TEXTILE FABRICS OF THE NEW ENGLAND INDIANS

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Comparatively little is known of the indigenous art products of the New England Indians, especially of such perishable objects as garments and textile fabrics. In general the arts of these Indians resembled those of other eastern Algonquians, although little remains of the native culture of any of these tribes by which to judge their earlier and superior work. The bark and mat wigwams, bulrush and flag matting, bark receptacles, and a few other objects still made by the remoter Ojibwa are similar to those known to have been common in New England. The snowshoe and bark canoe of the Abnaki of Maine are, however, practically the only modern native artifacts of the New England Indians which remain unmodified.

For several generations the textile productions of the New England tribes have been limited almost exclusively to splint basketry, the manufacture and sale of which form the principal means of subsistence of many families. It may be assumed that modern examples of this work bear but slight resemblance to the earlier forms. The distribution of splint basketry at present among the Iroquois and widely separated Algonquian peoples seems to indicate a survival of this type from prehistoric times. It is the one style of Indian basketry which would be the most serviceable to the early colonists, and its demand by settlers would naturally stimulate its production and tend to modify the native forms. Still I find no mention of splint baskets by the earlier explorers and settlers of New England, although eight other varieties are noted, which seem to show that it was certainly not the prevailing type during the first part of the seventeenth century. The earliest authentic examples known to the writer belong to the first third of the nineteenth century, and are the work of the Scatacooks of Connecticut.
These have been described and figured by the Rev. W. C. Curtis in the *Southern Workman* for 1904, and may be classified as follows:

1. Handleless baskets with square or oblong base and rim more or less rounded, the height being usually much less than the diameter. These were commonly used as work-baskets by our grandmothers. This type may be indigenous.

![Carrying basket of hickory splints](image)

*Fig. 1.—Carrying basket of hickory splints. Mashpee Indians, Barnstable county, Massachusetts. (One-sixth natural size.)*

2. Baskets similar to the preceding type, but, unlike them, being supplied with a handle. These are much like the ordinary splint hand-basket of commerce.

3. Baskets with a square base and circular upper portion, the diameter being about equal to the height. They are furnished with a snug-fitting cover, and were used by our colonial ancestors principally as storage baskets for small objects, such as yarn, colored worsteds, etc. Similar baskets may still occasionally be found in the attics of the older New England families.
It seems probable that these types, with the possible exception of the first, were made more expressly for the needs of civilized housekeepers, but it is difficult to determine just how much both form and method of construction are due to the exigencies of two centuries of trade. The more common modern examples of New England splint basketry of Indian make have probably lost all resemblance to primitive forms and need not be discussed here. Most of the splints from which they are constructed are machine-made and supplied by wholesale.

There are two baskets in the Peabody Museum of Harvard University (one being shown in figure 1) which may be regarded as purely aboriginal. They are the work of the Mashpee Indians of Barnstable county, Massachusetts. A few of the primitive customs of this tribe were retained until a comparatively late period, sedge-covered wigwams being constructed as late as 1802. Both of these pack-baskets are made of hickory splints woven in a simple checker pattern. There are four series of warp splints, the first series being long enough to cross and radiate from the center of the bottom of the basket and to reach the rim on each side. The second, third, and fourth series are less than half the length of the first and are added at the bottom only, at intervals of about two inches, so as to fill the interstices between the radiating splints, one end of each splint of the last three series being cut wedge-shape so as to fit snugly.

The foundation of the rim consists of three hoops. Each alternate warp splint is cut off flush, while the ends of the others are bent over the middle hoop and pushed under the upper two or three rows of the woof. Within and without this middle hoop are the two other hoops, the whole being bound securely together by a splint wrapping. Two splint rings are attached on opposite sides at the rim, and two others are placed in corresponding position near the bottom for the carrying strap which is also woven of hickory splints. The ends of the strap pass through the loops and are tied beneath the basket. De Bry figures a Virginia Indian carrying upon his back, by means of a carrying strap, a basket of this form filled with fish.

The process of preparing splints in the earlier days was as follows: Small hickory, ash, or elm trees, a few inches in diameter,
were cut in the spring. The logs were sometimes soaked in water, although this was not always necessary. They were then peeled and beaten with wooden mauls until the annual growth layers were separated one from another. These were split into various widths and assorted, strips of uniform sizes being bound together in bunches or coils.

Of the many varieties of baskets, bags, and other textiles made by the New England Indians during the seventeenth century almost nothing remains. A critical study of the records of the early writers and of the modern basketry of various American stocks will however give us an approximate idea of the types of that period.

