

The Copp Family Textiles



FRONTISPIECE. View of Salem, Massachusetts, in the mid-eighteenth century. Salem, like the other New England and Atlantic seaports, received goods from many parts of the civilized world. Textile materials, shown in the foreground of this engraving by Leizelt, are being unloaded onto the wharf for checking and distribution. In spite of our image of Colonial life as being ruggedly independent and self-sufficient, the colonists were not only ready but eager to buy cheaper goods imported from abroad. (Smithsonian photo 70489.)

The Copp Family Textiles

By

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NATIONAL MUSEUM OF HISTORY AND TECHNOLOGY



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COVER ILLUSTRATION: A professional weaver at his loom. From *The Panorama of Professions and Trades or Every Man's Book* by Edward Hazen. Philadelphia, 1836. (Smithsonian Photo 57898-A.)

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Preface

AN EXTENSIVE COLLECTION of household textiles, costume items, furniture and related family pieces used by the Copp family of Stonington, Connecticut, from 1750 to 1850, were presented to the United States National Museum in the 1890s by John Brenton Copp. The group of household fabrics is a rare cross-section of the types of textile materials found and used in a prosperous, but not wealthy, New England home of the period. All of the textile items described in this catalog were made in or bought for the Copp home at the time of their original manufacture. Although it is not uncommon for families to save some treasured items from their beloved ancestors, it is far less common to save so much of the more utilitarian types of fabrics—ticking by the bolt, handwoven sheets by the dozens, yards and yards of fringes—items that many other, more frugal, New Englanders might have continued to use throughout the nineteenth century. The Copp descendants, primarily John Brenton Copp, appreciated the value and future interest of these “everyday,” seemingly homely textiles. They were exhibited in the late nineteenth century at centennial celebrations, giving rise to the family dating of so many pieces as “1775” or pre-American Revolution. Although many of the textiles are not that early, they do represent a most important period of the late eighteenth and early nineteenth century. But as significant as the early dating, is the fact that such seemingly ordinary items were offered to, and accepted by the Museum over seventy-five years ago, thus preserving for the future a realistic picture of family possessions of the past.¹

In addition to the general background information, this catalog includes considerable technical information about each textile. The decision to make a complete technical study of each fabric was made by this division at the time it became custodian of the first group of Copp textiles in 1961. These included thirty sheets, twenty-four of which were marked with embroidered initials. Since linen sheets have a tendency to vary only slightly in appearance, it was theorized that a study of the yarns and a yarn count of each sheet might reveal a clue to their dating. The embroidered initials did not help much, however. Unfortunately for our purposes, the Copps liked certain given names and used them repeatedly in successive generations. It was hoped that some conclusions might be drawn as to which generation a given sheet might belong by an analysis of the construction. Although we were unable to arrive at any conclusion in dating these sheets, the information that was gathered from this initial technical study helped us to understand better the problems of dating home-woven textiles. To increase the value of these textiles to subsequent curators and historians, technical analyses were also made for the remaining Copp household textiles as they came into the custody of this division. It is hoped that this information will be of continuing use

¹ A history of the Copp Family and a study of the entire collection of Copp material is in preparation by Mrs. Anne W. Murray, Curator Emeritus, Department of Cultural History, the National Museum of History and Technology, Smithsonian Institution.

in comparative studies of other Connecticut or New England textiles of the period and also with examples from other geographical regions of the United States.

The condition of most of the Copp textiles was basically good; they had had little or careful use and had been stored with reasonable precautions. However, fabrics stored over a long period of time acquire some soiling or discoloration due to an acid condition of many storage containers and to the many types of fumes to which they are exposed.

Some of the white textiles were badly discolored. It was decided that for continued preservation the cellulose fibers should be put into as near neutral condition as could be done safely. The dust-removal and wet-cleaning methods used were solely for the purpose of preservation; the resulting improvement in appearance was a bonus, but not the primary concern. An italic notation next to the catalog number in the entry of each textile indicates whether the item was cleaned by our Textile Laboratory. Notes on the cleaning methods used for each class of items are summarized in the Appendix.

For further study a bibliography on pertinent related subjects is included at the close of this catalog.

Portions of the Copp collection have been exhibited in the Museum since the 1890s. Most recently the entire collection of household textiles were shown for the first time in a special exhibit from March 1968 to March 1970 in the National Museum of History and Technology. Many of these items will also be shown in the future Hall of Textiles. A number of pieces of furniture and related family items are now on exhibition in the Hall of Everyday Life in America and some costume items may be seen in the American Costume Gallery on the second floor of the National Museum of History and Technology.

I am greatly indebted to the work of my staff in the preparation of this catalog: Miss Rita J. Adrosko, Associate Curator; Miss Doris Bowman, Lace and Needlework Specialist; Mrs. Maureen McHugh, Textile Conservation Specialist; and Mrs. Lois Vann, Textile Technician; for their cooperative work in recording the technical information. And to Miss Adrosko for the preparation of the brief history of the Copp Family and preparation of the excellent special exhibition of "The Copp Family Textiles."

GRACE ROGERS COOPER
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The Copp Family

ABSTRACT: At the time this exhibit was proposed, the Copp collection of textiles and other family memorabilia, although unique in its scope of everyday household textiles, had received little exposure since its receipt in the late nineteenth century. The nature of household linens, however, made it imperative to take a considerably more-than-superficial look in order to distinguish one white piece from the next. Consequently, studies were made on each textile item in the collection which are now being published for the first time in this catalog.

In preparing textile items for exhibition, the historical information as to how, why, and where each textile was made is not the only element involved in considering them for exhibition. The physical handling of textiles must also receive serious study. Although, unlike ceramics, textiles do not break, their preservation is a complex problem. Old textiles that are in seemingly good condition can deteriorate from strain in handling, or too much light, or dust. Acid transferred from the hands of people touching the fabrics (as in hanging or mounting them), improper finishing of exhibition cases, overexposure, and heat are additional hazards. Unfortunately, many rare and irreplaceable museum textiles have been "lost" in the museum due to any one of these factors. Therefore, the methods used to meet the problems of cleaning, mounting, and exhibiting the Copp Family Textiles have been described in an appendix.

THE AUTHOR: Grace R. Cooper is Curator in Charge of the Division of Textiles, National Museum of History and Technology. She also serves as the Department Editor and Advisor for Textile for the Encyclopaedia Britannica. Her textile specialization, although limited to those of American interest, is not confined to domestic fabrics but ranges from primitive spinning wheels to sewing machines and from printed cottons to thirteen-star flags.

THE COPPS WERE CHARACTERIZED by an early twentieth-century historian as a family whose "social family life was fully enjoyed, for . . . wit, beauty and culture united [among them] to form nature's noble men and women."² They were probably fairly typical of the hardy God-fearing English-

men who survived the ordeals of settling in a new land, and lived on to enjoy its rewards.

The first Copp to reach America was William, a 26-year-old London shoemaker who in 1635 set out for the Massachusetts Colony on the good ship *Blessing*. He landed east of Boston and became the first owner of Copp's Hill in north Boston where his first wife Judith was later buried. William's son Jonathan established the Connecticut branch of the

² Grace Wheeler, *The Homes of Our Ancestors*, p. 43.

family around Stonington later in the seventeenth century. Many of his male descendents gained comfortable prosperity as merchants and businessmen, while their wives and daughters led full lives as mothers of large families in which education and refinement were encouraged.

Storekeeper Daniel Copp's advertisement in a 1798 newspaper reveals that his stock, covering a great variety of goods, was comparable to that of many stores of the period. His textiles from Europe and India included such basic items as "elegant light and dark Chintzes and Calicoes, corded Dimities handkerchiefs," as well as "a pleasing assortment of Ribbons . . . of all figures" and "a variety of fashionable stockings." Besides imported cloths he "also had on hand, groceries of all kinds; snuff . . . flour . . . excellent dried codfish and crockery which could be sold at a very small advance for Cash, or most kinds of Country Produce."³ Undoubtedly many of these goods found their way into Copp wardrobes and larders.

The long succession of Jonathans, Samuels, Catherines, Esters, Marys, and Sarahs makes it rather difficult to set in order the generations and their contributions to the collection. Although many items are marked with finely cross-stitched initials, the recurrence of the same given names makes it almost impossible to attribute them to specific individuals. Thus, for example, the sheets initialed **MC** could have belonged to Margaret, born in 1727, Mary, born in 1745, or Molly (also called Mary), born in 1777.

Among the more colorful Cops was thrice-married Samuel—known as Uncle Sam—who stated after taking his third wife, "I married first for love and second for her purse, the third for a warming pan, doctor and nurse."⁴ A bolster cover (not illustrated) is identified by the hand-inked name of his second wife, **B. Chapman**, (Betsey), a Norwich, Connecticut, woman whom he married in 1844.

A daughter, Phebe Esther, born to his first wife, made one of the two samplers (Figure 10). The design of this embroidery, made in 1822 when Phebe Esther was eight years old, is obviously based on a similar sampler made fifty-seven years earlier by a relative—possibly a second cousin—whose name **Esther** is embroidered on her sampler (Figure 9).

Samuel's brother, John Brown Copp, who was born in 1779, may also have made a contribution to the family's textiles. According to a family story this deaf and dumb fellow, a stonemason by trade, was gifted with an "artist's mind and eye." It is said that he "drew patterns for white bed spreads or counterpanes . . . for the young ladies of the neighborhood, who [felt they had to] own one of these among their marriage portion. They were made of cotton or linen homespun cloth, and embroidered in design with white cotton. . . . One or more of these can now [1903] usually be found among the treasured possessions of almost every old family in town. . . ."⁵ The patterns for the embroidered counterpanes (Figures 11, 13, and 16) could have been drawn by John Brown Copp, for the above description fits them very well and their dating coincides with the period in which he would have been active.

In spite of the fact that at least two Cops—Oliver and Daniel—were storekeepers who could have supplied most of the family's textile needs, it is quite possible that some of the simple cloths, such as sheeting and table linens, were handwoven at home with yarn spun by women. *The Universal Asylum and Columbian Magazine* in November 1791 stated, "There is scarcely a family in the State of Connecticut so rich or so poor as not assiduously to attend to domestic manufactures . . ." Such comments added to the family's sense of thrift (seen in their quilt shown in Figure 4) and the presence of many willing hands made it quite unlikely that the great quantity of yardage used—nearly fifty yards in the set of checked bed furniture alone—would have been purchased.

RITA J. ADROSKO

³ *The Connecticut Gazette and the Universal Intelligencer*. New London, Connecticut: 6 June 1798.

⁴ Grace Wheeler, op. cit.

⁵ Grace Wheeler, op. cit.

Catalog of the Copp Household Textiles

NEEDLEWORK

Quilt Making

IN EARLY NEW ENGLAND quilt making was a matter of extreme necessity and practicality. Fabrics were precious. The tiniest scraps of fabrics, including those that had been used and reused, were saved to be pieced together in a hit-or-miss fashion and quilted into warm bed covers.

By the second half of the eighteenth century, the heavy exertions required to clear the land and sustain life in the early days of the colony had been gradually replaced by less strenuous domestic routines. The resulting increase in their free time meant that housewives could give more consideration to the decorative aspect of such utilitarian concerns as quilting. A more plentiful supply of both domestic and imported fabrics was available as well. Although fabrics were used more extravagantly, to the extent of piecing quilts in a definite pattern or making a quilt with the entire top of one fabric decorated with a quilted design, the old habit of thrift was not forsaken. The smallest scraps continued to be saved and used. Worn sheets and blankets often served as linings. The nineteenth century, however, brought a progressive disregard for the saving ways associated with quilting in the previous century.

The three quilts in this collection represent three distinct types, all typical of eighteenth-century America—the quilted counterpane, made of a single fabric; the pieced quilt in an overall repeated pattern, made up of different fabrics; the pieced quilt in a single motif design, using different fabrics.

Quilted counterpane (Figure 1), 100 by 89 inches,

⁶ “Water camblet (also chamblet and camlet), those which after weaving receive a certain preparation with water and are then passed under a hot press, which gives them smoothness and lustre.” Quoted from *Chambers’ Cyclopaedia*, 1731 edition, in James, *History of Worsted Manufacture*. The sharp creases visible in Figure 1 indicate where the folds of the fabric were subjected to the hot press. The piece is probably an English fabric.

top fabric of water camblet,⁶ indigo, warp and weft two-ply Z-twist wool,⁷ thread count 40 by 39; quilted and seamed with two-ply, indigo wool thread, S-twist; it is lined with two different natural wool fabrics, probably portions of old blankets, one with a thread count 41 by 35 of smooth, tight single-ply Z-twist yarns. The second blanket, with a thread count of 43 by 30 and with the initial **C** cross-stitched to it in dark blue, two-ply S-twist wool thread, is of softer single-ply Z-twist yarns and stitched with two-ply linen thread, S-twist. The counterpane is interlined with carded wool fibers and bound at the edges with the indigo wool fabric stitched to the right side, then turned back to the lining and stitched with a running stitch. It is quilted in a combination of two popular Colonial American patterns, the pineapple and tree of life—which in this quilt trails off to a flowering vine border—with diagonal ground quilting. It was probably made in the third quarter of the eighteenth century. H.6643

Pieced quilt (Figure 3) 101 by 101 inches, “Nine-Patch” design. The alternating major pattern squares are made up of nine pieces stitched together, set with alternating major squares of the same size in white to make an overall pattern of intersecting

⁷ The identification of the yarn fiber as wool is based on microscopic examination, as are all other fiber identifications. Two-ply indicates that two single yarns have been twisted together. Z-twist indicates the direction of the twist to be /, or from right to left; S-twist means the direction of the twist is \, or from left to right. The direction of the twist is, therefore, one more characteristic in the identification of a textile. If the term 2/2-ply is used, it means that two two-ply yarns have been twisted together.

In the thread count, the first number refers to the warp yarns and the second the weft yarns in one square inch of the textile in question. The thread counts are made by averaging a minimum of three places, if the textile is of sufficient size to permit this. A slight variance of one or two yarns would not necessarily mean that two pieces of like fabric did not come from the same loom run. Washing, bleaching, dyeing, and daily use could change the thread count to a limited degree if both pieces had not been treated in exactly the same manner. There is also more variation in the weft count of handwoven fabrics.



FIGURE 1.—Quilted counterpane. (Smithsonian photo 32795-A.)

diagonal lines. The top is cotton, the printed fabrics are in browns. It is pieced with two-ply linen thread and quilted with both two-ply linen and two-ply cotton thread, with diagonal quilting in the pieced squares, and shell quilting in the all-white squares.

It is lined with linen, probably an old sheet, marked in cross stitch **D C**, perhaps standing for Dolle Copp, who was born 1772. The interlining is of carded wool; edges are bound with linen stitched with two-ply linen thread. Although the wool interlining is



FIGURE 2.—Detail of Figure 2, showing center pineapple design. (Smithsonian photo 61288-B.)

