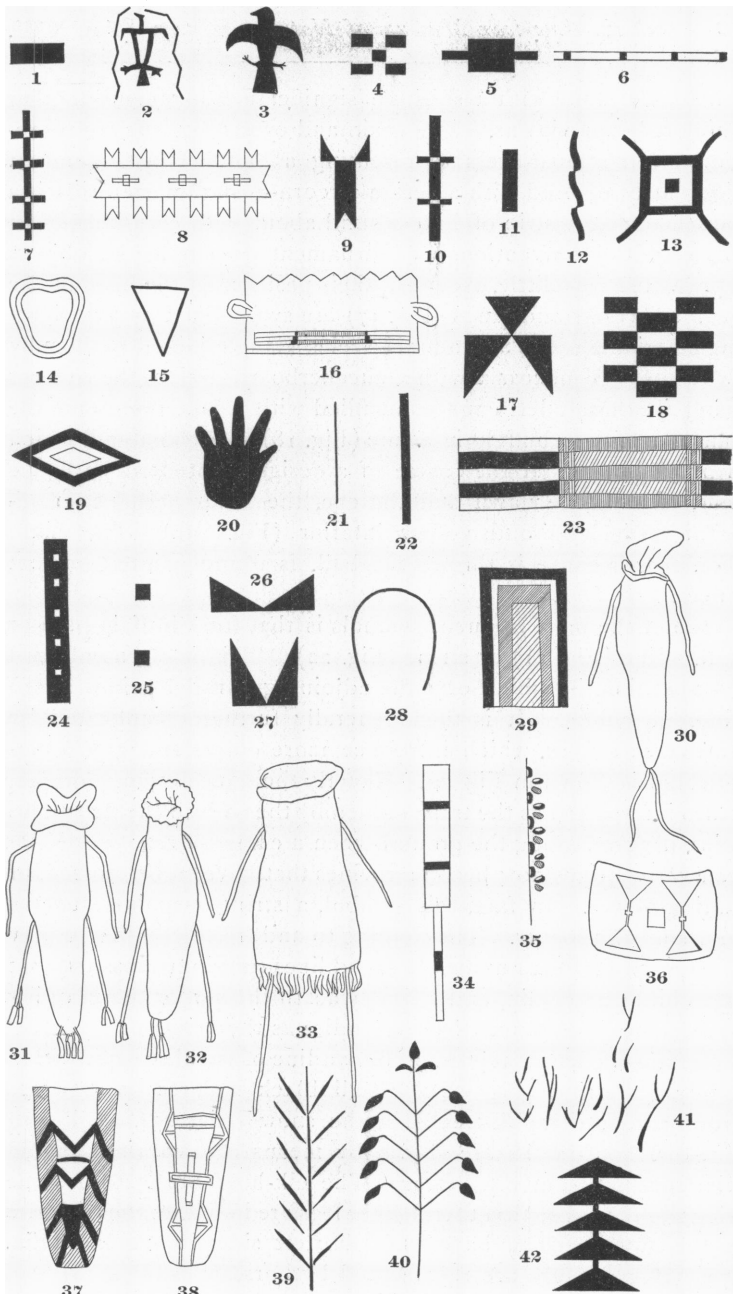
Designs of animal origin, generally of preponderating frequency among primitive races, are abundant among the Arapaho also, but they by no means dominate.

One would expect to find the buffalo, which provided practically all the means of life, giving rise to many of the symbols in use. This is the case, but representations of the animal itself are rare, and they are reduced by simplification to a rectangle of solid color (Fig. 1).¹ It will be seen later that this practically coincides with the symbols for the earth and for abundance, and this coincidence is evidently the cause of the scarcity of decorations representing the animal itself. Of birds, the thunder-bird or eagle (Fig. 2), and the crow (Fig. 3) occur. They are represented in much the same way as on our silver coins. The head is either turned to one side or stretched forward. The thunder-bird is characterized by lightning proceeding from his eye, while a line from his beak or his tail denotes the rain which he causes. The turtle is represented by five small squares arranged in quincunx (Fig. 4), or by a rectangle with two projections (Fig. 5). On certain dancing-belts a strip of hide wound with corn-husk (Fig. 6) represents a snake. The centipede (Figs. 7, 8), the crayfish or scorpion ('crab') (Fig. 9), the dragon-fly (Fig. 10), caterpillars (Fig. 11), maggots or grubs (Fig. 12), and the spider (Fig. 13) are found chiefly on foot-wear.

