NATIVE NORTH AMERICAN SEED BEADING TECHNIQUES: PT. I WOVEN ITEMS

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This is the first of two articles on the seed beading techniques of native North Americans. For ease of handling, the articles have been divided into two fairly distinct categories. This article deals with beadwork in which the fibers used for "holding" the beads are also the sole foundation of the finished item. For convenience, I refer to this as the *woven* category. The second article will deal with seed beads which are applied with fibers to another material which serves as the foundation, such as cloth or leather, i.e., *sewn* beadwork. There are several areas where these two categories overlap and they are no means to be regarded as absolute classifications, but merely as a convenience for presentation.

As these articles are intended for the craftsperson and collector alike, a brief word about materials should preface the discussion of technique. Historically Native Americans have used sinew, horsehair (a European introduction), moosehair and finely spun fibers of native plants such as basswood and nettle in their bead working. Plant fibers and animal hair dominate the woven category, whereas sinew dominates sewn items. The various methods of preparation and identification of fibers are too lengthy to detail here. In the last 80 years, commercially spun cotton and linen threads have replaced the increasingly less available and more time consuming to prepare native fibers. Within the last few decades, with the invention of nylon, thread of that material has become popular, though it remains to be seen if it will withstand the test of time as well as the older native materials.

Traditionally, the foundations for the "sewn" form of beadwork were leather — either deer, elk or moose hide. Buffalo hides were also decorated with sewn beadwork, but because of their weight were used predominately for blanket-like robes instead of more "tailored" clothing, as were the lighter hides.

With the advent of European traders and the decline of native wildlife due to human population pressures, manufactured textiles increasingly took the place of hides. Heavy velvet and woolen trade goods were the most popular. Linen and cotton fabrics were used to a lesser extent, mostly for linings, though sometimes as primary foundations for beadwork. The Woodland tribes of the eastern forests and the Great Lakes area gradually came to use these European goods almost to the exclusion of leather in their garments. While these fabrics replaced some leather articles in other culture areas, such as the Plains and the Great Basin areas, they never became as widespread in usage as in the eastern Woodlands areas. Today, commercially tanned leather from domestic animals has taken over a major portion of the items once made with native-tanned hides, though there are still people around who can and do produce the latter.

The awl used in sewn beadwork was once a sharp piece of chipped stone or bone before Europeans introduced iron and steel awls along with the glass and metal seed beads that we will be discussing here. Later, with the decline of sinew usage, needles became common, replacing the slower awl-sewing methods.

This brings us to the most important "material" — the glass seed bead, historically imported mainly from Italy and Czechoslovakia and now manufactured in large quantities worldwide. Before trade with Europeans brought glass beads to this continent, there was already a long tradition of decorative arts here. Glass beads displaced many of these native forms such as porcupine guill-working and moosehair embroidery and pushed them out of the central trends of Native American decoration, while at the same time stealing many design elements and techniques from these older forms. At the same time, several European beadworking techniques were copied and blended with the older traditions to form the beautiful historical pieces of Native American art from the mid-18th century to modern times. It should be mentioned that there are several sizes of "seed" beads, the most common today being the 13/0, 12/0, 11/0 and 10/0 beads, 13/0 being the smallest. Older museum pieces show that the smallest seed bead was common a hundred years ago, though difficult to obtain today and often with too small a hole to accommodate modern beading needles. A slightly larger bead, often known as the "pony" bead, was also used in many of the following techniques, especially in the very earliest artifacts (c. the early 1700's in the East and the early 1800's on the Plains and in the West). Seed beads come in many colors which are transparent, translucent and opaque. They may also be of faceted (known as "cut") glass or metal. Metal beads were and are produced in less quantity and are more rare. Several kinds of seed beads might be used on a single piece and the subtle blending of these diverse qualities by native artists makes for a large part of the enchantment which beaded pieces cast over their observers.

There are approximately four sub-categories of the "woven" classification of beadwork: **True Weaving**, **Netting**, **Braiding** (and other forms of necklace strands), and **Border Stitches** (including fringes). The last is an example of a technique which would fall equally well under the sewn or woven classification and may be found in conjunction with both kinds of beadwork.

First we will consider true "weaving" techniques. The Great Lakes and Mississippi Valley regions are the main sources of woven beadwork, though in recent times all techniques and styles have been mixed as a result of greater inter-tribal contacts in government boarding schools, etc. Though there are a number of prehistoric beadweaving techniques employing shell, stone, bone and other native forms, we will concentrate on the two forms most often encountered in historical examples of seed bead art: Square Weave and Bias Weave.