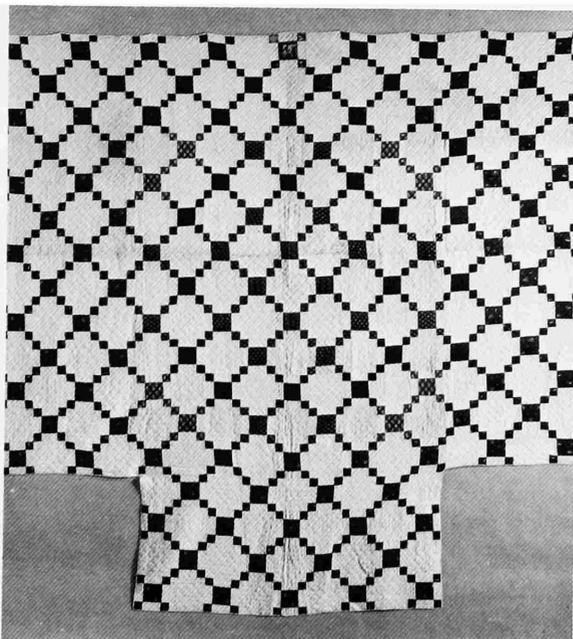


FIGURE 3.—Pieced quilt, "Nine-Patch" design. (Smithsonian photo 61291-I.)

more typical of an earlier period, the dark ground prints used would indicate that this quilt was made in the late eighteenth century. *H.6679*

Pieced quilt (Figure 4), 83 by 85 inches, variation of the "Framed Medallion" design. The medallion is made up of a group of five $2\frac{3}{4}$ -inch patches pieced in the "Variable Star" pattern, surrounded by five rows of patches of the same size, with the initial frame in a two-inch "Chained Square" pattern. (The variety of dress fabrics used in this quilt are worthy of note and will be described separately.) The major part of the top is stitched with two-ply linen thread, the blue border is pieced with two-ply blue cotton thread; part of the linen lining is an old sheet marked **H V**; the lining is seamed with both two-ply linen and two-ply cotton thread. The quilt was probably made about 1795 or a little later. *H.6680*

The fabrics in the quilt shown in Figure 4 are quite unusual because of both their condition and pattern variety. Although they play an inconspicuous part in the overall effect, at least nine different white fabrics appear in the top—five dimities and two each of plain cotton and plain linen. There are three different woven silk and linen stripe patterns, in blue and white, red and white, and yellow and white. The greatest treasure trove, however, is the variety of printed dress fabrics—at a conservative count over 150—dating from the 1770s–1790s. It is hard to believe that such a variety could represent the fabrics of a single household, even with many friends and access to a dry goods store, over a span of two generations. This goodly selection gives some idea of the great number of printed dress goods that were in use in a single community in eighteenth century America.⁸

There are three major groupings of printed fabrics in this quilt: all linen; cotton and linen; and all cotton. Only a half dozen or more are in the first two categories; the remaining ones are all cotton. A sampling of each is illustrated. The photographs illustrate the frugality of the times, when even very small pieces of fabric were stitched together to make a unit. The smallest piece in the quilt is $\frac{1}{2}$ by $\frac{1}{4}$ by $\frac{3}{8}$ inch. The photographs reproduce the fabric pattern at about three quarters actual size.

⁸ In 1784, John Lord Sheffield in his *Observations on the Commerce of the American States* (p. 40), stated that after woolens, linens, and cutlery, "Printed Calicoes and other printed goods" accounted for the largest volume of articles imported into the American states.

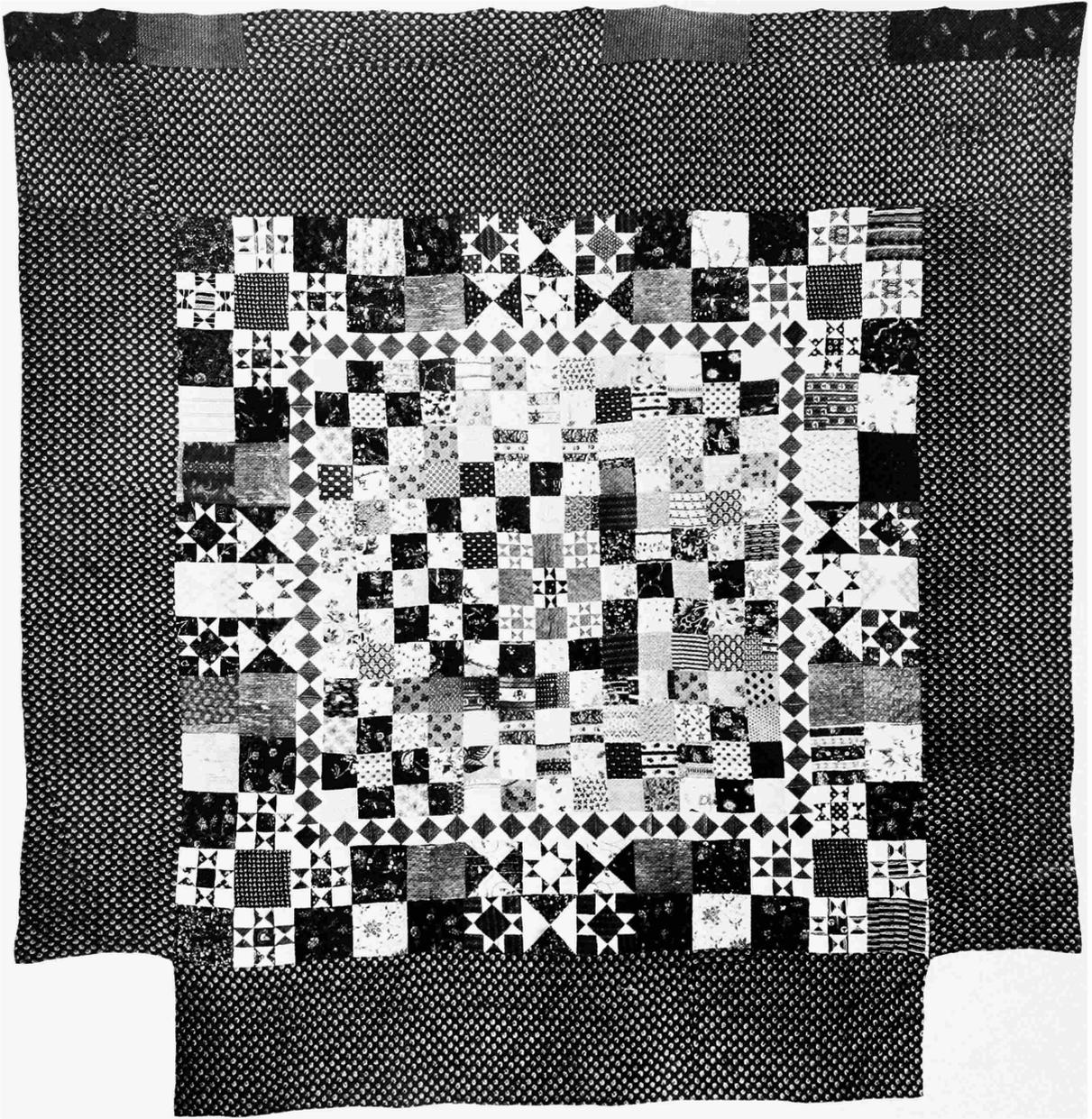


FIGURE 4.—Pieced quilt, variation of the “Framed Medallion” design. (Smithsonian photo 6535.)



FIGURE 5.—Block printed fabrics used in quilt shown in Figure 4.
a, Linen. *b*, *c*, *d*, Linen and cotton. *e*, *f*, *h*, Cotton. *g*, Resist cotton.

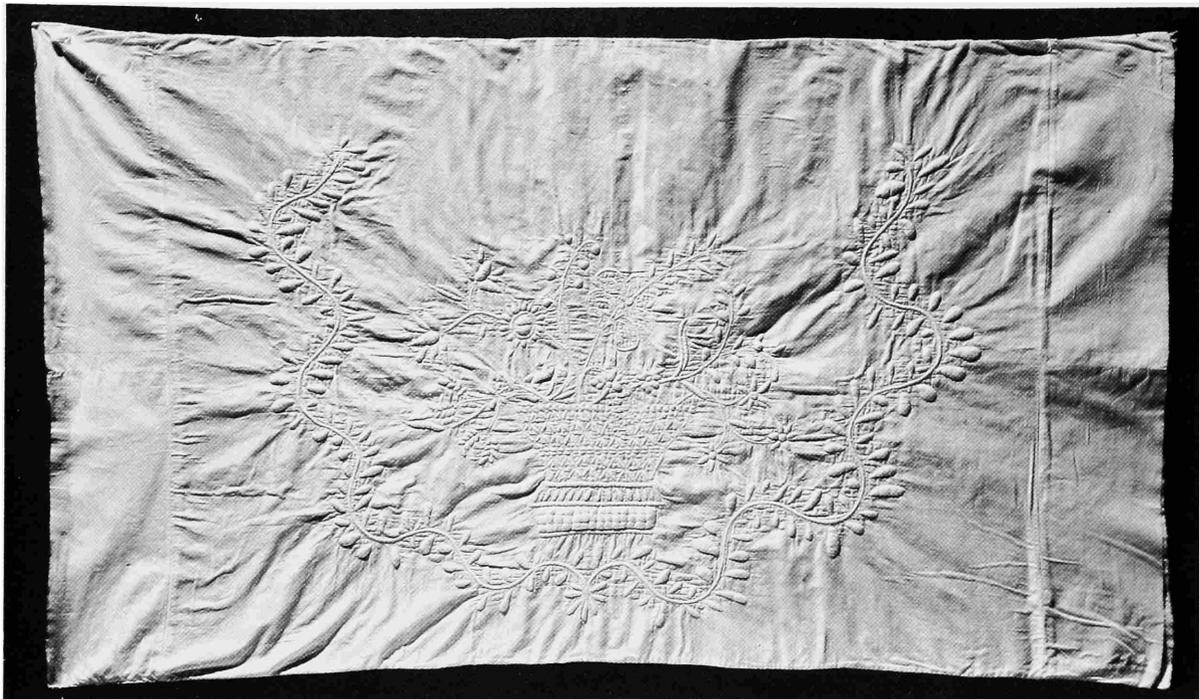


FIGURE 6.—Quilted dressing table cover. (Smithsonian photo 61668-A.)

Linen (Figure 5), block-printed in two shades of brown on natural color linen, stippled ground; thread count warp 40 (Z-twist) and weft 32 (Z-twist); probably English, 1780s. The other printed linens are of the same general style, printed primarily in browns with small amount of red, with stippled grounds. Their thread counts vary from 40 to 48 in the warp and from 28 to 40 in the weft; one is a balanced fabric.

Linen and cotton (Figure 5), block-printed in brown and gold on a natural color ground with an overall stipple pattern similar to above; thread count linen warp 52 (Z-twist) and cotton weft 54 (S-twist); probably English of the 1780s.

Linen and cotton (Figure 5), block-printed in browns on white; thread count linen warp 40 (Z-twist) and cotton weft 24 (S-twist); possibly American of the 1770s.

Linen and cotton (Figure 5), block-printed in red, brown, yellow, and tan on white. Stippling on the white stripe is in red; thread count linen warp 40 (Z-twist) and cotton weft 28 (S-twist); possibly American of the 1780s.

Cotton (Figure 5), block-printed in a red stripe with an overprint of dark brown serpentine pattern

on a white ground; thread count 44 (Z-twist) and 28 (S-twist); three blue threads in the selvedge indicate an English cotton of post-1774; the weft has only a very slight twist and was probably spun on a jenny rather than on an Arkwright spinning frame as was the warp. This is one of several prints in the quilt having remaining selvedges with the blue-thread clue.

Cotton, (Figure 5) block-printed in an Indian mound-of-earth design in yellow, red, and green on a white ground; thread count 54 (Z-twist) and 52 (S-twist); probably French of the 1780s.

Cotton (Figure 5), block-printed in a resist snail shell design, indigo dyed; thread count 68 (Z-twist) by 53 (S-twist); probably an Indian cotton, possibly printed in America in the 1780s; the fabric was used for the wide outside border of the quilt; it shows signs of earlier usage and was probably a dress originally.

Cotton (Figure 5), block-printed in a small flower and rosebud sprigged design in brown outline with red flowers and yellow leaves; thread count 60 (Z-twist) by 55 (S-twist); probably French, 1780s; fabric used in one of the dresses in the Costume collection.

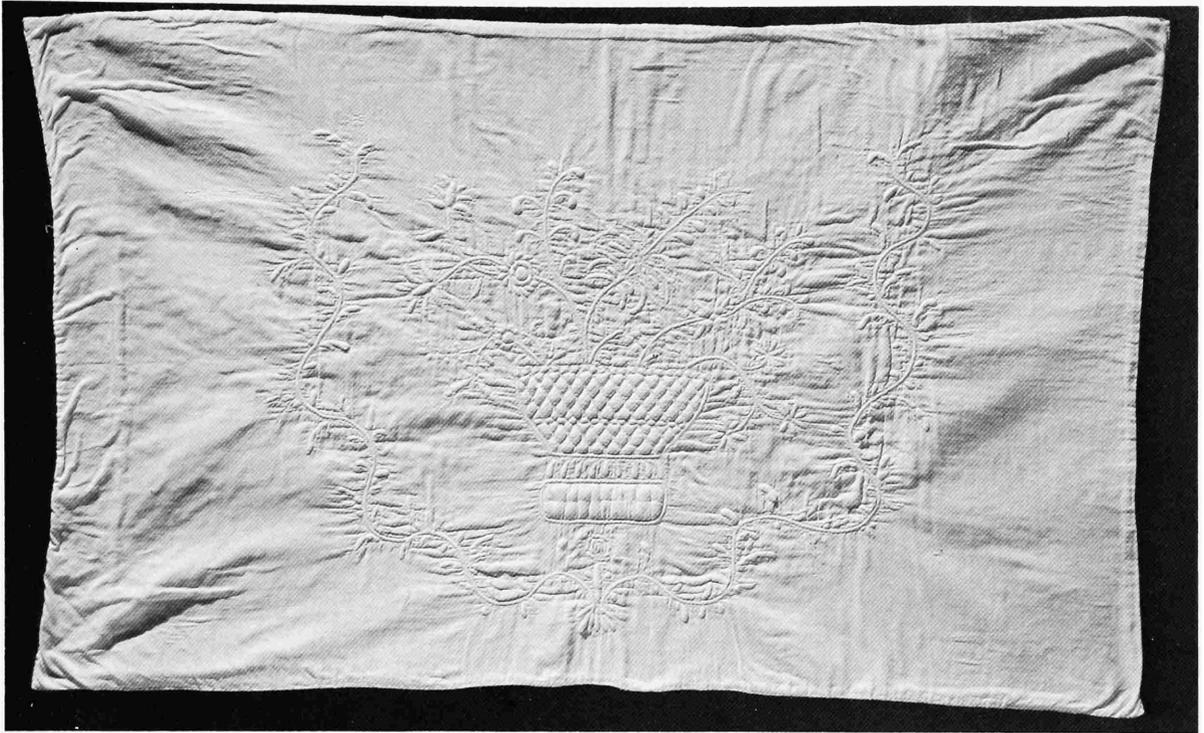


FIGURE 7.—Quilted dressing table cover. (Smithsonian photo 61668.)

Quilted dressing table or toilette cover (Figure 6)⁹, 44 by 24½ inches; cotton top, thread count 128 by 104 both single-ply Z-twist yarns; cotton lining, thread count 48 by 41 single Z-twist yarns; quilted with three-ply S-twist cotton thread; the quilting pattern in a flower basket with a semicircular wreath in back stitch and “stuffed work,” a padding accomplished by forcing a thick soft cotton yarn or fibers, as appropriate, through the lining fabric in the areas of the design. Fabric was added to both ends after the original was in use. It was probably made about 1825. *Cleaned T. 67-162. H.6549.*

Quilted dressing table cover (Figure 7), 33¾ by 20½ inches; cotton top, thread count 92 by 74, both single-ply Z-twist yarns; cotton lining, thread count 42 by 37 single-ply Z-twist yarns; quilted with two-ply S-twist cotton thread. The quilting pattern is a flower basket with a semicircular wreath in back stitch and “stuffed work.” Probably made about 1825. *Cleaned T-67-161. H.6589*

⁹ Although items such as this are sometimes catalogued in museums as bureau covers, contemporary references list similar objects as dressing table or toilette covers.