Other animal forms are found executed more realistically on certain paintings or carvings. These animals are the buffalo, turtle, weasel, kit-fox, deer, antelope, fish, crow, thunder-bird, magpie, bull-bat, duck, etc. These representations, however, are scarcely conventionalized enough to be regarded as symbols, and are really pictographs.

Separate parts of the body, animal and human, are not infrequently represented. The heart is roughly triangular in shape (Figs. 14, 15). It is sometimes represented in place in animals,

¹ A list of the catalogue numbers of the specimens on which the decorations here discussed are found is given at the end of this paper.



Figs. 1-42. Symbols of the Arapaho Indians.

sometimes alone with a spiritual signification analogous to that which it bears with us. The brain and eyes (Fig. 16) are represented (on a head-dress representing a buffalo) by a band of hide partly covered with a design of corn-husk; on each side is a loop made of a strip of hide wound about with corn-husk. In this case the conventionalized ornaments resemble the objects represented very little, except in their position on the head of the wearer. Heart and lungs (Fig. 17) are symbolized by two right-angled triangles and a smaller isosceles triangle joined to them by its vertex. A moccasin with a checkerboard design, the squares being alternately left empty and filled with beads, represents the rough interior of buffalo intestine (Fig. 18). A rhomboid, which ordinarily occurs at the centre of a design painted on parflèche bags, is both the navel and the eye, the latter perhaps on account of its red and yellow interior (Fig. 19). The hand (Fig. 20), because it throws the ball, is found painted on that object.

One of the most frequent symbols is that for a buffalo path or trail, a line (Fig. 21) or stripe (Fig. 22). This is often enlarged by repetition, in which case the adjoining parallel stripes are of different colors. It is then generally further complicated by transverse stripes, which introduce more colors and give a pattern that is shown in Fig. 23. Exactly the same design, however, is also interpreted as the trails caused by the ends of the tent-poles being dragged along the ground when a camp moves; while the transverse stripes now become ravines that have to be crossed, or halting-places. In fact, this symbol, a stripe or a line, denotes any path whatsoever. The running to and fro of children at play is represented by a number of broad lines running across the foot of a child's moccasin, and a line beneath the sun or the morning star denotes the course of these bodies as they rise.

Buffalo-tracks are represented by a line of small squares within a broader stripe (Fig. 24). Small black squares on a white ground denote rabbit-tracks in the snow (Fig. 25). Elk and antelope hoof-marks are shown by means of two right-angled triangles joined at one vertex. The elk-hoof (Fig. 26) has the triangles placed so that their longer legs are in a line; the triangles in the antelope-hoof have their shortest sides in one line (Fig. 27). Horse-tracks are represented by horseshoes (Fig. 28), and

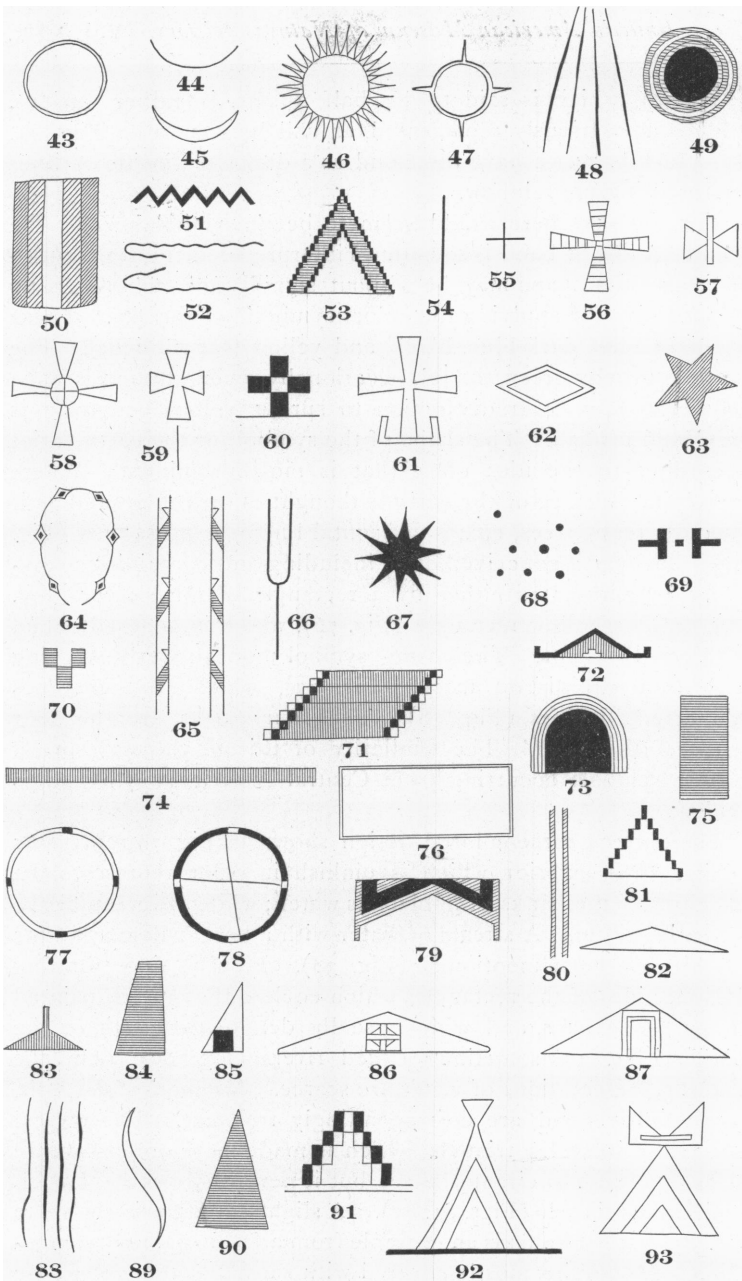
bear-claws, in one instance, by rectangles enclosing smaller rectangles, the nails being omitted (Fig. 29).