Square weaving is so-called because the warp and weft elements cross one another at right angles. There are many types of looms employed to obtain this result. They range from bow looms (used mostly in South America, though found in early Ojibwa weaving) to looms with specially pierced wooden "heddle" devices for separating warp threads (Micmac). Minor variations among beadweavers in such things as double or single warp threads, twined outer warp threads, double weft threads, etc. are as numerous as the forms of bead looms. For a thorough, detailed discussion of these, the interested reader is referred to William C. Orchard's famous work *Beads and Beadwork of the American Indians*.

One of the simplest forms of the square weave loom is the modern Ojibwa type. All other square weave looms (except the bow loom mentioned above) are more or less elaborate variations of this basic rectangular wooden frame. All that is required are four pieces of wood fastened together at the corners (or a heavy cardboard box). One continuous warp thread (usually of linen or cotton) is strung around and around it with each pass of the warp thread evenly spaced from the last. One more pass of the warp thread over the frame than the number of beads in the width of the pattern is required. The most recent variation of warping the loom employs single strands of thread, one more in number than the desired width in beads and a few inches longer on either end of the piece (to be used in finishing fringes or to be woven back in). Kits available in hobby stores often employ rotating spools at either end of the loom to wind up finished work, exposing unused warp in the process and keeping the overall size of the loom to a minimum as opposed to the above mentioned type which is exactly half the size of the completed piece.

To weave the beads requires a long, fine beading needle which has been threaded and tied to one of the outside warp threads with the required number of beads for one width strung on it. The needle and beaded thread are passed under this warp to the opposite side. Holding the thread tight, each of the beads is pushed up between a pair of the warp threads all the way across so that the holes in them are above the level of the warp threads. The needle is passed back through all the beads while they are in this position, thus weaving the first row (Fig. 1). All other rows follow this same pattern. Additional threads are attached at the sides as needed. The loose ends of these and the first thread are woven back into the beadwork to hide them. This produces a stronger foundation than if they were merely cut off at the edges of the piece. When finished and removed from the loom, the warp threads are tied together, woven back into the piece and tied off to prevent unraveling, or made into fringes (to be discussed later). This is basically the technique used with the bow and heddle looms also.



Fig. 1. Square weave technique. (After Orchard, 1975: 112, fig. 92).

The most common articles of square weave beadwork were used as sashes, belts, arm and leg bands, and necklaces. Wider pieces were sewn whole onto bandolier bags and smaller pouches by woodlands tribes (Figs. 2-11).

Bias weaving has been described as "weaving in which the warp and weft elements change places in alternating lines, the warp becoming the weft and the weft taking the place of the warp" (Orchard 1929:112). This is a rather ambiguous statement. What takes place is that several pairs of threads are knotted onto leather or some other material to form the edge of the piece, or just to hold them for the weaving operation. One of the outside pairs is threaded with one bead, then the two threads are separated and one passes over and one under the pair immediately opposite. Another bead is then strung on and the process is repeated until the desired width of beads is achieved. When the desired width is obtained, the bead-holding string is turned down and becomes a "warp thread" for the next row. The next outside pair of threads on the same side as you started then repeats this process until it too is turned down and becomes warp thread for the next row. Preston Miller, in his beadworking book, Four Winds, refers to this type of weaving as "side weaving" and suggests the worker use a needle on each pair of doubled threads to facilitate stringing the beads and running the paired threads through each other (Fig. 12, 12A).



Fig. 7. Eastern Woodlands, bandoleer bag. Rectangular bag and strap of black wool and brown cloth; no opening. Bag and its fringe, and strap and its fringe each woven in one piece, with square weave. Beadwork fringe end in steel beads, followed by yarn fringe. L: 78 cm. No. 5337.



Fig. 8. Eastern Woodlands, Central Algonkin, bandoleer bag detail. Note square weave, blanket stitch on beaded fringe, brass beads on yarn tassels. No. 0609.



Fig. 9. Eastern Woodlands, rectangular flat bag of woven beadwork (square weave). Woven in one piece, with join only at bottom. L: 13.5 cm. No. 2167.



Fig. 10. Woodlands or Eastern Sioux?, band of solid beadwork without backing, square weave; few cut steel beads in the 2 central and 2 end design patterns; 3.5 cm x 67 cm. No. 5127. Plains, possibly Arapaho. Square weave bands attached at ends to buckskin pieces. No. 5125.