Dressing table cover (Figure 8), 35 inches by 20½ inches; made from an earlier piece of embroidered muslin, thread count 52 by 48, single-ply cotton, embroidered in pulled work, chain stitch, running stitch, satin stitch in three-ply S-twist cotton and two-ply S-twist linen. Cotton fabric, 148 by 112, with portions cut away to show the main part of the pot-of-flowers design of the early piece superimposed about 1820; additional embroidery in three-ply S-twist cotton through both fabrics. The early embroidery was probably made during fourth quarter of eighteenth century, the dressing table cover was made about 1820. *Cleaned T-67-32. H.6593*

Embroidery

As soon as time permitted, the need for beauty and self-expression led the Colonial housewife to decorate her household fabrics. The implement that she used was the needle. Girls were taught to embroider quite early and each dutifully worked her sampler. As a housewife, long hours of sewing and

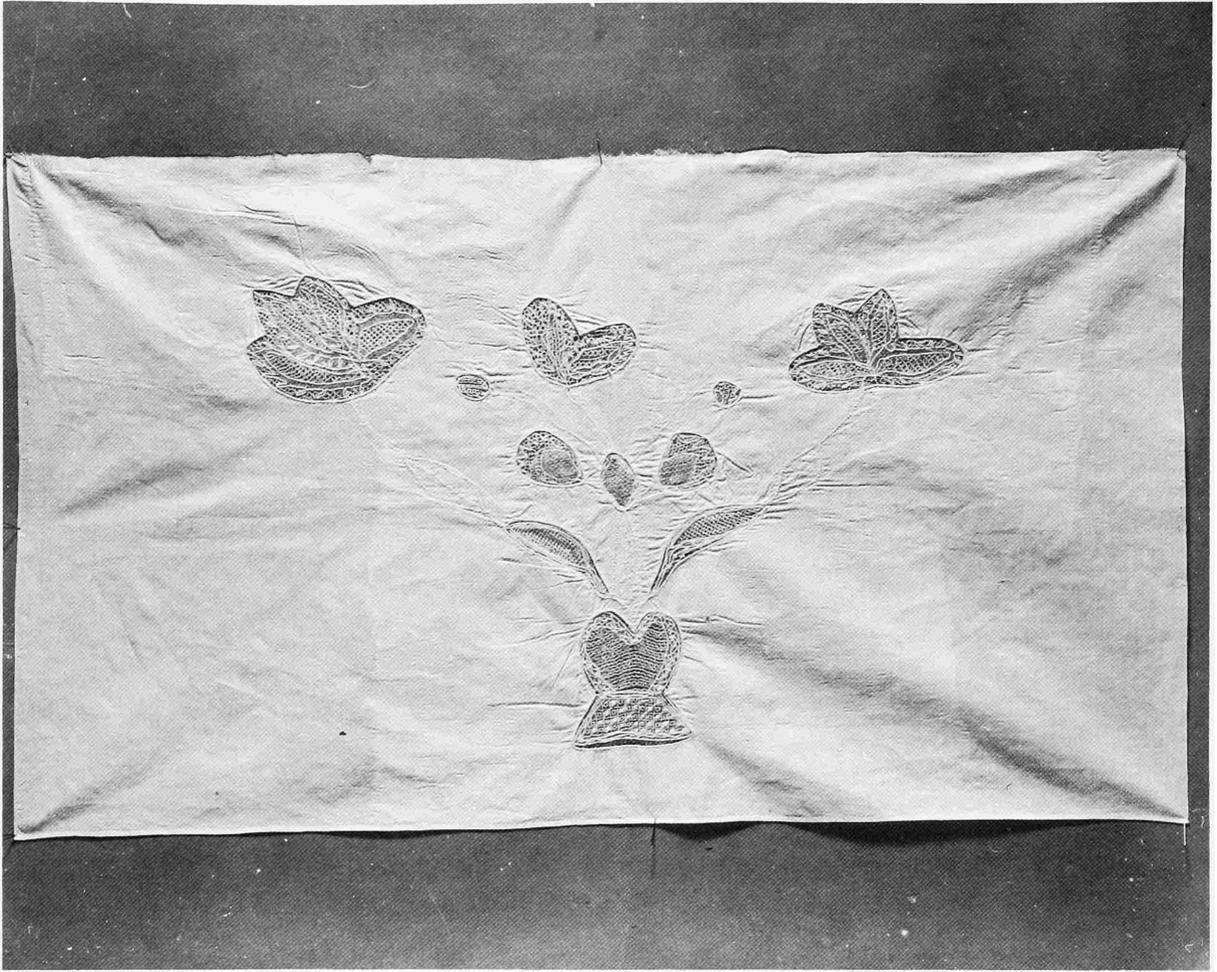


FIGURE 8.—Dressing table cover of embroidered muslin. (Smithsonian photo 61291-G.)

mending gave her the proficiency that helped her to be artistic. Patterns were few and were frequently copied from earlier works. By the eighteenth century there emerged a fresh and charming quality to the embroideries produced in this country that could be identified as "American."

Sampler (Figure 9), 11 by 13½ inches. Multicolor silk embroidery in tent stitch, eye stitch, and crossed-corners cross stitch on a linen ground, thread count 36 by 39 Z-twist. It shows alphabets, numerals, flowers, tree and verse, "Better it is to be of a humble spirit with the lowly than to divide the spoil with the proud." Marked "Esther Copp her sampler made in the eleventh year of her age August AD 1765." *H.6590*

Sampler (Figure 10), 21½ by 16½ inches; multicolor silk embroidery in the same stitches as the eighteenth-century one in Figure 16, on a linen ground, thread count 29 by 31 Z-twist. The width of the sampler is a full fabric width, selvedge to selvedge; the design was obviously inspired by the earlier sampler, with the addition of a typical nineteenth century multiple border. In addition to the earlier verse the following were added, "Let the sweet work of prayer and praise employ my youngest breath, Thus I'm prepared for longer days or fit for earlier death" and "This work I did to let you see, What care my parents took of me." Marked "Phebe Esther Copp aged 8 1822." *H.6591*

Embroidered counterpane (Figure 11), 104 inches



FIGURE 9.—Sampler, 1765. (Smithsonian photo 27466.)



FIGURE 10.—Sampler, 1822. (Smithsonian photo 27467.)

long by 98½ inches wide. The ground fabric is corded cotton¹⁰ with a linen warp, fabric width 33½ inches, weft of 10 to 13 medium weight yarns between single heavy wefts, thread count 46 by 48. It has a floral design with swag and tassel border couched¹¹ in heavy soft two-ply linen thread. There are traces of cut ends of two-ply linen thread on both the sides and bottom edges indicating that the counterpane probably had a fringe originally. Probably made in the second half of the eighteenth century. *H.6664-B*

¹⁰ Most "cotton" fabrics produced in Europe and America before the end of the eighteenth century were woven on a linen warp. See chapter on textile manufactures in the eighteenth century.

¹¹ Couching is the technique of laying one yarn or thread on the surface of a fabric and stitching it in place with a second thread. The use of cotton on the surface with linen used as the stitching thread is a good indication that it predates the machine spinning of cotton.

Embroidered counterpane (Figure 13), 94 inches long by 82 inches wide with four-inch fringe on sides and bottom. The ground fabric is corded cotton, with a weft of six fine yarns with one heavy and one fine yarn thrown together at each seventh pick, fabric width 27/28 inches, thread count 34 by 49. It is embroidered in a pineapple pattern¹² with pot of flowers and running floral border in candlewicking¹³ in a knotted stitch. It is seamed with two-ply linen and also with two-ply cotton thread, hemmed with two-ply linen thread. A cotton netted fringe was stitched on with two-ply cotton thread. Probably made about 1800. *H.6644-C*

¹² This pineapple pattern is very similar to the one in the quilted counterpane shown in Figure 1.

¹³ Heavy, soft twist, two-ply cotton yarn.



FIGURE 11.—Embroidered counterpane. (Smithsonian photo 61288-C.)



FIGURE 12.—Detail, showing corner of counterpane in Figure 11. (Smithsonian photo 61287-B.)



FIGURE 13.—Embroidered counterpane with fringe. (Smithsonian photo 61289.)

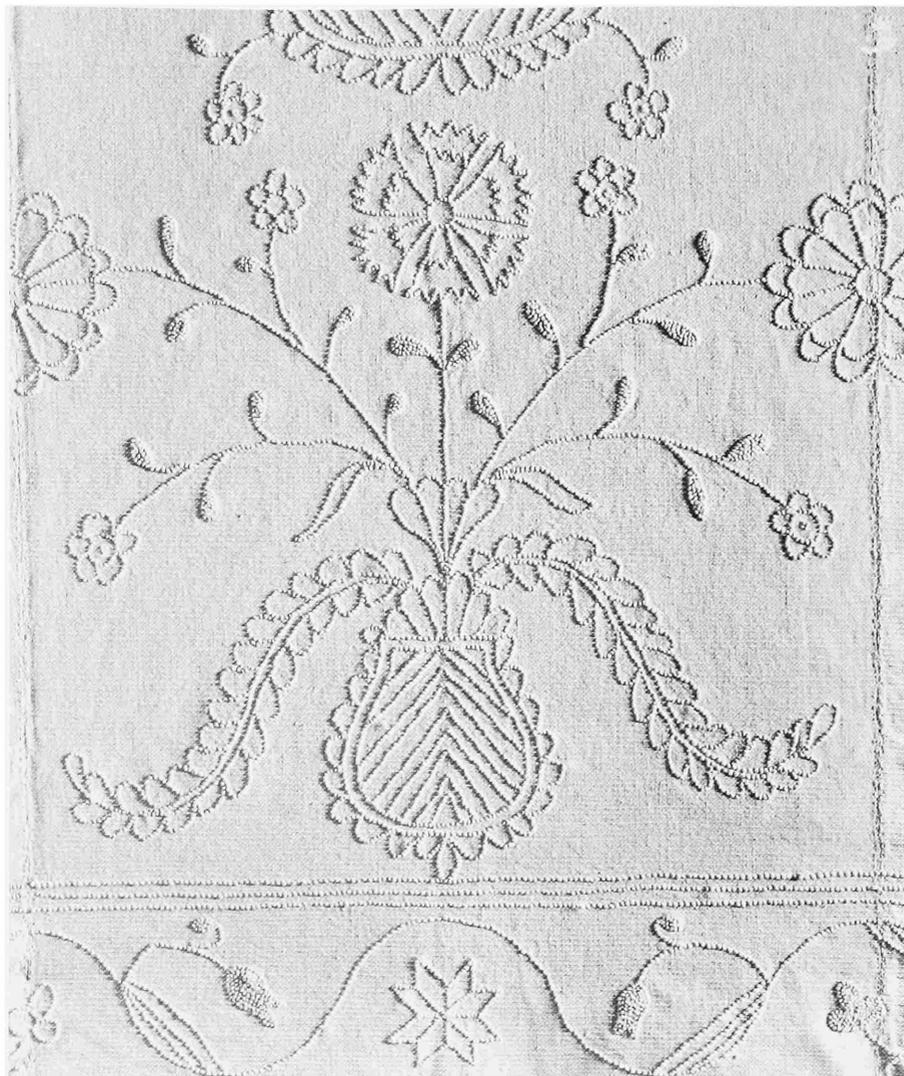


FIGURE 14.—Detail, showing central pot-of-flowers design on counterpane in Figure 13. (Smithsonian photo 61288-F.)

Embroidered counterpane (Figure 16), 94 inches long by 87 inches wide; the ground fabric, corded cotton, weft of eleven fine yarns with one heavy and one fine yarn thrown together at each twelfth pick, fabric width 30 inches with some variation up to half an inch, thread count 38 by 39. Embroidered in a geometric¹⁴ and floral design with a swag and

¹⁴ Most of the embroidered counterpanes of this type that have geometrical aspects to their design were inspired by the tufted woven counterpane designs. Concerted effort was made to follow the line of the warp and the weft, in contrast to the freedom the embroiderer was at liberty to exercise. The few dated ones on record run from 1819 to 1823. Although this Copp counterpane might be a little earlier, the compact feeling of the design would lead one to believe that it is of this period or a little later.

tassel border in candlewicking in a knotted stitch with the initials **EC** in the center; seamed and hemmed with two-ply cotton thread. Possibly designed by John Brown Copp¹⁵ and made in the first quarter of the nineteenth century. *Cleaned T.69-43. H.6644-A*

Apron (Figure 19), 32½ inches long by 47 inches wide; plain weave sheer linen, single-ply Z-twist yarns in warp and weft, thread count 54 by 46. White on white embroidery in satin and stem stitch with pulled work, executed in two-ply S-twist linen

¹⁵ John Brown Copp is known to have drawn patterns for white counterpanes for the young ladies of Stonington. Grace Wheeler, *Op. cit.* (footnote 5).

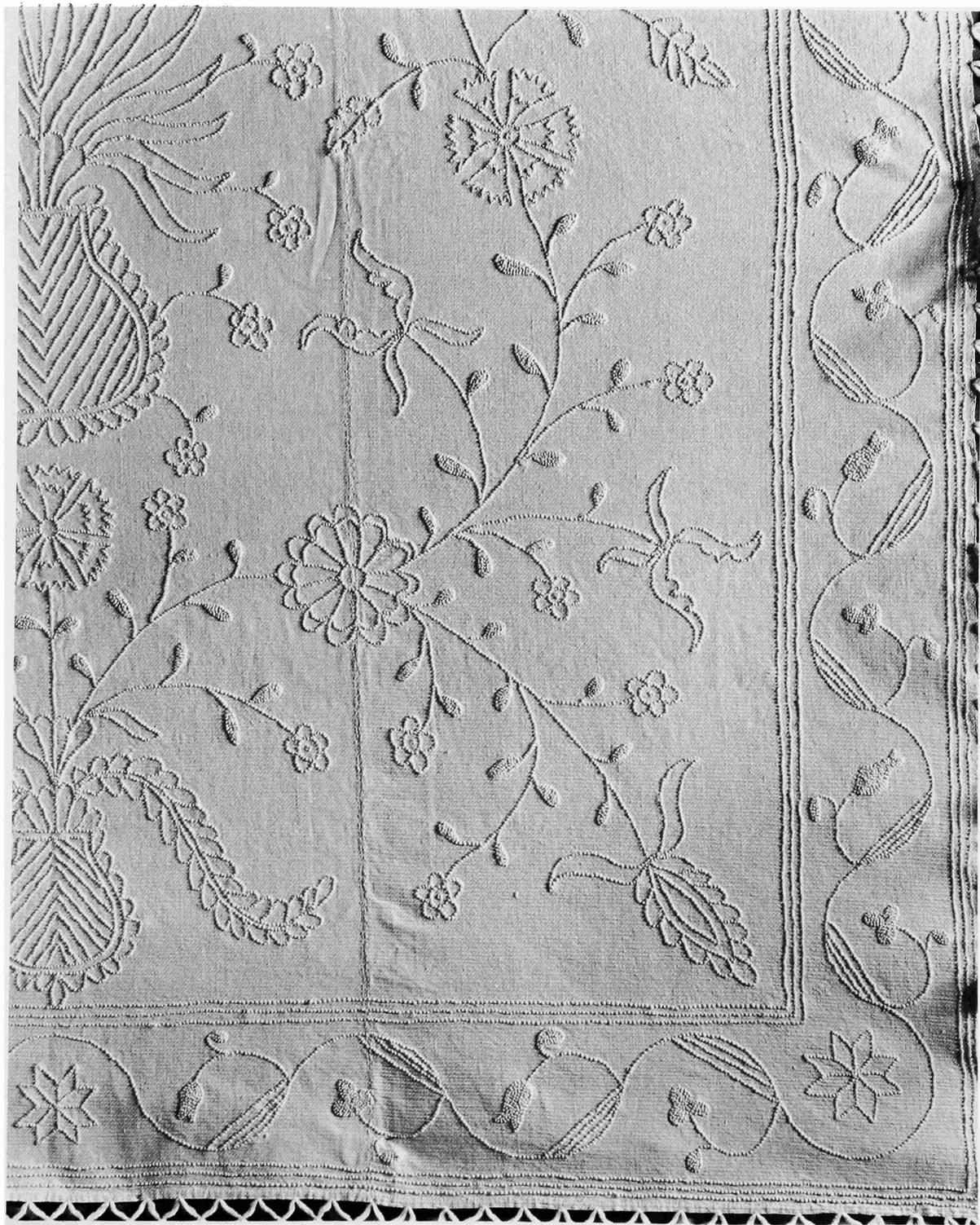


FIGURE 15.—Corner detail of counterpane shown in Figure 13. (Smithsonian photo 61288-E.)