The Arapaho use small leather paint-bags, or pouches, in which they keep their body-paint. These bags generally represent small animals, such as the beaver (Fig. 30), fish (Fig. 31), lizard (Fig. 32), or frog (Fig. 33). The opening of the pouch is the animal's mouth, two strings that serve to close the opening are the forelegs, etc.; that is to say, the whole object that is to be ornamented is considered an animal. The Arapaho say that at the beginning of the world their ancestors had only the skins of these animals for paint-bags, and that thus the custom originated. These bags are partly covered with bead-work, and, as might be expected, the beading often carries out the idea that the whole bag is an animal. Thus we have the ribs (Fig. 34) and the tail-markings (Fig. 35) of the beaver, the four shoulder-joints of a frog and the food inside of it (Fig. 36), the markings on the body of the lizard (Fig. 37), etc. These symbols, however, are complex and many-colored, and scarcely suggest the part of the body intended, except by their position. Sometimes the surroundings of the animal are also indicated. A fringe at the bottom of a 'frog' bag denotes the grass in which the animal is sitting (Fig. 33); a 'beaver' bag has worked on it in beads the course of a stream, a beaver-dam, and beaver huts (Fig. 38). Finally we have such apparently irrelevant designs as spear-heads, tents, and the blue sky on a bag representing the beaver. It should be added that these paint-bags do not invariably represent animals. They are of interest because they are the only cases of adaptation of an object to animal or other forms,—a feature common to the art of many tribes, and particularly applied in objects made of pottery. The Arapaho have not employed this device much, nor very consistently.

Ornamental designs derived from plants are unusual, as among most primitive tribes. Trees are represented by a rude though perfectly natural symbol (Fig. 39). In some cases this design represents only the cedar, while the leaf-bearing cottonwood is distinguished by additional green touches at the ends of the branches (Fig. 40). Grass is denoted by short straight lines at various angles to each other (Fig. 41), also by the fringe on the

paint-bag above (Fig. 33), and mushrooms by a series of triangles bearing stems (Fig. 42).

Inanimate nature furnishes a considerable variety and a great number of symbols. The sun is denoted by a circle (Fig. 43), the moon by a horizontal crescent (Figs. 44, 45). Each of these symbols, however, is also used for the other. Sun-rays are represented by straight lines radiating from the sun or extending downward from it (Figs. 46, 47, 48); in the sun-dance and the mescal ceremony, by a yellow buckskin fringe. The rainbow consists either of party-colored concentric rings within the sun (Fig. 49), or of blue, red, and yellow parallel, contiguous stripes (Fig. 50). The symbol for lightning consists of long zigzag or wavy lines, often issuing from the eye of the thunder-bird. Generally there are from two to four lines of different colors (Figs. 51, 52). In one rather elaborate design, broad yellow bands with red edges denote sheet and forked lightning (Fig. 53). Rain, as already stated, is expressed by a line proceeding from the thunder-bird (Fig. 54); strings or thongs attached to objects may also denote rain; and white or transparent beads at their ends, hail. The morning star has the cross for its symbol, but occasionally it is not distinguished from other stars. The cross may vary from two intersecting lines (Fig. 55) to a Maltese cross (Fig. 56), or similar forms (Figs. 57, 58), and may be elaborate in color. A perpendicular line beneath the cross represents the course of the rising star (Fig. 59); a horizontal line beneath it and in contact with it, the horizon, above which it is just beginning to rise, or its nearness to day (Fig. 60). Two short stripes on each side of the star are said to denote its twinkling (Fig. 61). Other stars are most frequently represented by a diamond or rhomboid of several colors (Fig. 62) in bead-work, and a five-pointed 'star' (Fig. 63) in carving or painting. Half a dozen rhomboids connected by a line running around the foot of a moccasin are a constellation, probably Corona (Fig. 64). Two white stripes with several colored marks upon them are the Milky Way (Fig. 65). This latter seems a cramped or abbreviated design, for the closely allied Cheyennes represent the Milky Way by a sort of elongated Y, a line which forks in its course (Fig. 66). The cross seems also to be used for ordinary stars, as are a number of other symbols (Figs. 67, 68, 69). A small design, consisting of three squares