Fig. 11. Southwest, Yuma. Two square weave necklaces with loop fringes of large and small beads. Some large beads identifiable as Czech molded glass, others possibly Chinese No. 5290 (piece with large light-colored bead at apex of woven portion) 50 cm; other one is No. 5289.



Fig. 12. Technique of bias weaving. (After Orchard, 1975: 131, fig. 110).



Fig. 12A. Old fragment of bias weave strip, woven on sinew. No accession no.

Though of mostly geometric design, examples of square weave and bias weave also include attempts at flower, leaf and bird patterns. Bias weave articles were most commonly chokers or women's hair ornaments (Fig. 13) and were usually not very wide. Bias weave did not have the wide distribution square weaving did. It seems to have been used chiefly among those tribes who were also very prolific square weavers such as the Potawatomi, Menomini, Sauk, Fox, Delaware, Oto, Winnebago, Osage, Omaha and Penobscot. Square weaving, by contrast, can be found in almost the entire North American continent. Some of this distribution can be shown to be influenced by increased inter-tribal communication after the 1850's as a result of multi-tribal Indian schools, European traders and faster methods of transportation, such as the horse and especially the train.

Another category of woven beadwork is the "net-like" weave or netting which is usually used for neck ornaments, though occasionally as "collars" for pottery containers or sewn around the outside of small cloth or leather pouches. The Mojaves are particularly noted for this kind of beadwork, which is also practiced by other tribes in their vicinity such as the *Washo* in Nevada, the Monos in California and the Yumas in Arizona. Tribes in the "western Southwest" and the Basin up into Idaho have been known to use it. The Comanche of Oklahoma and some of the Southeastern tribes who were removed to Oklahoma, and Eskimo also use this technique (Fig. 14-18).

Fig. 13. Eastern Woodlands, Central Algonkin (Fox?), woven beadwork (bias weave) strip without backing, used as hair ornament/tie. Band split into 2 strips; each of these are again split into 2, resulting in 4 strips. L: 93 cm. No. 2183.



Fig. 15. Southeast, Caddo bag of U-shaped flexible buckskin. Note netted fringe on bottom of bag, interesting blanket stitch variation on border of flap. L: 27 cm (Including handle). No. 5108.



Fig. 16. Alaska, detail of solid beadwork breast ornament. Example of single bead netting very similar to peyote stitch except done with several threads, versus one. No. 2226.



Fig. 17. Southwest, Apache netted bag. Woven lace-like netting sewn over crepe-like lining. L: 25.5 cm. No. 5333.



Fig. 18. Plains?, netted necklace of beads loosely wrapped around buckskin core; not peyote stitch. No. 5163.

To begin with, a "base cord" is required, which can be either plain or strung with beads. It can even be the edge of a garment. Pairs of threads are attached to this consisting of one thread folded in half to form each pair. The paired threads are then separated and any number of beads strung on these individual threads. At a certain point the threads are re-paired, though not with the original partners, but with the one to the other side, passed through a single bead, and re-separated. The same number of beads as strung on the first time the threads were separated, are again strung on. The original pairs of threads are then re-united and passed through a single bead. To flare the piece, the loops are lengthened with more and more beads as the piece progresses. A glance at Fig. 19 will illustrate this more clearly. The outside edges of the piece use one less bead in the design unit described above, as the threads are only paired twice (at the beginning and end of the outside unit) instead of three times in one design unit.



Fig. 19. Technique of netting. (After Orchard, 1975: 140, fig. 118).

Because of its similarity to netting, I will include a technique known as Peyote stitch under this category also. Peyote stitch is so-called because of its frequent use on the handles of eagle feather fans used in the religious rites of the Native American Church. It differs from most netting techniques in that it uses only one thread (though it is possible to execute the above mentioned "netting" with a single thread and needle also) and one bead per "loop" creating a tight, solid appearance that other netting methods don't (Fig. 20). Peyote stitch was used traditionally as a three-dimensional covering for pipe stems, feather fan handles, gourd rattles, and occasionally to make a type of "Crow necklace" (Fig. 21). Modern beadworkers tend to use the stitch to make key chains and earrings for tourists or as small presents. Peyote stitch has the quality of moulding itself to the object it covers in contrast to flat beadworking which is more two-dimensional in purpose.



Fig. 20. Plains, Arapaho, beadwork strip made with peyote stitch. Buckskin at one end, beadwork fringe at other. L: 14 cm. No. 5255.