FIGURE 16.—Counterpane embroidered in candlewicking. (Smithsonian photo 61289-A.)

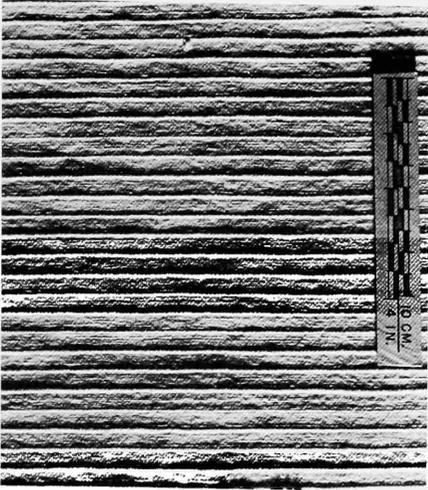


FIGURE 17.—Detail of ground fabric from counterpane in Figure 16. (Smithsonian photo 61289-B.)

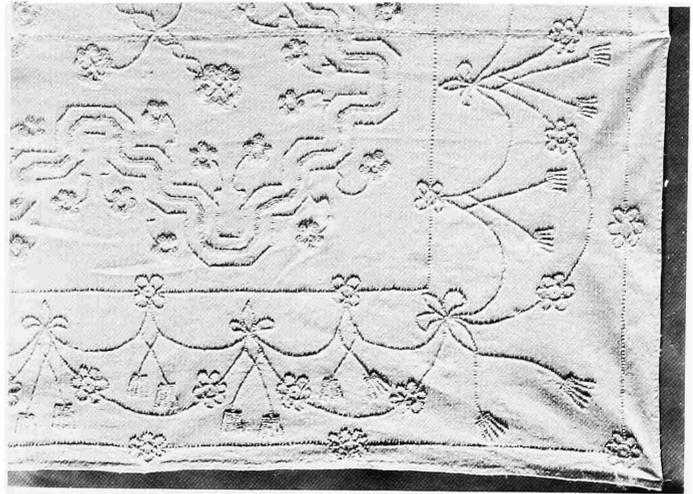


FIGURE 18.—Side and corner detail of counterpane shown in Figure 16. (Smithsonian photo 61288-D.)



FIGURE 19.—Embroidered apron. (Smithsonian photo 61289-C.)

thread in an all-over floral sprig pattern with a running floral border on the bottom and two sides. Hemmed on four sides with two-ply S-twist linen thread; ground fabric probably imported, apron probably made and embroidered in the third quarter of the eighteenth century. *Cleaned T.67-84. H.6650-A*

Muslin (Figure 21), probably originally the skirt of a dress but bearing the holes and tears that would result from its later use as a window curtain, 35½ inches long by 100 inches wide, two widths of fabric stitched to form width; plain weave sheer cotton, single-ply Z-twist yarns in warp and weft, thread count 62 by 58. White on white embroidery, flowers and other motifs in two-ply cotton chain stitch, small dots two-ply linen satin stitch, inner scalloped border two-ply cotton chain stitch, outer scalloped border two-ply linen buttonhole stitch, jagged border in two-ply cotton chain stitch with two-ply linen crescents and dots. Seamed with the same linen thread, later mends of six-cord cabled cotton thread; ground fabric probably imported from India, muslin probably embroidered about 1800. *Cleaned T.67-83. H.6650-B*

single-ply Z-twist yarns in warp and weft, thread count 62 by 58. White on white embroidery, flowers and other motifs in two-ply cotton chain stitch, small dots two-ply linen satin stitch, inner scalloped border two-ply cotton chain stitch, outer scalloped border two-ply linen buttonhole stitch, jagged border in two-ply cotton chain stitch with two-ply linen crescents and dots. Seamed with the same linen thread, later mends of six-cord cabled cotton thread; ground fabric probably imported from India, muslin probably embroidered about 1800. *Cleaned T.67-83. H.6650-B*

BED FURNITURE

In the eighteenth century the term "bed furniture" was used to mean the hangings and outer textiles used on a bed: valance, tester, curtains, head cloth or curtain, counterpane, and flounce. The curtains kept out drafts, and the full ensemble served as a status symbol and often brought color to the parlor in which it might be located, or to the simply appointed bed chamber.

There are three sets, or partial sets, of eighteenth-

century bed furniture in the Copp collection. The earliest is a partial set made of a wool and linen fabric with an embossed design. The second and third sets are of linen; one a partial set of white and the other a full set of blue and white checks. In 1794, Henry Wansey, an Englishman visiting America, wrote, "At one house where I stopped, a young woman told me that . . . the check window curtains were her own making, of flax raised, dressed, and

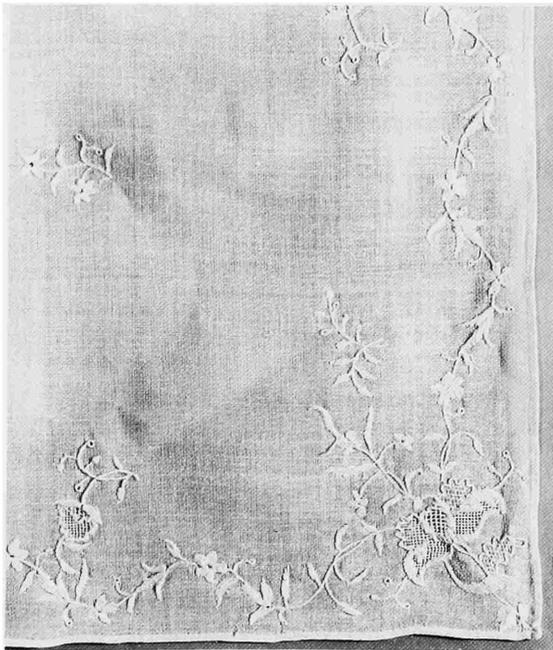


FIGURE 20.—Corner detail of apron shown in Figure 19. (Smithsonian photo 61291-E.)

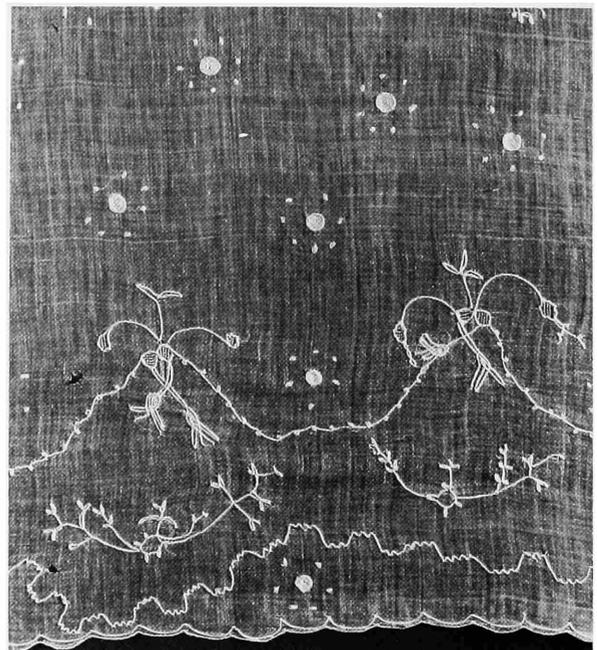


FIGURE 21.—Detail of a piece of embroidered muslin. (Smithsonian photo 61287-F.)



FIGURE 22.—Bed hangings illustrated in woodcut from *Little Ann*, published in 1825 by The Religious Tract Society. (Smithsonian photo 74414.)



FIGURE 23.—Wool and linen bed curtains. (Smithsonian photo 65548.)

spun by herself and sister, as well as the bed-furniture of the house.”¹⁶

Valance and four bed curtains (Figures 23 and 24) valance 76 inches long by 12 inches high (one side section), the curtains are from 78 to 79½ inches in length by 32, 32¼, 64, and 64½ inches in width; the fabric resembles a camlet in appearance but has a linen warp and a wool weft, rather than being all wool; the ribbed appearance is achieved by the use of thicker weft yarns; the width of the fabric is 32 to

¹⁶ Henry Wansey, “An Excursion to the United States of America in the Summer of 1794,” England, 1798; as quoted in Cummings, *Bed Hangings*, p. 43.

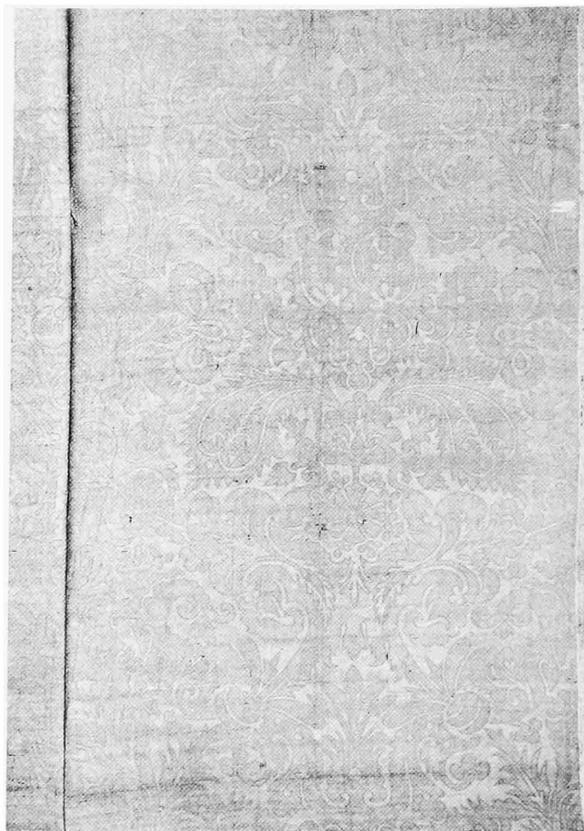


FIGURE 24.—Detail of embossed fabric design on bed curtains in Figure 23. (Smithsonian photo 60792.)

32¼ inches. The surface is embossed¹⁷ with a large-scale, bisymmetrical, stylized floral motif arranged within oval forms the full width of the fabric and with a 36-inch vertical repeat; the embossing produces dull-finish figures on a glazed ground. The original color—visible under the binding—was a bright coral but during use has faded to a dull gold or snuff color. The edges are bound with a narrow silk ribbon also faded to a dull gold. All the pieces are stitched with two-ply, S-twist linen thread, the valance is lined with buckram; the wide curtains have fifteen hand-wrought metal rings (three missing on one) and the narrow curtains have seven and

¹⁷ Embossed designs were applied by the use of engraved cylinders, the fabric was termed “figured” or “flowered” depending on the design. An embossing machine with an engraved roller is illustrated in the *Diderot Encyclopaedia*, 1763, volume 4 of Plates, plate 2.

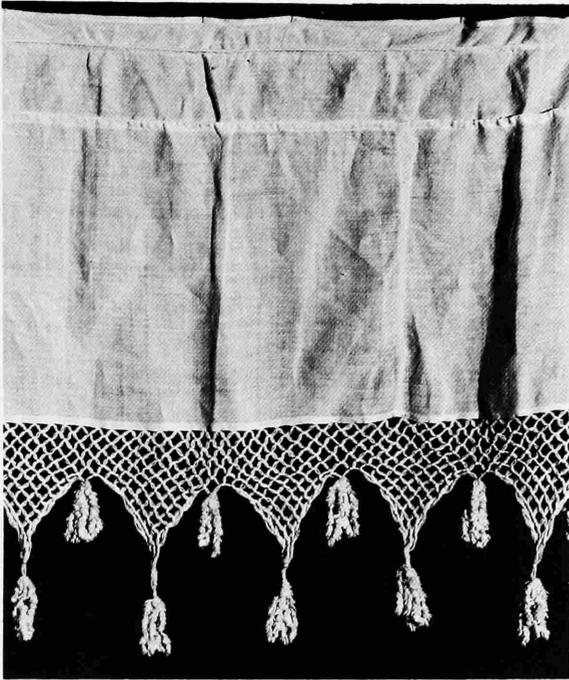


FIGURE 25.—Detail showing fringed valance from set of white linen bed curtains. (Smithsonian photo 61290-D).

eight respectively. The style of the embossed design is reminiscent of a simplified version of a late seventeenth or early eighteenth-century damask; the fabric is judged to be mid-eighteenth-century imported from England and probably made into the bed furniture by the Cops at Stonington *H.6648 A-E*

Valance and three bed curtains (Figure 25), valance 22½ feet long made up of eight widths of 34-inch white linen woven of single-ply Z-twist yarns; the bed curtains, of the same fabric, measure 80 to 81 inches long—the single width curtain is 32¼ wide and the two double curtains are 64 and 65 inches in width, each complete with linen tape loops. The 16½-inch valance is finished with a netted fringe of two-ply S-twist cotton knotted in groups of four with a looped trim of tied and cut yarns. The fringe is stitched to the linen fabric with two-ply S-twist linen thread, while single-ply Z-twist linen thread was used to stitch the overcast seams. The set is judged to be very late eighteenth century; the fabric may have been spun and woven by the Copp family. *Cleaned T.68-4. H.6649 A-C (Bed curtains). Cleaned T.67-160. H.6665 (Valance)*

Complete set of Bed Furniture (Figure 27), in blue and white linen check with a repeat approximately 2¾ by 2¾ inches, each repeat consists of blue and white yarns arranged in the following order in both the warp and the weft: twelve blue, six white, two blue, two white, two blue, forty-eight white, two blue, two white, two blue, six white, and twelve blue, which balance the check and are the beginning of the next repeat; the solid white squares are approximately 1¼ inches and the solid blue squares about ¾ of an inch in dimension. The fabric width is thirty-four inches, but of course varies slightly. It is woven of single-ply linen yarns; the thread count varying from a warp of forty-three in some pieces to a warp of fifty-two in others, the weft is more consistently in the mid-40s; such a variation in the warp count would indicate that more than one warp was set up—as would be the need for the approximately fifty yards of check to make the complete set. The unlined counterpane measures 101 by 102½ inches and is made up of three widths of the fabric, with a simple 2½-inch blue-and-white woven linen fringe on three sides. There are five pieces to the bed curtains: a head curtain approximately 68 inches square made of two widths, two side curtains approximately 86 by 51 inches, and two side-end curtains (that come together at the center foot of the bed) approximately 86 by 83 inches. There are six linen loops on the narrow side curtains

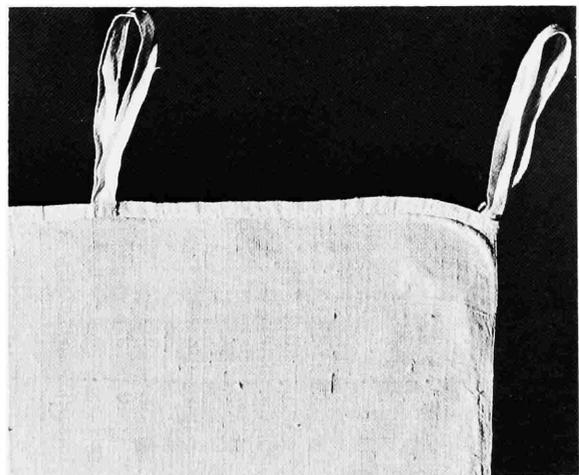


FIGURE 26.—Detail of tape loop from white linen bed curtains. (Smithsonian photo 61981.)