Figs. 43-93. Symbols of the Arapaho Indians.

(Fig. 70), which is said to be half a star, is rather curious. Clouds are variously represented, as will be seen from Figs. 71, 72. In Fig. 73 we have the cloud as a dark area inside of lines representing the rainbow.

For the sky there would seem to be no symbol beyond the color. A line or band is sometimes interpreted as the sky; but in such cases its shape may be without significance, merely giving opportunity for applying the colors symbolic of the sky. These are light blue, dark blue, black, and yellow (for sunlight). The earth is usually green, though occasionally, when autumn is to be represented in contradistinction to spring, yellow or brown is employed instead. The shape of the symbol for the earth varies according to the idea of it that is most prominent. Where merely the surface of the earth is thought of, or the ground as it supports tents, trees, etc., a horizontal line or band suffices (Fig. 74). The earth conceived of as including and containing everything is represented either by a rectangle of solid color (Fig. 75), or by a hollow rectangle (Fig. 76), which is generally filled with other designs. The cosmic symbol more properly is a ring with four equidistant marks (Fig. 77), which are sometimes connected by lines (Fig. 78). The four marks are the four 'ends of the earth.' The similarity of this to the widespread cosmic symbols occurring from Central America northward is evident.

The curious three-colored design shown in Fig. 79 represents a lake. The exterior, which is pinkish in color, represents the red earth of the banks; the black is water; while the green above is floating scum. A stream of water with a beaver-dam and huts has already been mentioned (Fig. 38). Finally, lines forming the long sides of the rectangles which enclose the pattern painted on parflèche bags, and which usually denote the earth or the camp circle, are sometimes called rivers (Fig. 80). On the whole, representations of water are scarce. Mountains and hills, on the other hand, are correspondingly frequent. The typical form is an isosceles triangle, which is made more or less obtuse (flat) according to circumstances, but is never more acute than an equilateral triangle (Figs. 81, 82). A slight variation is shown in Fig. 83, while Fig. 84 is an example from a freely painted composition. Mountains mostly covered with snow, but some of whose

dark rocks still appear, are represented by a design like that shown in Fig. 85. The mountain from which the buffalo issued to the world is frequently represented as in Figs. 86, 87, the square or cross denoting the hole or door. Snow is denoted by white, but sometimes white seems to be merely a neutral background. "Four destructive winds" are represented by four irregular wavy lines of different colors (Fig. 88). A sort of band or scroll encircling a stick is called the whirlwind (Fig. 89).

A frequent design, and one that might be expected, is the tent. This is a pointed isosceles triangle (Fig. 90), sometimes becoming equilateral (Fig. 91). With a small inverted triangle at its apex, it represents a tent with the poles projecting at the top (Fig. 92), while two small right-angled triangles added at the apex denote the triangular flaps that serve to control the ventilation (Fig. 93). A more realistic form, reminding one of pictographs, is sometimes painted or carved (Fig. 94). On the painted *parflèches*, the symbol of the tepee (Fig. 95) is colored green, yellow, and red. Here the green is the ground; the yellow, the skins of the tent; and the interior red, the fire. The small elongated or triangular marks at the base represent tent-pegs; when placed on the apex of obtuse triangles, these marks are monuments or piles of stones on mountain-tops, or old men's buffalo-ropes hung on sticks stuck into the ground to be prayed to (Fig. 96). The camp circle is sometimes represented by the same rectangle that is the sign of the earth (Fig. 76). Similarly, the lines and bands and combinations of stripes that denote buffalo-paths, at other times represent trails of a moving camp, and ravines to be crossed, as already mentioned (Fig. 23). Arrow-heads and spear-points are variously expressed,—by acute isosceles triangles (Fig. 97), right-angled triangles (Fig. 98), or an open sharp angle (Fig. 99). A barbed arrow is shown in Fig. 100. A bow is represented merely by a stripe (Fig. 101). In this case, again, the position in the composition is more suggestive than the shape of the symbol itself (see p. 82). A more realistic representation of bow and arrow is, however, not wanting (Fig. 102).