Fig. 21. Closeup of the type of "Crow necklace" made with the peyote stitch.

To cover a smooth cylindrical form, several beads are strung on a thread and held around the object to be covered to determine the number needed to make a tight circle around the piece. This number is then divided in half and one of these halves removed. One bead is added to the remaining half if the total can be divided into equal parts. If the total number is odd, say 13, then 7 beads are left on and 6 beads removed. This first row is pulled around the object trying to keep the beads evenly spaced apart and the needle is then inserted in the first few beads again to keep them all in place. It should be stated here that an armature of this sort is not at all necessary and the piece can be executed solely with the "sewing" thread and no other foundation. A type of necklace known as the "Crow necklace" is made by this method. The "Crow necklace" is usually composed of several strands of this "hollow" peyote stitch, done in differing lengths.

The needle is brought out of the first row of beads at an arbitrary point and one bead added to the string. The needle is then re-inserted in the next bead of the first row and back out again. Another bead is added and the process repeated until the end of the row. At this point, the needle will be back at your "starting point" in the first row. It should now be re-inserted through the first bead in the second row, another bead added and the process started again for row 3. A glance at Fig. 22 should clear up the process.



Fig. 22. Technique of peyote stitch.

Another form of peyote stitch is used by the Cheyenne. Instead of every other bead being attached in the first row, every third bead was put on, each additional row followed the method described above except that only one-third of the beads, instead of one-half, were put on in each row. Many old pieces of beadwork look like they have been covered with peyote stitch, but instead a close look will reveal that they have had a single strand of beads wrapped spirally around them, held down at strategic points by a second thread "overlaying" the beaded one. This is the case with many pipe stem wrappings. This form of wrapped beadwork belongs more to the sewn category and will be discussed again under that heading.

Our third sub-category is **Braiding**. Perhaps it should be more specifically entitled Necklace Strands. Most braids are used for that purpose and we will be including other forms of necklace strands in this class.

There are two techniques of braiding used for necklaces. Historically they were used predominantly by the Mojave and neighboring Colorado River tribes. One is a kind of 4-strand braid which achieves either a spiraling or a "diamond" effect when completed. The other is a four-strand braid that looks more like the conventional 3-strand hair braid when completed.

The method for the "conventional-looking" braid is as follows. Four strands slightly longer than the desired finished necklace length (to allow for take-up in braiding) are completely strung with beads to the same length, two of each color. Start at the center of the piece to avoid any interruption in the pattern as it passes around the back of the neck and to keep from having to tie loose ends together. With one pair of colors on the inside and the two strands of the other color held to the opposite edges we begin the braiding. The two outside strings are brought to the center, crossed over each other, and placed between the two strands there which are now on the outside. These two strands, in turn are brought to the center between the first two and the process continues until one side is completed. Going back to the center and continuing in the opposite direction, the other half of the chain is completed (Fig. 23). Loose ends are commonly fastened off by running them through a larger bead and making fringes of the ends which are then passed back through the large bead and tied off.



The other chain pattern can be produced by a technique often used in leather working. Starting with four chains, beaded and held as above (with one pair of colors to the inside and one of the others to either side of these), starting in the middle, one of the outside strands is passed under the two immediately next to it and back over the last one. Next, the outside strand on the opposite side is passed under the two next to it and back over one. This basic pattern (under two-over one) is repeated over and over, alternating first one outside strand and then the opposite to produce a spiral effect. For a variation of this, the total number of strands may be doubled and two strands of the same color held together as one for a thicker finished piece. Simply by rearranging the starting position of these strands from one pair on the inside and a single strand on the outside to having the two pairs side by side, the pattern can be changed to a diamond design instead of a spiral. The braiding proceeds in the same manner for both.

A third braiding method is that of center braiding and is found mainly in the Woodlands, though known from other areas as well. This is used almost exclusively for belts and was done using either all fibers or all beaded threads (Fig. 24, 25). It is also known as Osage Braiding or Mexican Double Braiding. Its method is similar to regular braiding, except that it's extended over more strands. Starting with the center strand, it is brought under the one to its immediate left, over the next, under and so on, over and under till it reaches the outside. Next, the thread to the left of the starting one is brought out, over and under to the right, till it too reaches the outside. The process continues with the next thread on the right (of the first thread going to the left), then to the left of the second going right, alternating sides and threads till all the threads but the two outside have been brought over and under to the outside. This method may be reversed by starting with the outside threads and braiding inwards to the center. The braid at this stage can be twined in reverse (if it was started from the center out, this would mean twining to the inside) till it reaches the center, only to change direction, or the braid may be worked twining entirely in one direction.