Brereton\(^1\) in 1602 saw, at Buzzards Bay, baskets made of twigs not unlike the English osier. When the Pilgrims\(^2\) landed at Cape Cod they opened an Indian cache and found therein a storage basket holding three or four bushels of shelled corn. It was round, with a narrow opening at the top, and was "handsomely and cunningly made." In form it apparently resembled the storage basket of several modern tribes, notably the Pima. In one of the mat-covered lodges they found "baskets of sundry sorts, bigger and some lesser, finer and some coarser; some were cunningly wrought with black and white in pretty works." When Captain Underhill\(^3\) returned from his memorable expedition against the Pequot Indians, he brought several "delightful" baskets. Gookin\(^4\) refers to basket sieves for sifting cornmeal. According to this writer, rushes, bents (coarse grass), maize husks, silk grass, and wild hemp were used for baskets and bags, some of which were very neatly made and ornamented with designs of birds, beasts, fishes, and flowers. To this list Josselyn\(^5\) adds sparke and the bast of the lime tree, in their natural colors or dyed black, blue, red, and yellow. Wood\(^6\) writes: "In the summer the Indians gather hemp and rushes and material for dyes with which they make curious baskets with intermixed colors and portraiture of antique Imagerie." Some of the

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4. *Massachusetts Historical Collections*, First series, i, pp. 150, 151.
bags or sacks woven of Indian hemp would hold five or six bushels.\textsuperscript{1} According to Champlain,\textsuperscript{2} large bags woven of grass were used for storing corn. It is probable that some of the maize-husk baskets noted by Gookin were woven in the same manner as the baskets of this material still occasionally made by the Iroquois Indians for their own use. A low, broad, bottle-shaped receptacle is a frequent form, the neck being supplied with a corn-cob stopper. Another variety is pan-shaped with nearly perpendicular sides. Both styles are in twined weaving, for which the pliable husks are especially adapted.

Rushes, bents, silk grass, wild hemp, and linden bast are all adapted to twined weaving. Rushes were extensively used in making mats for lining and furnishing wigwams. According to Williams these mats were embroidered. Josselyn says they were painted. Mourt, in his \textit{Relation}, informs us that they were of finer quality than those used for lodge-coverings.

The mats for both the exterior and the interior of the lodge were in all essential qualities like those now made by the Ojibwa, Menominee, and Winnebago. Morton\textsuperscript{3} and Vincent\textsuperscript{4} say the exterior mats of the New England lodge were made of reeds, large flags, or sedge, firmly sewed together with cords of Indian hemp, the needle used for sewing being made from the splinter bone (fibula) of a crane's leg. Modern mats of the western tribes above mentioned are usually made of flags strung together upon a series of bast cords in such a manner that each alternate leaf lies upon opposite sides and covers the junction of two other leaves. These mats are usually four or five feet in width and about ten feet in length. The ends are furnished with a strip of wood to which tying cords are attached.

The lining mats are woven of rushes in their natural color or dyed. Rushes are used for the woof only, the warp being composed of twisted cords of hemp or bast. The groundwork is usually the color of the undyed material, and artistic patterns are produced by

\begin{itemize}
\item \textsuperscript{1}Williams, \textit{Key into the Language of America}, R. I. Hist. Coll., i, p. 50.
\item \textsuperscript{2}\textit{Voyages}, ii, Prince Society's reprint, p. 121.
\item \textsuperscript{3}\textit{New English Canaan}, Prince Society's reprint, p. 135.
\item \textsuperscript{4}Vincent's \textit{Narrative}, Orr's reprint in \textit{History of Pequot War}, p. 105
\end{itemize}
weaving in rushes dyed in various colors. Both the simple in-and-out weaving and the more elaborate diagonal styles are followed in their construction.

Excellent examples of hexagonal weaving survive in the raw-hide "netting" of snowshoes made by the Penobscot and other Maine Indians. It is doubtful, however, if this weave was used in the basketry of this region.

It is impossible to determine to what extent the finer textiles were used, but we know that the New England Indians made a serviceable closely-woven cloth of Indian hemp (*Apocynum cannabinum*) and probably also of the soft bast of the linden. Bags holding five or six bushels were woven of the former material, the prepared fibers of which resembled silk in softness.

Robes woven of grass and hemp, "scarcely covering the body and coming down only to their thighs," were seen by Champlain in the vicinity of Wellsfleet Harbor. There is a drawing by John White, made in 1585, of a Virginia Indian wearing a "silk grass" mantle, which is probably identical with the New England specimens. It reaches only to the thigh and has an opening for the neck and another for the right arm. It is apparently twined woven, silk grass probably being used for the warp and cords of hemp for the woof. The twined woven, shredded cedar-bark capes of the Nootka are similar in form and style of weaving to these early Eastern examples.

The most beautiful garments produced by the New England Indians were made of the iridescent feathers of the wild turkey "woven with twine of their own making" in such a manner that nothing can be seen but feathers." These cloaks or mantles were usually the work of old men, although they were sometimes made by women for their children.

A few coarse feather garments are at the present time found among the California tribes. The Miwok of Calaveras county in particular construct a ceremonial cape by attaching the quills of

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2 Morton, op. cit., p. 142.
3 Capt. John Smith, *True Travels*, 1, p. 129.
4 Williams, op. cit., p. 107.
5 Josselyn, op. cit., p. 78.
TWINED WOVEN WALLET OF INDIAN HEMP

The design is wrought by false embroidery with white moose hair in its natural color or dyed red, green, blue, or yellow. Anasagunticook Indians, Oxford County, Maine. Two-thirds natural size.
turkey feathers to a coarse netting of twine, the feathers overlying each other like shingles upon a house. According to Du Pratz in former times feather garments were made by the Louisiana Indians, old fishing nets or woven mantles of mulberry bark being used for a foundation.