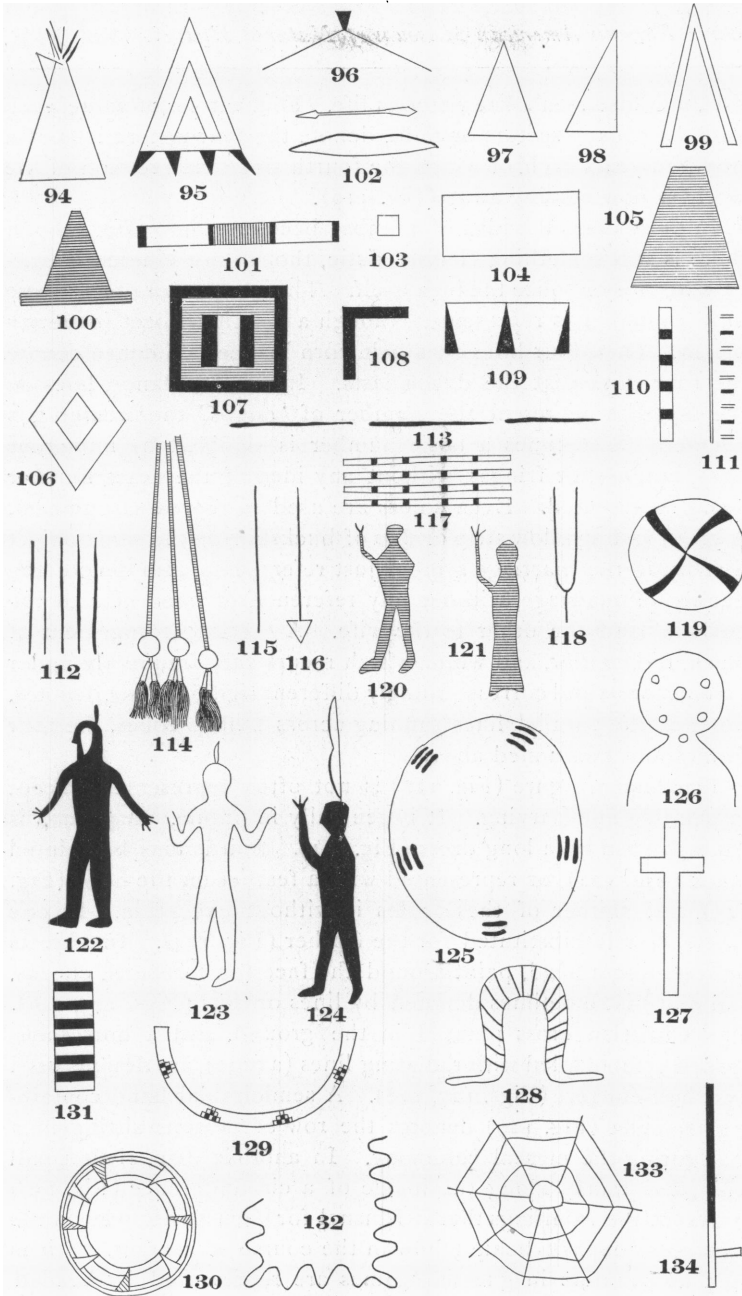
Symbols of abstract ideas have also been developed by the Arapaho. The same has been found by Ehrenreich among the closely-allied Cheyennes (*Ethnol. Notizblatt*, 1899, II, p. 27). It is difficult at times to get the exact meaning of the symbols, as

the Indians find trouble in using English abstract terms, and it is impossible as yet to state accurately the significance of the Arapaho words. Most of these designs, it is true, are so frequent that there is no possibility of a mistake; but many of the definitions must for the present be rather vague.

A common abstract symbol, perhaps the most common of all, is that called 'hiiteni,' which denotes abundance or the prayer for plenty. It varies considerably, but all the forms are connected with the square or rectangle. This, it will be remembered, is also the symbol for the earth and for buffalo. The close connection between the ideas is evidently reflected in the similarity or identity of their symbols. The form said to be the most typical of this symbol is a trapezoid. This symbol is never large in comparison with the object decorated; often it is minute. Among its forms are the square (Fig. 103), rectangle (Fig. 104), trapezoid (Fig. 105), rhomboid (Fig. 106), and square containing a rectangle (Fig. 107). It is usual, when the size of the symbol permits, to have its central portion of a color different from the rest. Several designs which are combinations of this symbol are shown in Figs. 108, 109, 110. A comb-shaped design (Fig. 111) was also, in one case, said to represent an abundance of buffalo, but was not the hiiteni.