Fig. 24. North America, beaded sash, made by center braiding. L: 118 cm (including fringe). No. 2199.



Fig. 25. Fringed ends of center braided sash.

The remaining forms of necklace strands are executed mainly with needle and thread and are probably best illustrated with pictures rather than words, so I will refer you to Fig. 15, 26. Some, looking suspiciously like forms of European beadwork "daisy-chains," I have rarely seen in any museum collections, early Indian photographs or any of the reference material on historical Native American beadworking. I suspect, since they are being used on the Blackfeet and other reservations today, that they are a relatively recent European-introduced technique adopted particularly for items made for a tourist-type market. One of these forms is illustrated in Fig. 26. All other forms of "floral" chains are basically variations of the technique which I will now describe (Fig. 26). To begin, five beads are placed on the sewing thread. If the chain is to be a specifically "floral" one, the fourth bead will be of a contrasting color, if not, they will all be the same (this can be varied in other ways too). The thread is then pulled around and the needle placed through the first three beads again. Four more beads of the main color (no matter which pattern you prefer) are then placed on the thread and the needle is brought around and through bead number 5 (as it was placed on the first stitch) and the first two beads. The needle continues on around through the next four "outside" beads (numbers 3, 7, 8, and 9) and on around the outside "circle" of beads so that one "flower" is completed. At this point you may add another two beads of the main color, bringing the needle back through the last two beads sewn (numbers 8 and 9) and then through the two just added. Either way, after this, you put on three beads (with the second one being the "minor" color, if a flower, as opposed to the "main" color of your design) and come back through the last two beads and continue on from there as for the first motif. Varying this stitch a little to exclude the center bead and/or using bugle beads on the sides will give you a rectangular, ladder-type chain.



This brings us to our last and rather transitional sub-category of "woven" beadwork: the **border stitches** and **fringes**. They are transitional because they may be borders or fringes attached to any of the above mentioned "woven" pieces or may be used to finish the edges of sewn pieces to be discussed in the next article.

"Overcasting" is typical of a border stitch applied to sewn beadwork, usually, but not always, to attach a plain backing to a piece. The thread is attached to the back of the front piece (the knot will be concealed by the leather backing in this manner), three or four beads are strung on and the thread is then "cast over" the piece and the needle placed through both backing piece and front piece, drawn tight, and threaded with beads again (Fig. 27). Placing the "overcast" stitches as close together as possible, this continues until the whole circumference is covered. This method is used on rosettes, belt buckles and hair pieces. It was also employed by the Sioux to finish off the raw ends of their pipe bags by folding the edge over slightly and "overcasting" beads to cover it and make a thick neck to the bag.

"Blanket stitch" borders can be put on square or bias woven bands as well as on sewn pieces where overcasting might be used, or to finish off hem, sleeve or neck edges of garments or foot gear (Fig. 15, 28-30). They employ a technique similar to the blanket stitch in European sewing and embroidery. To begin a row of this "blanket stitch" on a sewn piece, three beads are threaded onto the needle (or sinew) on the side facing the worker. Then the needle is placed behind the piece's edge and brought through to the front again and passed through the last bead threaded once more, pulling tight. Two more beads are added, the needle drawn from the back to the front again through the piece to be edged, and through the last bead and so on till the end of the row (Fig. 27). Variations on this "blanket stitch" may be obtained by varying the number of beads through which the thread is re-passed or the number left singly strung in between.

When used on a woven piece of beadwork, these borders may be worked at the same time as the main body of the piece is being woven using the same weft thread or they may be sewn afterwards on the completed piece. Figure 27 will show a few of the variations of blanket stitch.





It is appropriate that the last technique to be discussed here is fringing. Fringes are usually the last thing to be added onto a piece, be it from the "woven" or "sewn" category. Native Americans and the Plains tribes in particular, employed many techniques to achieve several forms of fringes on their beaded articles. Larger beads such as Crow, Venetian glass, French brass, etc. were also used for this purpose. Strings of seed beads used singly as a straight fringe or doubled up into loops and double loops or even ones with a 3-bead turn at the end reminiscent of a clover leaf (Fig. 30, 31) were added to beaded articles to achieve graceful qualities of motion. (It should be noted here that Plains Indian clothing was meant to be seen in motion, a fact which modern museum cases fail to point up and emphasize.) However, anyone attending a traditional Indian dance where many of the participants are wearing heavily beaded and fringed garments cannot help but notice the graceful rhythmic enhancement of the clothes to the dancers' bodies. Figure 31 is self-explanatory as to the method of construction of several commonly seen fringes (Fig. 4, 14, 20, 30, 32, 33).