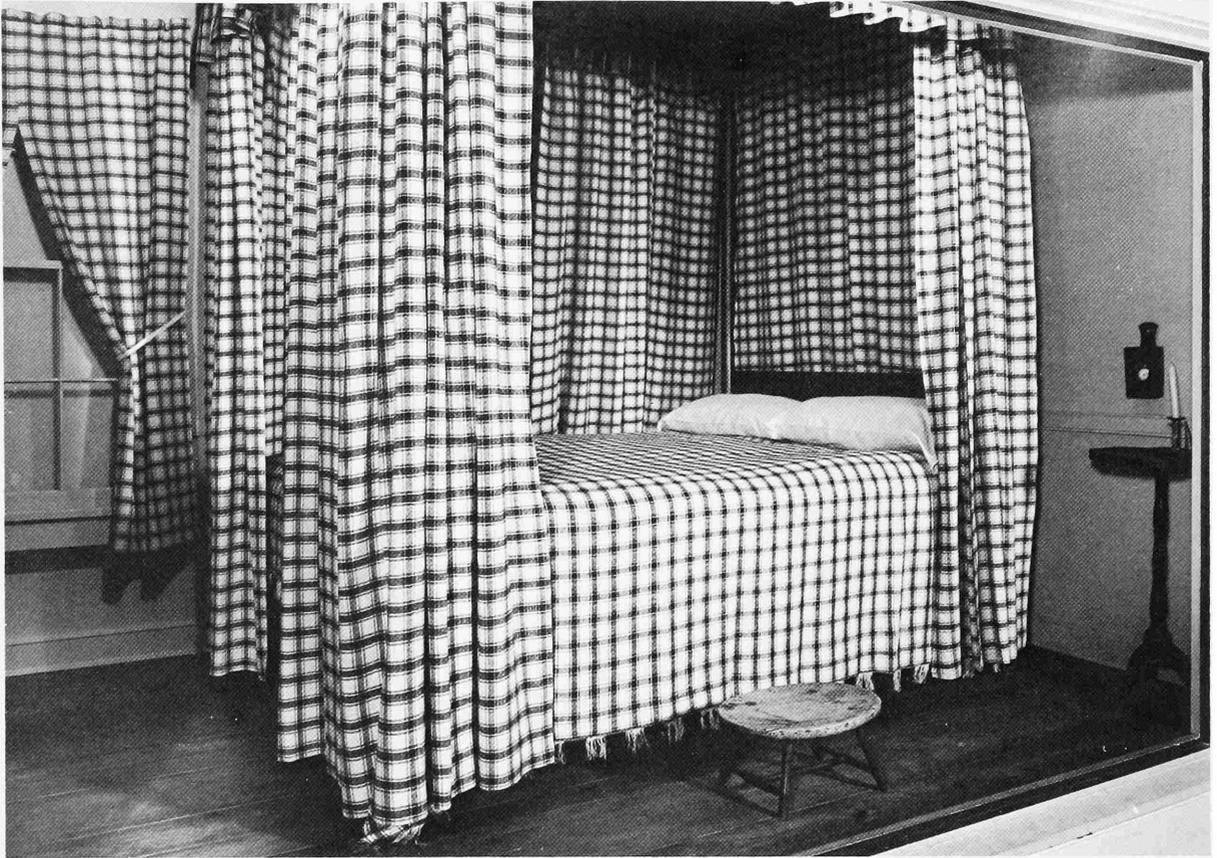


FIGURE 27.—Bed curtains, bed cover, valance and window curtain in room setting.
(Smithsonian photo 74646.)

and eleven on the wide ones. The head curtain has evidence of threads possibly from the stitching of eight loops, although it might have been tacked as it would not have been necessary to slide the head curtain. The valance is 15 inches deep and measures about 375 inches in length, which is just enough to give it a slight gathered fullness. There are casings one inch and seven inches from the top edge which has a one-quarter-inch hem (as does the bottom edge), which indicate that the valance was probably meant to be tacked from the tester frame of the bed. There are four pair of window curtains, each pair stitched together at the top for a length of about fourteen inches. The curtains vary in length from 68 to 70½ inches and in width from 48 to 50—each panel is therefore about 24 inches wide. There

is a one-quarter-inch casing two inches from the top to carry the supporting cord, which probably was tied to nails on either side of the window. All the curtains are finished with one-eighth-inch hem except where a selvedge is left as the finished edge. The last piece (use unknown) measures 18 by 16½ inches and is made up of two pieces stitched together with a length of the fringe stitched to the surface to form a 16-inch circle. The edges of the piece are very poorly finished, indicating that they were probably not supposed to be seen. All the pieces are stitched with two-ply, S-twist linen thread. This set of bed furniture was probably made by the Copps in the late eighteenth century; the fabric may have been woven by them also. *Cleaned T.68-30, T.68-31, T.68-32. H.6647 (A-L)*

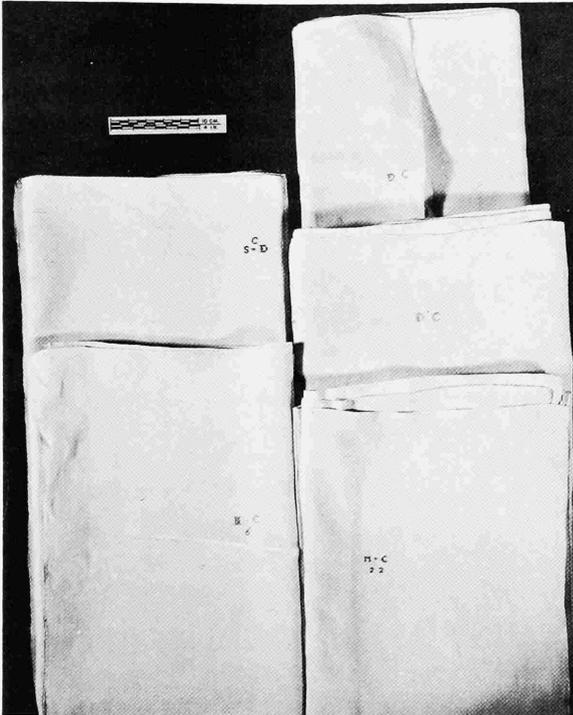


FIGURE 28.—Marked bed sheets. (Smithsonian photo 61302.)

been marked **D C**. One of the sheets might have been made before 1794 by her or her mother. The other three sheets are seamed with three-ply machine-spun cotton thread and, on two, the initials are worked in light blue machine-spun cotton thread. Cotton thread spun by hand was neither fine nor strong enough to be used as sewing thread. Machine-spun cotton was not produced in New England before the early 1790s. Although it was produced in England earlier, it was not twisted into sewing thread at that time. Machine-spun cotton was reported to have been twisted into sewing thread in Pawtucket, Rhode Island, by Samuel Slater's wife in 1794, but it was not commercially produced by the Slater Mills until early in the nineteenth century.²¹

It would be too much to assume that daughter Dolle acquired some of Mrs. Slater's thread in 1794 when it was first produced and seamed three sheets before she was married later in the year. Although it is possible that these sheets were made by Dolle

²¹ Grace R. Cooper, Appendix "Cotton Thread, Historical Notes," *The Invention of the Sewing Machine* (United States National Museum Bulletin 254, Washington, D.C., U.S. Government Printing Office, 1968), p. 135.

Brown Copp, it is unlikely. They were probably made in the early nineteenth-century by another **D C** whose name has been lost.

Six sheets are marked **P C** with and without numbers. Polly Copp was born in the 1780s. It is quite likely that these sheets were part of her dowry. Three of them are embroidered with the **4**, **5**, and **6**; the other three are not numbered. One sheet is seamed and hemmed with two-ply linen thread; one sheet is seamed and hemmed with three-ply cotton thread; the other four sheets are seamed with three-ply cotton and hemmed with two-ply linen. These are all judged to be of the early nineteenth century.

Two sheets are marked **E C**. The initials are embroidered in blue linen. The hems and center seams are stitched in two-ply linen thread. Since there were a number of Copp girls with first names beginning with "E" (Elizabeth, Esther, and so forth), it is difficult to establish to which these sheets belonged originally. However, there is nothing in the component parts to prevent them from having been made by Esther Copp, born in 1754, who made the 1765 sampler. The sheets would probably have been made about 1770.

The ten sheets marked **M C** were attributed by the family as having been made by Mary Copp. There were many Mary Cops and an equal number of Margarets and Marthas. All but one of the sheets are seamed in the center with either two-ply or 2/2-ply linen thread. One is seamed with three-ply cotton. Two of the sheets, a pair, have the numbered monogram **M C** **22** embroidered in blue linen thread.

First, it is important to note that usually two sheets bore the same number, that is, the sheets were numbered by pairs; second, the number **22** indicates the quantity of sheets that a well-stocked linen closet would contain. The remaining sheets are embroidered in an orange-brown silk, and there are a marked pair of **5s**, a **6**, a **7**, a pair of **8s**, and a pair of **11s**. All the sheets, marked and unmarked, are included in the following chart. (Table 1).

There are seventeen pillow cases in the collection of bed linens. The **M C** **22** pair of sheets have a pair of matching marked pillow cases. They are made of the same fine linen, but of even finer quality than the others, and are embroidered in the same blue linen thread. There are four linen twill tapes stitched at the open end of each pillow case, which were used as closing ties to keep the pillow in proper position.

TABLE 1.—Sheets.

Center Seam Thread		Hem Thread		Sheet Dimensions (in inches)	Thread Count (warp x weft)	Identifying Marks	Cleaned	Catalog Number
Ply	Fiber	Ply	Fiber					
2	linen	2	linen	90½ x 69	45 x 50	M C 6	T.67.91	6667-B
2	linen	2	linen	93 x 69½	51 x 53	E C	T.67.122	6667-G
2	linen	2	linen	94½ x 69¼	50 x 54	E C	T.67.135	6667-D
2	linen	2	linen	86½ x 72	43 x 43	D C	T.67.123	6667-T
2	linen	2	linen	89½ x 65¼	52 x 60	C S D	T.67.100	6667-K
2	linen	2	linen	93¼ x 69¾	43 x 49	C S D	T.67.101	6667-B 1
2	linen	2	linen	92½ x 69	45 x 48	P C 4	T.67.115	6667-I
2	linen	2	linen	91 x 68½	46 x 44	—	T.67.142	6667-F 1
2	linen	2	linen	92 x 70	44 x 48	—	T.67.97	6667-S
2	linen	2	linen	91½ x 68¾	45 x 50	—	T.67.128	6667-U
2	linen	2/2	linen	90½ x 66	48 x 55	7 M C	T.67.90	6667-E
2	linen	2/2	linen	93 x 69	60 x 69	M C 22	T.67.85	6667-A
2	linen	2/2	linen	93 x 68½	60 x 73	M C 22	T.67.86	6667-P
2	linen	2/2	linen	92 x 71	44 x 45	M C 11	T.67.131	6667-X
2	linen	2/2	linen	91 x 70¼	45 x 48	M C 8	T.67.116	6667-L
2	linen	2/2	linen	93 x 58¾	37 x 45	—	T.	6667-R
2/2	linen	2/2	linen	90½ x 70	44 x 46	M C 5	T.67.90	6667-F
2/2	linen	2/2	linen	91 x 70	45 x 49	M C	T.67.95	6667-W
2/2	linen	2/2	linen	91¾ x 70	43 x 47	M C 11	T.67.129	6667-Q
2/2	linen	2/2	linen	92½ x 71	43 x 47	—	T.67.98	6667-V
3	cotton	2	linen	93 x 70	44 x 51	P C	T.67.121	6667-H
3	cotton	2	linen	90½ x 70¼	50 x 50	P C	T.67.118	6667-C
3	cotton	2	linen	96 x 71	49 x 50	P C 6	T.67.132	6667-M
3	cotton	2	linen	92 x 71	49 x 50	P C 5	T.67.94	6667-N
3	cotton	2	linen	88 x 68¾	36 x 37	D C	T.67.119	6667-E 1
3	cotton	2	linen	88 x 71	44 x 43	D C	T.67.133	6667-D
3	cotton	2	linen	89 x 68½	36 x 36	D C	T.67.89	6667-A 1
3	cotton	2/2	linen	90½ x 70	44 x 46	M C 5	T.67.134	6667-J
3	cotton	2/2	linen	92 x 70	43 x 39	—	T.67.137	6667-O
3	cotton	3	cotton	98 x 71½	50 x 51	P C	T.67.120 1	6667-C

There is one pillow case marked **M C**₇ that matches the same number sheet in construction but not in fabric. It is stitched with two-ply linen thread in hem and seam and embroidered in brown-orange silk. The other **M C** pillow cases are numbered, one pair **12**, one pair **14**, and one pair **19**. One pillow

case is marked **S D** and matches the sheet so marked. A pair of **P C**₆ cases are ruffled with a linen of finer quality. Five of the pillow cases are not marked. The following table gives the related technical information (Table 2).

Only one pillow case is stitched with 3/2-ply

TABLE 2.—Pillow cases.

Seam Thread		Hem Thread		Case Dimensions	Thread Count	Identifying Marks	Cleaned	Catalog Number
Ply	Fiber	Ply	Fiber	(in inches)	(warp x weft)			
2	linen	2	linen	33 $\frac{3}{4}$ to 34 $\frac{3}{4}$ x 17	50 x 54	C S D	T.67.44	6664-A
2	linen	2	linen	33-34 x 17 $\frac{1}{2}$ to 17 $\frac{3}{4}$	49 x 48	M C 7	T.67.47	6664-B
2	linen	2	linen	32 $\frac{1}{4}$ to 33 $\frac{3}{4}$ x 17	45 x 49	M C 12	T.67.43	6664-G
2	linen	2	linen	32-33 x 16 $\frac{3}{4}$ to 17	45 x 49	M C 12	T.67.33	6664-F
2	linen	2	linen	34-34 $\frac{1}{2}$ x 17 $\frac{1}{4}$ to 17 $\frac{1}{2}$	51 x 53	M C 14	T.67.35	6664-K
2	linen	2	linen	34 to 35 x 17 $\frac{1}{4}$	51 x 54	M C 14	T.67.41	6664-E
2	linen	2	linen	32 $\frac{1}{4}$ to 33 x 16 $\frac{3}{4}$ to 17	51 x 58	M C 19	T.67.42	6664-D
2	linen	2	linen	33 to 33 $\frac{3}{4}$ x 16 $\frac{3}{4}$ to 17	60 x 69	M C 19	T.67.48	6664-C
2	linen	2	linen	33 to 34 x 17	44 x 46	—	T.67.49	6664-J
2	linen	2	linen	34 $\frac{3}{4}$ to 35 $\frac{3}{4}$ x 16	51 x 56	—	T.67.45	6664-I
2	cotton	2	cotton	32 $\frac{3}{8}$ x 17 $\frac{5}{8}$	94 x 77	M C 22	T.67.149	6664-M'
2	cotton	2	cotton	32 $\frac{1}{4}$ x 17 $\frac{5}{8}$	94 x 75	M C 22	T.67.149	6664-M
2	cotton	2	cotton	32 $\frac{1}{2}$ x 17 $\frac{1}{2}$	94 x 80	P C 6	T.67.68	6732-A
2	cotton	2	cotton	32 $\frac{1}{2}$ x 17 $\frac{1}{2}$	94 x 79	P C 6	T.67.69	6732-B
3	cotton	3	cotton	31 $\frac{1}{4}$ to 33 x 16 $\frac{3}{4}$	38 x 40	—	T.67.46	6664-H
3/2	cotton	3/2	cotton	33 $\frac{1}{2}$ x 23 $\frac{1}{4}$	50 x 40	—	T.67.50	6664
							T.67.147	6664-L

thread and dates most probably from 1850.²² It is made of linen considerably coarser than the others which also varies in construction and size. It is finished with a hem of 1 $\frac{1}{4}$ inches rather than with a narrow rolled hem, as the others are. The end has five buttons and buttonholes, so the pillow can be held in place. The proportions are quite different from the earlier pillow cases and more like modern ones.