Thoughts (reason, wish, prayer) are represented by lines, either parallel or end to end (Figs. 112, 113). Sometimes pendant strings wound with quills, or again small round mirrors, have the same signification. In one case there were appended to strings that bore this meaning, brass beads, small tin cylinders or cones, and dyed horsehair, which denoted the accomplishment of the thought, or thankfulness for the fulfilment of the desire (Fig. 114). The course of a message or prayer to heaven is denoted by a straight line (Fig. 115); the attention that the prayer is to receive, by a design similar to an arrow (Fig. 116). The heart is also used in an abstract sense in the symbolism of this tribe.

The four ages of man or periods of life, called 'hills' or 'divides' of life, are represented by four white bands, each with four black spaces at equal intervals upon it (Fig. 117). A line which for the greater part of its length is forked (Fig. 118), denotes life, which in youth is single, but thereafter is made double by marriage. A straight stripe, the sign for a path of any



Figs. 94-134. Symbols of the Arapaho Indians.

sort, may also symbolize virtuous life. Four circles of white, each with four black sectors or radii, denote the four generations of a hundred years each, of which the fourth since the creation of the world is now passing away (Fig. 119).

In these cases the idea of number becomes important, though there is still something characteristic, though not inherently suggestive, to symbolize the idea itself. There are other cases where only a number is represented, though a definite object is clearly meant. Thus, four lines on a belt worn in a certain dance denote the four days that the dance lasts. In another dance, lines on the leggings represent the number of 'coups' the wearer has counted. Sometimes a large number is signified by numerous lines, notches, or fringes, without any idea of the exact number being represented. Even colors are used to represent numbers. A green and a yellow strip or flap of buckskin, on the same object that bears the marriage symbol just referred to, also denote the duality of marriage, without any reference of one color to the husband and the other to the wife. A certain arrangement of black, red, yellow, and white, which recurs very frequently under various forms and correspondingly different significations, denotes, when on the parallel lines running across buffalo-robcs, the four generations mentioned above.

The human figure (Fig. 120) is not often represented, except in painting and carving. It is generally in profile. A woman is distinguished by a long dress (Fig. 121). Spirits may be painted black (Fig. 122), or represented with a feather on the head (Fig. 123), but neither of these rules is without exception. In one case a bow is substituted for the feather (Fig. 124). In objects representing a head, paint around the face (on forehead, cheeks, and chin) is sometimes denoted by lines or dots (Figs. 125, 126). The Christian cross planted in the ground, and a horseshoe-shaped symbol filled with radiating lines (a halo), are designs used by a half-convert (Figs. 127, 128). A semicircular band containing triangles (Fig. 129) denotes the row of persons sitting in a tent during the mescal ceremony. In another case, eight small triangular marks along the inside of a circumference (Fig. 130) represent the vomitings that it is usual for each participant in the worship to deposit behind him in the course of a night. Sticks used as counters in guessing-games are represented by beaded

lines (Fig. 131). The two outlines seen in Figs. 132, 133, are symbols of the spider-web. A pipe is shown in Fig. 134.

Color is almost always used in Arapaho ornamentation. As is natural, it generally aids the realistic expression, and conforms as nearly as possible to the color of the object represented. In fact, sometimes it is only through the color that the meaning of a design becomes clear (*cf.* Figs. 11, 50, 79, 85, 122). When, however, the color of the object in nature is wanting, or unessential in the Indian's opinion, color is sometimes put on, as it seems to us, at random. Thus we have party-colored buffalo-tracks; antelope-hoof marks in blue; red, black, green, and yellow thoughts; pink, green, and blue buffalo-gut; and so on. It should be remembered, however, that the Indians declare, and believe, that they see various colors in stars, lightning, and similar objects, which to us suggest only an idea of brilliance; and that colors are at times used to express the abstract idea of a difference, or a number, without any attempt at realistic representation. The tendency is to use colors, like forms, with pictorial intent; but this is not carried so far as with forms, and there is a purely ornamental (*i. e.*, more than merely conventionalized) employment of color. The principal colors also have significations of their own, which they sometimes bear irrespective of the design in which they occur; so that we may have a shape-symbolism and a color-symbolism in the same decorated object, each totally independent of the other. Thus, green is the earth; red, mankind (both on account of blood and red paint); yellow, daylight, and hence sometimes heaven; blue, the sky; white, snow; black, night.