Feathers were attached one over the other to the fabric, and covered both sides of the garment.\textsuperscript{1} Lawson mentions a Santee (Siouan) doctor or medicine-man warmly clad in a mantle of turkey feathers, the feathers being selected and arranged to form figures.\textsuperscript{2} Butel-Dumont writes that the fiber of basswood bark was used by the southern Indians to make a species of mantle which is covered with swan's feathers.\textsuperscript{3} The foundation of the feather cloaks of the Pacific islands is either netted or twined woven. Morton's remark that the New England feather mantles were "woven with twine of their own making" would seem to indicate that the feathers were fastened to a woven fabric and not to a netted foundation. There would be nothing inconsistent, however, in the employment of netting for the purpose, as fishing nets were in common use.

An example of indigenous textile work of a type probably not uncommon throughout New England during the early historic period is illustrated in plate xvi. So far as known it represents the highest development of weaving and embroidery among these Indians, and as a specimen of embroidered twined woven cloth it probably equals the productions of any North American tribe. It is a two-fold pocket-book of European pattern and is shown open. The side not illustrated is furnished with two pockets of green flannel. The front is supplied with a silver hasp with the date 1778 engraved upon it. The hasps were the work of a local silversmith. The form of the pocket-book, the green flannel, and the hasps are of course European. The heavy cloth forming the body of the book, the material of which it is made, the style of weaving, and the embroidered design are purely aboriginal.

This wallet was made by Mollocket, an old Indian woman of considerable local fame, living in Oxford county, western Maine.

\textsuperscript{1}Quoted by Holmes, 13th Rept. Bur. Ethnology, p. 27.
\textsuperscript{2}Ibid., p. 28.
\textsuperscript{3}Ibid.
She was one of the Anasagunticooks, a tribe claiming dominion over the Androscoggin valley. It was given by her to Eli Twichel of Bethel, Oxford county, about the year 1785, and is now in the collection of the Maine Historical Society, having been presented to that institution by Mrs Lucia Kimball in 1863. The wallet is in twined weaving, a style common among nearly all primitive people. The entire surface of one side of the closely-woven cloth is covered with an artistic design embroidered with the long white hairs of the moose in their natural color or dyed red, green, blue, or yellow. The design is excellent and the colors are well grouped.

The warp is formed of twisted cords of native fiber, probably Indian hemp. Each woof element consists of two cords of the same material twisted once around each warp-strand as illustrated in figure 2. These double woof-strands are pressed close together, concealing the warp, and are in turn concealed beneath the embroidery covering the outer surface. A filament of moose hair is wrapped three times around each strand of the twisted woof elements where it comes outside. On the inside of the fabric there is no appearance of ornamentation, only the ends of the hair showing where they have been carried through.

Strictly speaking, the ornamentation is in what is termed false embroidery, the outer woof-cords being wrapped with moose hair during the process of weaving, and not after the cloth is finished, as in embroidery proper.

Fig. 2.—Detail of wallet. a, a, warp cords; b, b, twined woof cords; c, moose hair wrapped three times around each twist of the woof strand on the right side of the fabric.
The technique is identical with that of the Tlingit basketry and the wallets of the Nez Percé Indians, except that these tribes wrap the coarser embroidery strand but once around the woof-twist instead of several times as in the New England work. Patterns of a character similar to the design upon the pocket-book, showing the wide distribution of the geometric and linear style of decoration among the Algonquians, are common upon the old quill-ornamented bark boxes of the Micmac and the rush mats and wool wallets of the Ojibwa. These wallets or bags are about twenty inches in length and fourteen in width, with an opening at one of the longer edges. In former times they were made of native material, bast or Indian hemp, but are now commonly woven of trade worsted, although the primitive style of weaving and decoration is followed. Similar bags, with the opening at one of the longer or shorter edges, were widely distributed, occurring among the Salishan tribes of the west coast, the neighboring Shahaptians, the Winnebago, Oto, and Omaha of the Siouan stock, the Ojibwa, and doubtless also among the more eastern Algonquians, including the New England Indians. Josselyn may have referred to wallets of this type when he wrote of woven bags of dyed porcupine quills. ¹ The style of weaving and embroidery surviving in the pocket-book illustrated was probably applied by our eastern Indians principally to bags of the above general form.

In conclusion it is evident that the textile products of the New England Indians were of a relatively high order: that baskets, bags, matting, and twined woven cloth were made of a quality probably not excelled by any of the Algonquians, and so far as we can judge by existing examples it is doubtful if embroidered cloth of any North American tribe exceeded in workmanship or artistic merit that produced by the natives of New England and their neighboring kindred.