Also included with the bed linens are two linen bolster covers. The first is 57 $\frac{1}{2}$ by 16 $\frac{1}{2}$ inches of tube construction, full fabric width 33 inches. It is embroidered **M C** in brown silk, and made of fabric

with a thread count of 45 by 41. The sewing thread used was two-ply linen. The second bolster cover is 62 $\frac{1}{2}$ by 17 inches of tube construction, full width of fabric 34 inches. It is made of two fabric lengths stitched together, rather than of a single length as is the first. The thread count of the ground fabric is 61 by 53. The inked name **B. Chapman** is written at each end, indicating that the bolster might have been constructed from a pair of pillow cases. Betsey Chapman of Norwich, Connecticut, married Samuel Copp in 1844. The original components, or pillow cases, were probably made prior to that date, probably in the early 1840s.

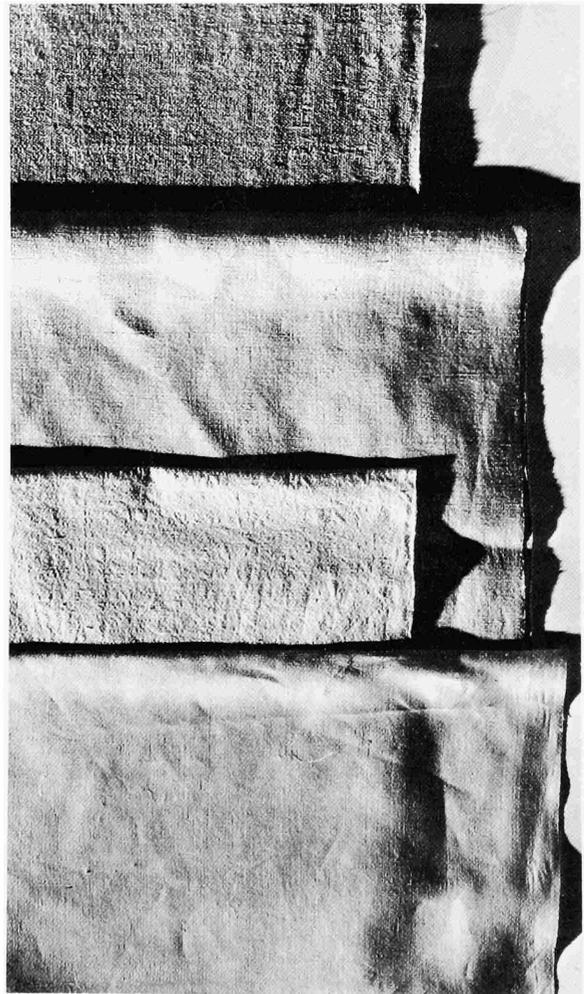
There are a number of unused lengths of linen (Figure 29), of the type used for the sheets and pillow cases. These are charted for reference. The selvedge to selvedge dimension is given first.

²² Ibid., p. 63. The terms 3/2-ply thread and six-cord thread are synonymous. The latter is the contemporary term and the former a descriptive term. It is, in effect, a cabling or twisting together of three two-ply yarns.

TABLE 3.—Unused lengths of linen.

<i>Dimensions</i> (inches x yards/inches)	<i>Thread Count</i> (warp and weft)	<i>Cleaned</i>	<i>Catalog Number</i>	<i>Finish</i>
32½ x 12 31¼	46 x 54	T.67.114	6671-A	Unbleached
34¼ x 10	62 x 66	T.67.146	661-B	Bleached
29 x 2 34½	56 x 68	T.68.3	6671-C	Unbleached
33 x 6 20	40 x 42	T.67.143	6671-D	Unbleached
34 x 6 13	46 x 55	T.67.170	6671-E	Unbleached
26 x 5 17	46 x 54	T.67.158	6671-F	Unbleached
34 x 4 6	42 x 48	T.67.171	6671-G	Unbleached
34 x 4 6	42 x 48	T.67.171	6671-G	Unbleached
29¼ x 3 11¼	57 x 59	T.67.169	6671-H	Unbleached
30¼ x 6 9¼	17 x 34	T.67.167	6671-I	Unbleached

FIGURE 29.—Lengths of linen yardage showing variety of textures. (Smithsonian photo 62008.)



Bed Ticking

The two lengths of bed ticking (Figure 30) are impressive, first because of their similarity to modern ticking and second because of the quantity of unused fabric in such good condition. Both of these examples probably date from the early nineteenth or very late eighteenth century. The use of cotton in the warp would indicate that it postdates the machine spinning of this fiber. The narrow, even stripe ticking is of dark blue cotton and white cotton warp with a weft of natural linen; the thread count is 58 by 56 and it is woven in a 3/1 twill weave.²³ There are 55 yards of this 29-inch-width fabric. The second ticking of a balanced stripe of wide and narrow groupings has a warp of dark blue linen and white cotton with a weft of natural linen; the thread count is 63 by 61 and it is woven in a 3/1 twill weave. There are 11¾ yards of this 29¾-inch-width fabric.

²³ Gallatin, *A Statement on the Arts*, p. xxix.

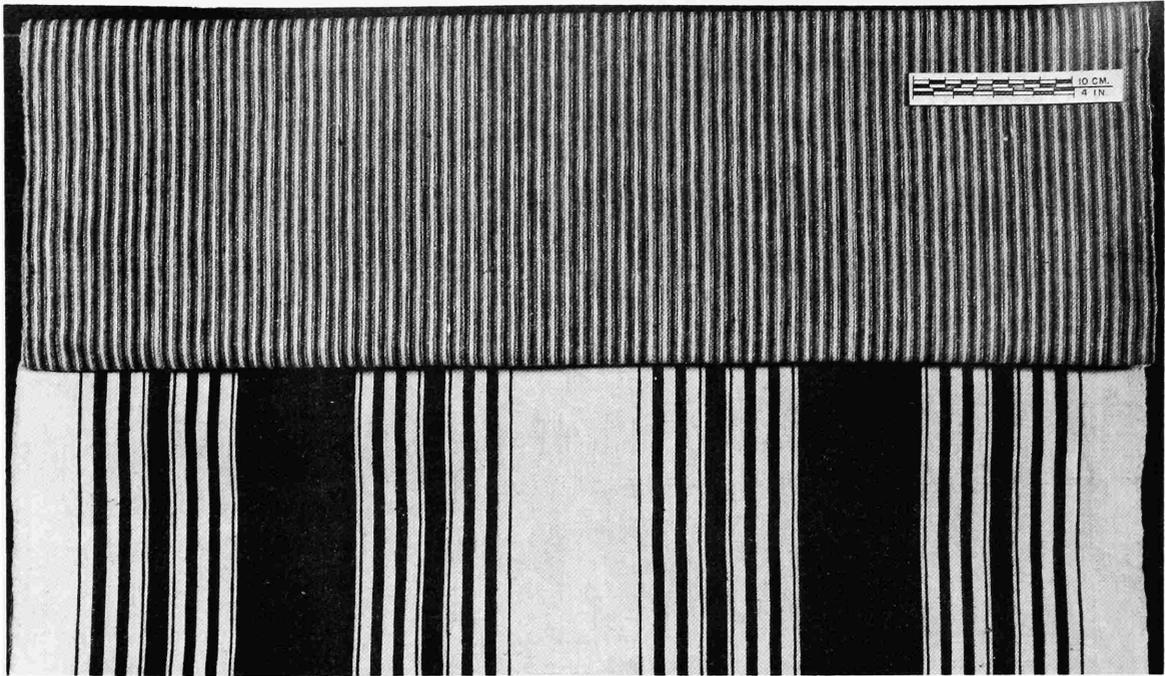


FIGURE 30.—Bed ticking. (Smithsonian photo 61290.)

TABLE LINENS AND TOWELING

The use of a patterned linen cloth on the table, restricted to the church and royalty in the earlier centuries, became a symbol of monetary success by the seventeenth and eighteenth centuries. For those who could afford them, the complicated drawloom damasks were the most prized. But the simpler patterned linens were less expensive though none the less a luxury at this period in history. Some of these patterned linens were imported and some were woven by the professional weavers in America and even the more skilled housewives. *The Connecticut Gazette and the Commercial Intelligencer* (New London) advertised on 11 April 1804, page 2, "A variety of damask and diaper table cloths and napkins . . . cotton doyles, or small napkins." The "damask" here probably refers to a fabric having alternating warp and weft-faced twill pattern blocks, not to the drawloom damasks that were almost certainly produced on order at this time. The "diaper" mentioned in the ad refers to a small all-over woven geometric pattern, such as the "M's and O's" weave.

There are five tablecloths, ten napkins, one stand

cover (?), and eight linen towels in this collection. The towels are included with the table linens as the same type and weight fabric was used for these items. Figure 31 shows these as they appeared in the special Copp exhibit.

Tablecloth (Figure 32), 44½ by 44 inches, two 22-inch widths stitched together; diaper pattern in M's and O's weave in linen, thread count 57 by 61; stitched with two-ply S-twist linen thread. Applied woven fringe on four sides, which has single-ply Z-twist cotton loops 1⅛ inch long and a linen warp. The initials **M C** are embroidered in yellow-brown silk; probably made in the late eighteenth century by one of the **M** Copp ladies. *Cleaned T.67.75. H.6682-B*

Napkins (one illustrated in Figure 33), of which there are ten, approximately 21 by 22 inches, in diaper pattern M's and O's weave in linen matching tablecloth, Figure 32. *Cleaned T.67.53 to 62.*

Tablecloth (Figure 34), 66¼ by 62 inches, two 31-inch widths stitched together, simple block-patterned damask in linen, thread count 50 by 43; stitched with two-ply S-twist linen thread; applied

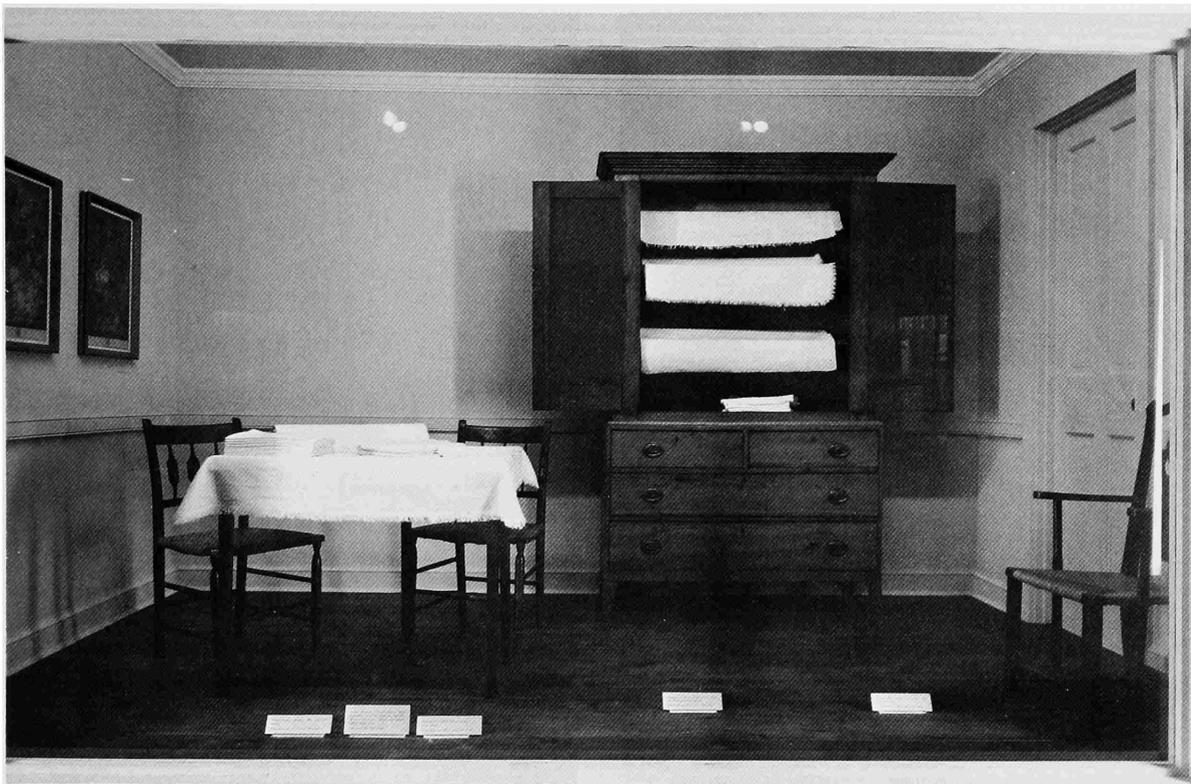


FIGURE 31.—Table linens on exhibition. (Smithsonian photo 65546.)

woven, cut fringe of single-ply Z-twist linen. The initials **M C** are embroidered in brown silk. Reportedly made about 1750, certainly at least late eighteenth century, by one of the **M** Copp ladies. *Cleaned T.67.156. H.6683-B*

Tablecloth (not illustrated), $60\frac{1}{2}$ by $58\frac{1}{2}$ inches, two $29\frac{1}{4}$ -inch widths stitched together, 2 over 2 twill weave in linen, thread count 36 by 42; stitched with two-ply Z-twist linen thread. The initials **M C** are embroidered in brown silk, probably late eighteenth or early nineteenth century, by one of the **M** Copp ladies. *Cleaned T.67.72. H.6682-A*

Tablecloth (Figure 35), $75\frac{3}{4}$ by $71\frac{1}{2}$ inches, two $35\frac{3}{4}$ -inch widths stitched together, simple block-pattern damask in linen, thread count 46 by 48; stitched with two-ply S-twist linen thread. The initials **P C** are embroidered in a warm brown silk in one corner; short, self-fringe $1\frac{1}{4}$ inches long at each end; probably late eighteenth or early nineteenth century, by one of the **P** Copp ladies. *Cleaned*

T.67.93. H.6683-A

Table cloth (Figure 36), $32\frac{1}{4}$ by $58\frac{1}{2}$ inches, two $29\frac{1}{4}$ -inch widths stitched together, diaper pattern in M's and O's weave in linen, thread count 46 by 41; stitched with two-ply Z-twist cotton thread; probably made in the early nineteenth century. *Cleaned T.67.28. H.6653-B*

Called a "huckaback stand cover" by the donor, this item (Figure 37) was most probably a towel that also may have been used to cover the wash stand. It is 42 by $22\frac{1}{2}$ inches, woven in a simple pattern weave with a more elaborate side and end border with rose colored cotton used to set off the $2\frac{1}{2}$ -inch end borders; with a two-inch self-fringe; thread count 65 by 56; the initials **F M c P** at one end. The number **3** suggests that this was one of a number of towels of the same type, probably purchased about the middle of the nineteenth century. *Cleaned T.67.64. H.6684*

A group of eight linen towels in twill and birdseye weaves offer an interesting comparative study. Two

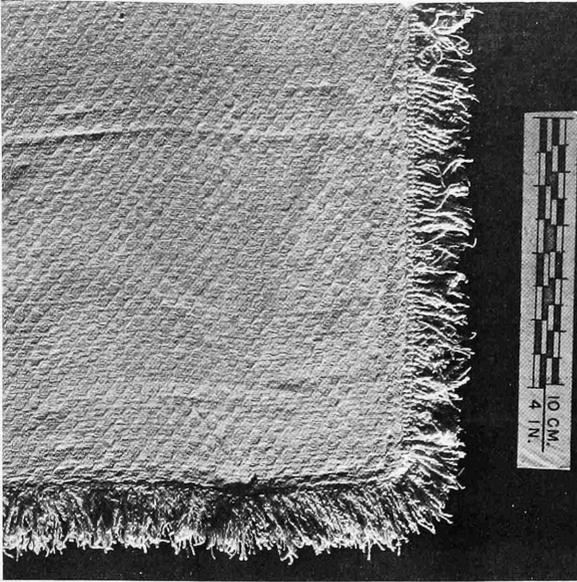


FIGURE 32.—Corner detail of tablecloth showing fringe.
(Smithsonian photo 61290-A.)