So far, various designs and characters have been described separately. As a rule, however, they occur in combination. The relation or connection between the symbols in such a combination may be of three kinds. 1. The relation may be conventional, *i. e.*, fixed by usage. 2. Relation may be apparently wanting; for instance, a moccasin is decorated with characters representing the earth, the heart and lungs, the dragon-fly, caterpillars, and stars. But in cases like this, the ornament often records a dream or vision, and this gives close associations to apparently disconnected symbols. 3. The relation between the symbols may be close, and the whole design may then even tell a story.

An instance of such coherence is shown in Fig. 135, representing a bag ornamented with bead-work. The blue background is the sky: in this flies the thunder-bird or eagle, whose red heart and white tail and wing feathers are shown. Below it are bands of yellow sheet-lightning: these are bordered by red zigzag or forked lightning. Triangles represent the mountain-tops, rising higher and higher, upon which the bird has successively rested in his upward flight. Below him the rain is falling: this fills a lake near the bottom of the whole design. At the edges is white snow, from which mountains emerge. At the top, however, where the thunder-bird is, there is so much heat that there is no snow. A design similar in character, though much simpler, worked in beads, is found on a moccasin (Fig 136). The long white stripe is a buffalo-path, in which a buffalo (shown by a green rectangle) is standing. A transverse stripe at the end is a hunter's bow; and from this barbed arrows (black triangular marks) have been shot into the buffalo.

Connected or narrative symbolism also occurs in the painting on a cylindrical case of buffalo-hide, used as a medicine-case. The design of this is shown, spread out flat, in Fig. 137. Below, on the right side, is the sweat-house into which the owner and maker of the case went before beginning his fast to acquire supernatural power. This ornament also represents a small mound in front of the sweat-house, on which a buffalo skull is lying. The fish-tail ornament just above this is the mountain on which the man fasted, and hence also represents himself. To the right of this, the crescent-topped design is 'the overseer' (the sun), also called 'the one that lights.' The pedestal or stalk of this figure represents 'information' (supernatural power) flowing down from this being to the earth (the horizontal line). At the extreme left, the same design is a representation of himself after he had acquired information and power; and to the right of this, the fish-tail ornament now represents this very medicine-case. But the case is made of buffalo-hide, and his supernatural power consisted largely in control of the buffalo; therefore this same symbol also denotes buffalo. Below, on the left, is the sweat-house into which he went after his fast.

It has been mentioned that the symbols of the earth, the buffalo, and of prayer for plenty (*hiiteni*), are often identical. The



Fig. 135. Beaded Pouch.

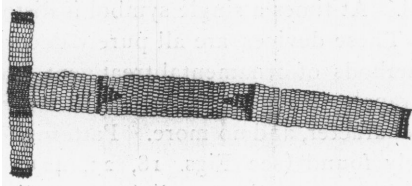


Fig. 136. Design from a Moccasin.

affinity between them is strikingly shown by the painting represented in Fig. 138. The whole design is a buffalo, and stands halfway between a realistic picture and the usual plain rectangular symbol. Body, head, legs, and tail can easily be made out. At the same time the whole design is also called *hiiteni*,—the name of the symbol for prayer for abundance. Abundance is also denoted by the short lines at the extremities of the legs. The three lines at the side, and the small vertical central line, are buffalo-paths. It is curious that they are so unsymmetrically disposed. The two rectangles in the centre signify the earth,—the outer one, which is red, denoting the earth proper; the inner one, which is green, grass. The maker of the design could give no other explanation of the repetition of the head at the rear end of the body than that the whole painting was a copy of a dream.

Arapaho decorative art thus bears resemblance to the system of pictographs used by North American Indians. The number of symbols is considerable; several of them express abstract ideas; connection between the symbols is usual, and they may even tell a story. All this suggests picture-writing.

At the same time there is no real pictography. The symbols described cannot be read. One man may guess the meaning of another's design; but he may also fail to understand it, or may even misinterpret it.

Then, too, it must not be forgotten that this art, whatever else it may be, is also ornamental. The symbols are decorative as well as symbolic. They are often duplicated, to make the two sides of the ornamented object symmetrical. This would not occur in pictography. Sometimes a pattern is even formed by means of repetition of a symbol. Another decorative device that has been mentioned is that of ornamenting an object as if the whole of it were an animal. At times a single symbol is distorted to make it symmetrical. These devices are all purely decorative in object.

All these methods of ornamental treatment, however, are carried out in Arapaho art just enough, as it were, to bring out its decorative character, and no more. Patterns formed by repetition are rarely found (see Figs. 18, 23, 42). Distortion for symmetry is infrequent and very slight (see Figs. 1, 5, 8, 10).