Fig. 30. Plains, Arapaho, rectangular beaded pouch with drawstring closing. Note beadwork fringe at bottom; those to the right show the clover leaf-like fringes, formed by a 3-bead turn at the end. L: 27.5 cm. No. 5220.





1 2 3 4 5 6 7 8 9 10 Fig. 32. Detail of Plains? beaded pouch, showing looped fringe. No. 5219.



Fig. 33. Plains circular buckskin pouch. Beaded both sides with faceted metallic beads, beaded single loop fringes on sides. Thong drawstring closing with 2 tassels. L: 12.5 cm. No. 5334.

It would be good to mention design in closing. Technique dominates design in the category of woven beadwork, though in sewn beadwork we shall see design tends to dominate technique. The function of the finished article dictates the technique used. Woven designs are basically geometric. Even floral motifs are reduced to the artificial "curves" of tiny square steps. The range of designs possible is as infinite as the possible ways of combining colors, lines and shapes. The illustrations showed historic and contemporary pieces from the Northeastern forests to the arid Colorado River basin of Arizona and the Eskimo of the far North. All the pieces are distinctive and yet within their cultural/geographic areas they conform to a certain "way" of combining design elements. Also keep in mind that the above techniques of weaving are by no means exhaustive. There are still some styles to be explored, though some of these are minor or even regional variations compared to the described methods and examples. Rule is too harsh and methodical a definition to describe this preference in pattern. To investigate all the subtle distinctions between tribes and areas would require a small volume. Suffice to say that in the last few decades, beadwork has transcended regional variations as the number of beadworkers diminished and has taken on a more intertribal or "nationalistic" tendency. The tribal affiliation or homeland of a beadworker is less apparent in his or her work; contemporary designs draw on a large pan-Indian background. It remains to be seen if increased numbers of beadworkers will ever regionalize beadwork into such diverse design traditions again.

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All items illustrated, except the one made by the peyote stitch, belong to the Scripps and Pomona College Collections of the Claremont University Center. Majority of items date from late 19th to early 20th Century.

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Fig. 2. Eastern Woodlands, Ojibwa bandoleer bag. Rectangular bag of cloth & velvet. Woven beadwork (square weave) on strap and main body of bag; floral beadwork on velvet inset. Note asymmetrical design on strap. L: 85cm. No. 2120.

Fig. 3. Eastern Woodlands, bag. Square bag of black felt with intricate beadwork; 11cm carrying strap covered with floral beadwork (square weave). Edged with red ribbon. Bag: 31 x 27cm; Strap: 61cm. No. 5162.

Fig. 4. Northern California, beadwork strips (Square weave). Solid beadwork, no backing; both with beadwork fringe on each end. 10cm scale. Nos. 2195, 2196. Fig. 5. Plains?, but more likely Objiwa, beadwork strip (square weave). Woven

beadwork; no backing. Repeating floral design. Warp threads ended off by braided wool fringe. L: 43cm without fringe. No. 1603. Fig. 6. Plains, Crow watch fob. Rectangular woven beadwork (square weave),

Fig. 6. Plains, Crow watch tob. Rectangular woven beadwork (square weave), no backing. Pointed at one end; beaded strands on other end. Probably made for tourist trade. L: 14cm. Transilluminated. No. 5275.

Fig. 14. Southwest Mojave? purse. Rectangular purse of beadwork in net-like construction; flap crossing, beaded handle, large loop fringe. L: 16.5 cm. No. 5284.
Fig. 28. Plains?, bag. U-shaped flat buckskin bag with flap-covered opening.
Beadwork on 1 side. Metallic and white beadwork scalloped border ("mountain-

Beadwork on 1 side. Metallic and white beadwork scalloped border ("mountaintype" blanket stitch). L: 21cm. No. 1521. Fig. 29. Southeast, Caddo bag. U-shaped soft buckskin with buckskin tringe;

Fig. 29. Southeast, Caddo bag. U-shaped soft buckskin with buckskin tringe; notable for beadwork star on flap closing. Unique blanket stitch border on flap. L: 15cm. No. 1522.

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