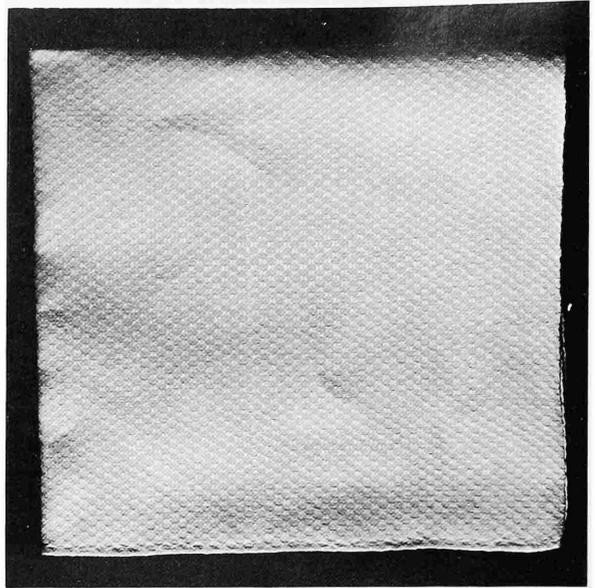


FIGURE 33.—Napkin matching tablecloth in Figure 32.
(Smithsonian photo 61302-H.)

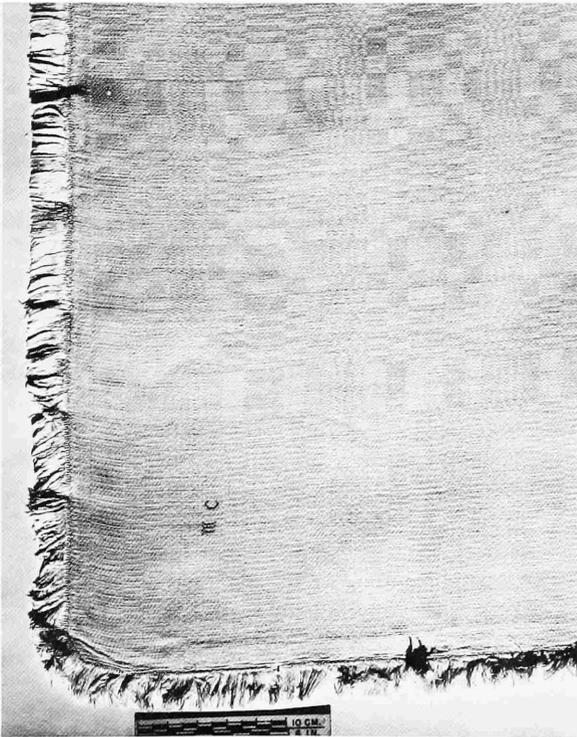


FIGURE 34.—Corner of block-patterned linen damask
tablecloth. (Smithsonian photo 61984.)

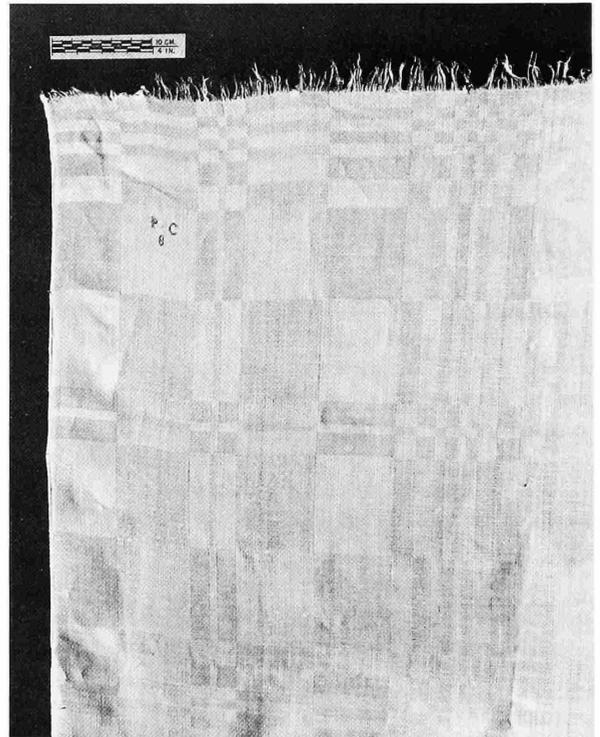


FIGURE 35.—Detail of damask tablecloth with monogram
(Smithsonian photo 61290-B.)

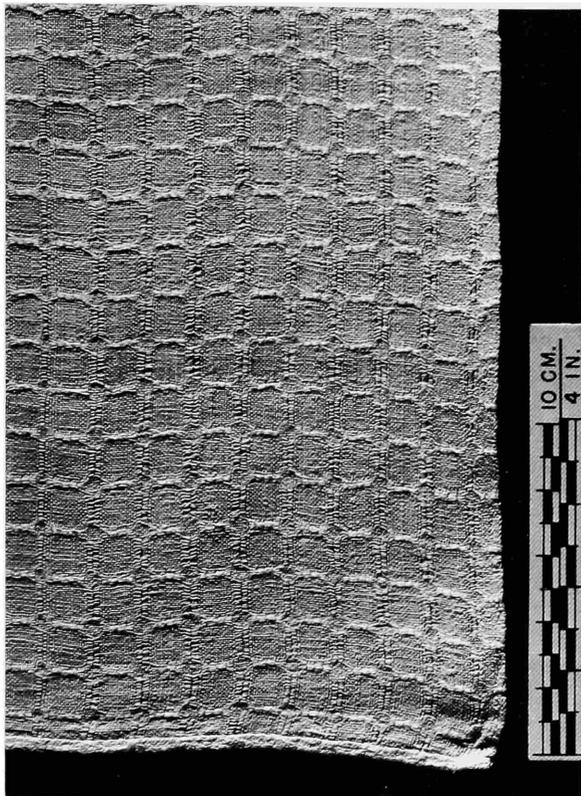


FIGURE 36.—Detail of linen tablecloth in diaper pattern M's and O's weave. (Smithsonian photo 61980.)

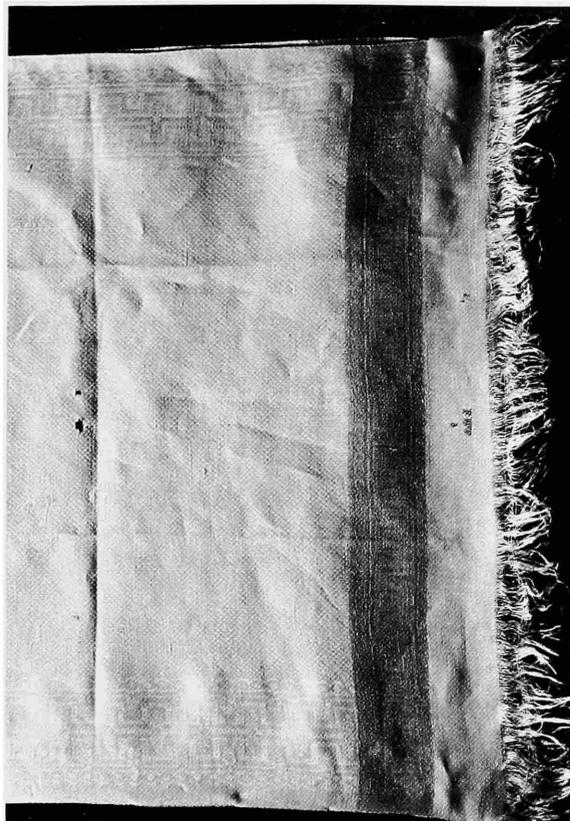


FIGURE 37.—Towel with more elaborate woven side and end border design. (Smithsonian photo 61302-C.)

of the three birdseye towels shown in Figure 38 marked $\begin{matrix} M & C \\ 1 & \end{matrix}$ and $\begin{matrix} M & C \\ & \end{matrix}$ have interesting variations that would indicate that they were not of the same date.

Towel (the folded towel on the right in Figure 38), 34 by 24 inches, linen, birdseye weave, thread count 46 by 56; hemmed with two-ply S-twist linen thread; embroidered initials **E C** in brown silk; probably woven in the late eighteenth century. *Cleaned T.57.67. H.6666-A*

Towel (not illustrated), $34\frac{7}{8}$ by $19\frac{3}{4}$ inches, linen, birdseye weave, thread count 36 by 50; hemmed with two-ply S-twist linen thread; embroidered initials and number $\begin{matrix} M & C \\ 1 & \end{matrix}$ in light brown silk; probably made in the late eighteenth century. *Cleaned T.67.40. H.6666-G*

Towel (the folded towel on the left in Figure 38), $32\frac{3}{4}$ by 25 inches, linen, birdseye weave, thread

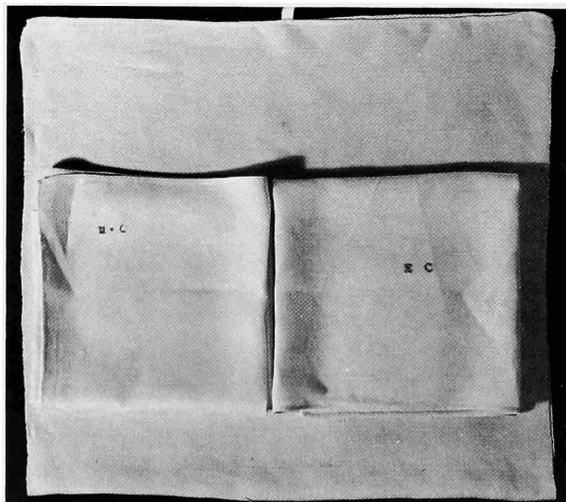


FIGURE 38.—Three linen towels. (Smithsonian photo 61291-H.)

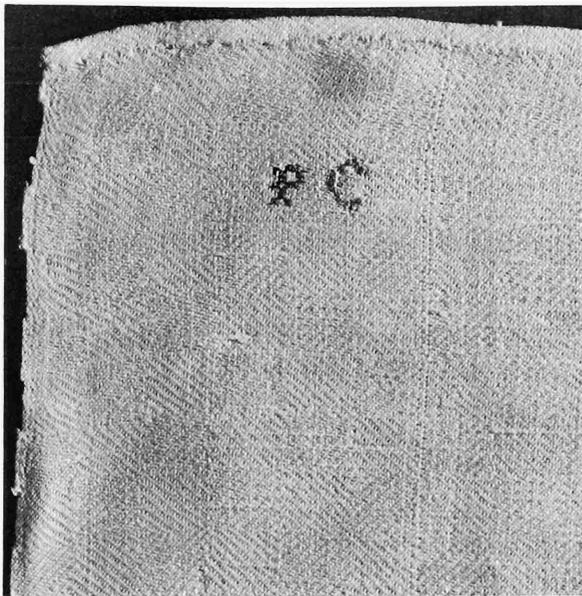


FIGURE 39.—Linen towel in diamond-patterned twill weave. (Smithsonian photo 61978.)

count 59 by 58; hemmed with two-ply S-twist cotton thread;²⁴ embroidered initials **M C** in dark brown silk; probably made in the early nineteenth century. *Cleaned T.67.66. H.6666-B*

Towel (the full-width towel in the background of Figure 38), 35½ by 19½ inches, linen, twill weave in a small diamond pattern, thread count 54 by 46; hemmed with two-ply S-twist linen thread; trace of initials embroidered but not readable; one-half-inch plain woven linen tape loop in center of one end of towel; probably made in the late eighteenth century. *Cleaned T.67.65. H.6666-C*

Towel (not illustrated), 36 by 20½ inches, linen, twill weave in a large diamond pattern, thread count 43 by 40; hemmed with two-ply S-twist linen thread, the selvedge to selvedge width of the woven fabric is the 36-inch dimension; embroidered initials **C P** in light tan and orangish-brown silk. The following two towels are of the same type; probably made in the nineteenth century. *Cleaned T.67.38. H.6666-E*

Towel (not illustrated), 36 by 21⅝ inches, linen, twill weave in a large diamond pattern, thread count 42 by 49; hemmed with two-ply S-twist linen thread; embroidered initials **C P**₁ in light orange-

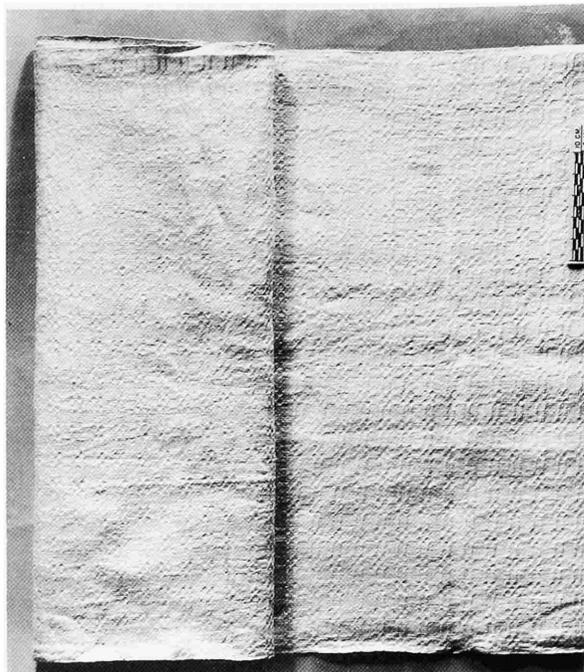


FIGURE 40.—Linen yardage, in M's and O's weave. (Smithsonian photo 61043-A.)

brown silk, barely readable. The variation in thread count would not prevent it from having been cut from the same piece as towel above. *Cleaned T.67.39. H.6666-F*

Towel (not illustrated), 36 by 22⅜ inches, linen, twill weave in a large diamond pattern, thread count 41 by 42; hemmed with two-ply S-twist linen thread; embroidered initials **C P**₂ in orange-brown silk; probably made in the nineteenth century by the same person responsible for the two previous towels. *Cleaned T.67.37. H.6666-D*

Towel (Figure 39), 36 by 21¼ inches, linen, twill weave in large diamond pattern, thread count 42 by 49; hemmed with two-ply S-twist linen; embroidered initials **P C** in brown two-ply S-twist silk; probably made in the late eighteenth century by a member of the Copp family. *Cleaned T.67.150. H.6666-H*

A full width of yardage (Figure 40), 22¼ by 227¼ inches, linen, M's and O's weave in a block design, thread count 46 by 52; probably used in the late eighteenth or early nineteenth century to make towels or other household linens. *Cleaned T.67.151. H.6653-A*

²⁴ Cooper, op. cit. (footnote 20).

TAPES AND FRINGES

Narrow textile wares, both utilitarian and decorative, are so easily purchased today that little thought is given now to their early ancestry and the time-consuming problem of providing such items 150 to 200 years ago. The narrow linen tape, used as a drawstring, a bed curtain or towel loop, a tie for a bonnet, pocket, or as a garter, was a most important household article. Much of the tape needed to fill the family's need was woven at home, as evidenced by the frequent appearance of tape or garter looms in household inventories. These were very simple looms, sometimes consisting of no more than a rigid heddle — slots in a board for the odd warps and holes between the slots for the even warps. For tension, the ends of the warps were tied to a chair or a post. With these looms plain woven tapes $\frac{1}{8}$ to $1\frac{1}{2}$ inches wide could be woven. More sophisticated tape looms had the rigid heddle set into a box with a small beam or roller placed to the back to hold the unwoven warp. Frequently, these looms were beautiful pieces of craftsmanship and graced elegant parlors. The two shown in the exhibit photograph (Figure 41) are good examples; they are not from the Copp collection but are contemporary with the textiles. Woven fringes could also be made on these looms with the use of a fringe guide, as illustrated on the upper tape loom on left. Fringes were also made by netting and knotting techniques.