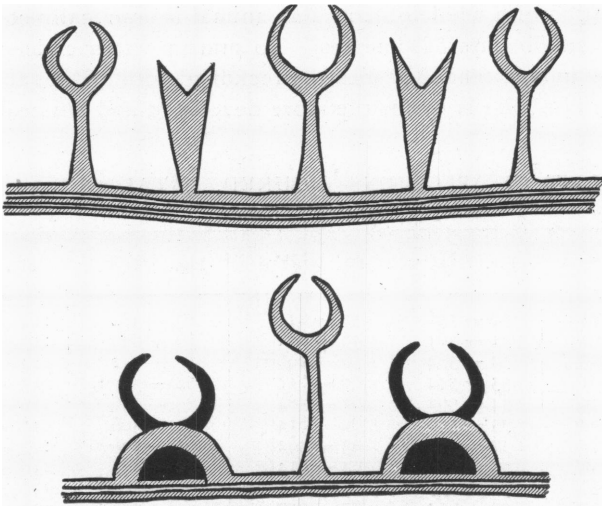


Fig. 137. Design from a Cylindrical Leather Case.

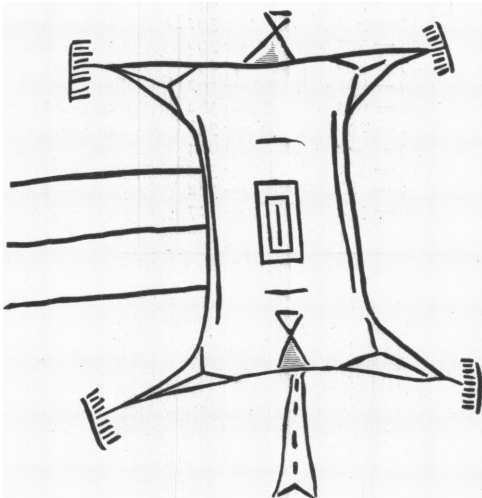


Fig. 138. Painted Design from a Blanket.

Decoration of a whole object as an animal is practically confined to one small class of pouches. To sum up, both a decorative and a symbolic tendency must be reckoned with in Arapaho art; but the symbolic is by far the more developed and noticeable.

LIST OF SPECIMENS FIGURED, CATALOGUE 50.

Fig.	Spec. No.	Fig.	Spec. No.	Fig.	Spec. No.	Fig.	Spec. No.	Fig.	Spec. No.
1	— 585	30	— 596	57	— 614	85	— 382	112	— 625
2	— 708	31	— 361	58	— 632	86	— 648	113	— 397 A
3	— 625	32	— 362	59	— 296	87	— 642	114	— 321
4	— 381	33	— 344	60	— 614	88	— 397 D	115	— 301 C
5	— 344	34	— 361	61	— 584	89	— 96	116	— 392
6	— 384	35	— 596	62	— 614	90	— 306	117	— 660
7	— 325	36	— 344	63	— 392	91	— 596	118	— 650
8	— 642	37	— 362	64	— 614	92	— 688	119	— 698
9	— 657	38	— 361	65	— 614	93	— 325	120	— 397 D
10	— 305	39	— 624	67	— 352	94	— 397 E	121	— 397 D
11	— 305	40	— 90	68	— 392	95	— 370	122	— 624
12	— 328	41	— 390	69	— 312	96	— 370	123	— 296
13	— 328	42	— 342	70	— 305	97	— 398	124	— 397 D
14	— 323	43	— 625	71	— 657	98	— 596	125	— 391
15	— 397 D	44	— 625	72	— 312	99	— 596	126	— 366
16	— 742	45	— 352	73	— 90	100	— 585	127	— 390
17	— 305	46	— 352	74	— 642	101	— 585	128	— 392
18	— 327	47	— 348	75	— 397 D	102	— 397 E	129	— 382
19	— 370	48	— 348	76	— 396	103	— 642	130	— 123 A
20	— 391	49	— 352	77	— 299	104	— 101	131	— 601
21	— 101	50	— 601	78	— 592 H	105	— 90	132	— 328
22	— 585	51	— 643	79	— 382	106	— 325	133	— 364
23	— 350	52	— 296	80	— 396	107	— 381	134	— 90
24	— 582	53	— 382	81	— 614	108	— 398	135	— 382
25	— 381	54	— 382	82	— 370	109	— 370	136	— 585
26	— 325	55	— 88	83	— 382	110	— 299 C	137	— 659
27	— 325	56	— 584	84	— 27	111	— 101	138	— 101
29	— 398								