There are no lengths of tape in the Copp collection. Two textiles show excellent examples of the tape and how it was used. These may be seen in the bed-curtain in Figure 26 and on the towel in Figure 38.

The collection of fringes is excellent, not only in technique and variety, but also in quantity, both on finished articles and in unused lengths.

Examples of woven fringes of similar type are found on the blue and white checked linen counterpane in Figure 27, on two tablecloths, and on four of the coverlets described in a following section.

Woven Fringes

Fringe (in the top row of Figure 42), one-inch deep, over ten yards in four pieces; uncut loops, two-ply S-twist linen yarn; plain and fine scale; minimum woven portion, weft inserted in pairs. *Cleaned T.67.76. H.6673-E*

Fringe (in the center row of Figure 42), $1\frac{3}{8}$ inch deep, over five yards in one piece; cut loops, two-ply

S-twist linen yarn; narrow tape-like band in plain weave, four wefts in each pick, with weft forming fringe on every fourth throw. *Cleaned T.67.36. H.6845*

Fringe (in the bottom row of Figure 42), $2\frac{1}{2}$ inches deep, over eight yards in one piece; uncut loops, two-ply, S-twist cotton yarn; narrow woven band, four weft yarns in each pick. *Cleaned T.67.81. H.6673-C*

Netted Fringes

Netting, an ancient art and widely used as a craft evolving from the making of fish nets, was very popular in eighteenth and nineteenth-century America. It was used extensively for decorative fringes



FIGURE 41.—Exhibit of tapes and fringes. (Smithsonian photo 65549.)

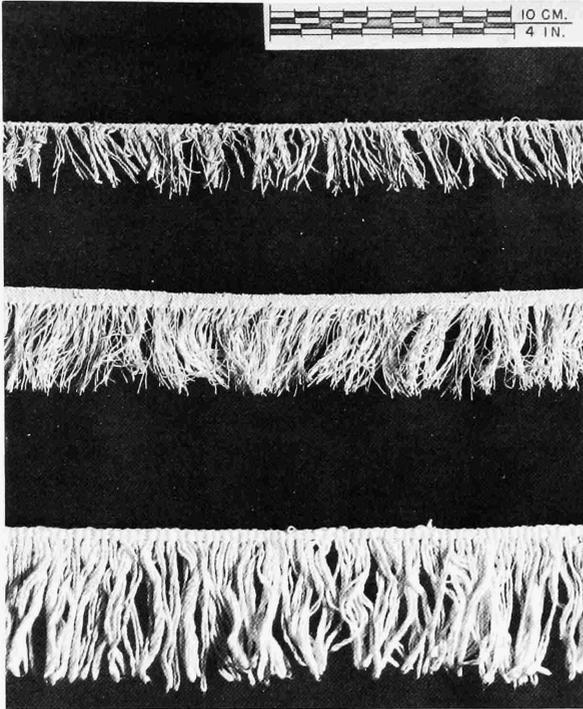


FIGURE 42.—Three woven fringes. (Smithsonian photo 61290-C.)

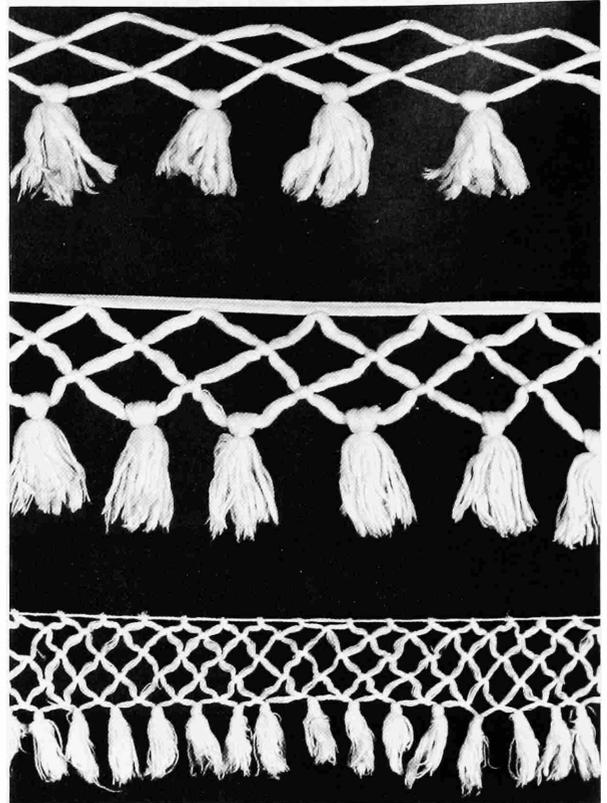


FIGURE 43.—Three netted fringes. (Smithsonian photo 61289-E.)

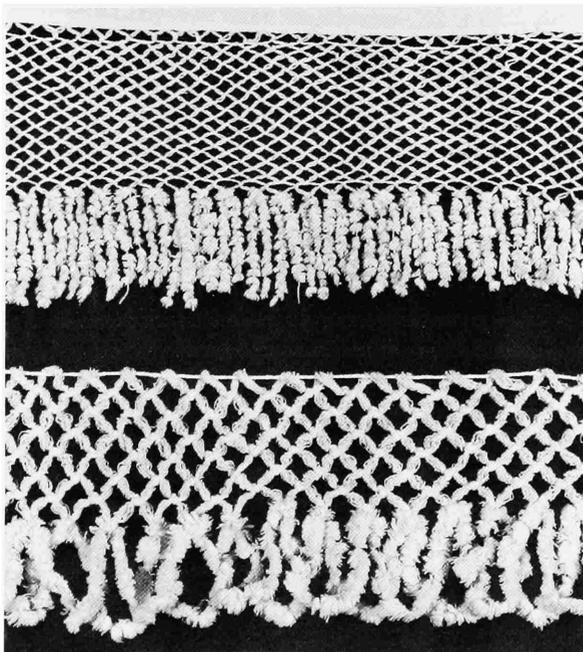


FIGURE 44.—Two netted fringes, five inches wide. (Smithsonian photo 61289-D.)

for bed and table furnishings and for complete items. Two implements are used in netting, one a bobbin-like instrument called a "needle" that carries the yarn and the other a smooth oval stick eight or ten inches long called the "mesh." In the initial row the needle carries the yarn around an anchored string; these yarns may be knotted or just looped. In the ensuing rows each is knotted to the one preceding it. The mesh determines the size of the diamond-shaped openings, and the loops are slipped off as the work progresses. The tassels or fringed edges are formed by clipping the last row of netting between the knots or by adding yarns to the netting to form the tassels separately. An example of the netted fringe of the first type described may be seen on the embroidered counterpane in Figure 13. The more elaborate netted fringe on the valance in Figure 25 should also be noted.

In addition to the fringed edgings there is one complete piece of netted work, a table cover shown in Figure 45.

Fringe (at the top of Figure 43), 3 inches deep, thirty-five yards in three pieces; simple netted fringe with two rows of knots; single-ply Z-twist cotton yarns used in multiples as a single unit; looped around the anchor string, no footing; finished with added tassels formed by looping and knotting to bottom edge between knots. *Cleaned T.67.77. H.6673-A*

Fringe (in the center row of Figure 43), 5 inches deep, over thirty yards in nine pieces; same as above but stitched to a narrow tape pre-woven of single-ply Z-twist linen yarns. *Cleaned T.67.70, T.67.78, and T.67.80. H.6673-B*

Fringe (at the bottom row of Figure 43), 3 inches deep, twenty-five yards in four pieces; simple netted fringe with five rows of knots, knotted to the anchored string; single-ply Z-twist cotton yarns used in multiples as a single unit; last row knotted to form tassels with additional cut loops to make the tassels full. *Cleaned T.67.79. H.6673*

Fringe (at the top of Figure 44), 5 inches deep, approximately ten yards in one piece; simple netted fringe with twenty-one rows of knots, looped around the anchor string; two-ply S-twist cotton yarns used in pairs for the net; finished with lengths of tufted ends of two-ply linen yarn used in pairs onto which are knotted short lengths of cotton yarns to give a chenille effect. *Cleaned T.66.9. H.6646*

Fringe (at the bottom of Figure 44), 5 inches deep, approximately six and a half yards in one piece; simple netted fringe with six rows of knots looped around the anchor string (the string that shows in the photograph is not the original); single-ply Z-twist cotton, with tight twist and used in multiples; finished with a fancy draped edge of two-ply S-twist cotton yarn to which has been tied fine tufts of single cotton to give a chenille effect. *Cleaned T.67.63. H.6673-F*

Table cover (Figure 45), 53 by 45 inches. Center of plain netting in single-ply slight Z-twist cotton yarn; several pattern borders in the same weight



FIGURE 45.—Netted table cover on contemporary table. (Smithsonian photo 61043-C.)

yarn and in a heavier three-ply S-twist cotton yarn; finished with a pointed border, each point with a tassel of tufted yarns with examples of both three-ply cotton core and two-ply linen core yarns with cotton tufts, the lengths of yarn looped twice with the cut ends to form the tassels. The tassel and pointed border are very similar to the border of a table cover in the primitive painting "Alice Slade" by Ammi Phillips, 1816, in the Edgar William and Bernice Chrysler Garbisch collection in the National Gallery of Art. It would be safe to judge that this table cover is of the same period. *Cleaned T.66.26. H.6685*

COVERLETS AND RUG

Warm and durable bed coverings were a necessity for New England and all the northern colonies. These bed coverings took several forms—quilts, blankets, and a type of heavy, patterned woven textile commonly called a coverlet. The earliest coverlets were woven on a linen or wool warp with

wool dominating the pattern weft. Very late eighteenth and nineteenth-century examples were woven on a cotton warp. The overshot weave was probably one of the most popular types, but birdseye and monks belt weave were also used in addition to the better known double weave and summer and

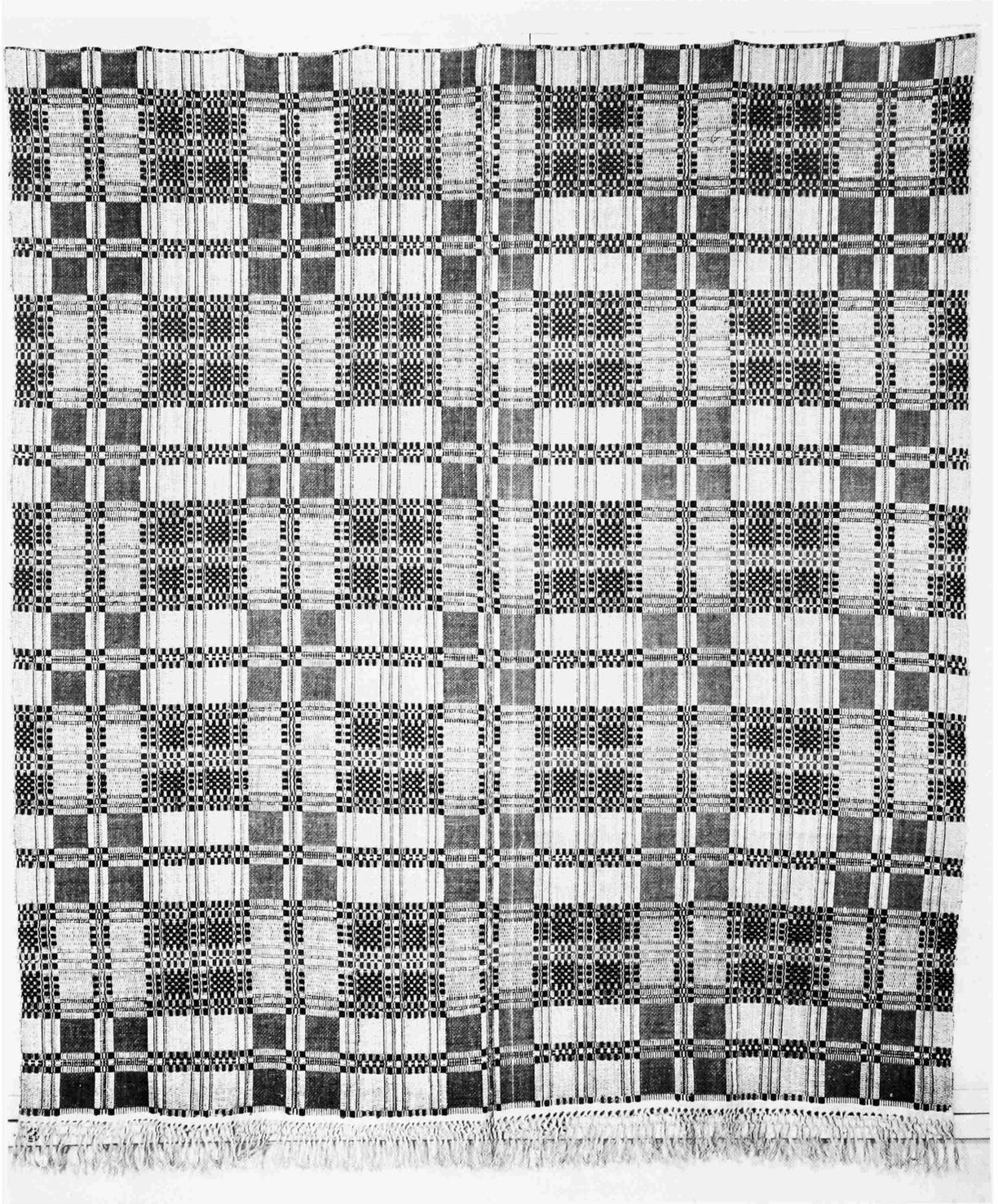


FIGURE 46.—Overshot weave coverlet in linen and wool. (Smithsonian photo 61040-B.)

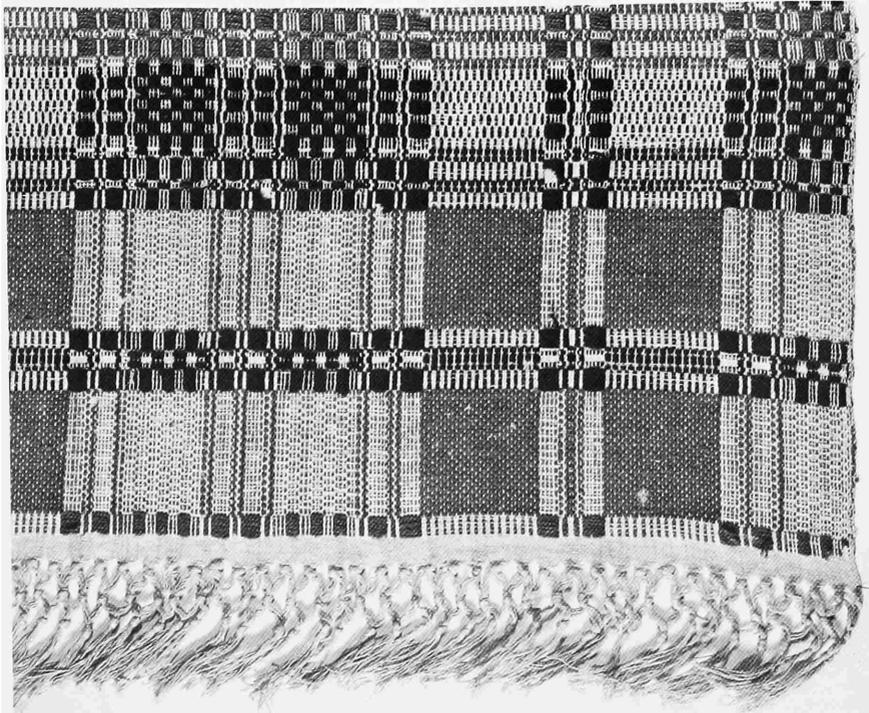


FIGURE 47.—Detail of coverlet in Figure 46, showing fringe. (Smithsonian photo 61291-B.)

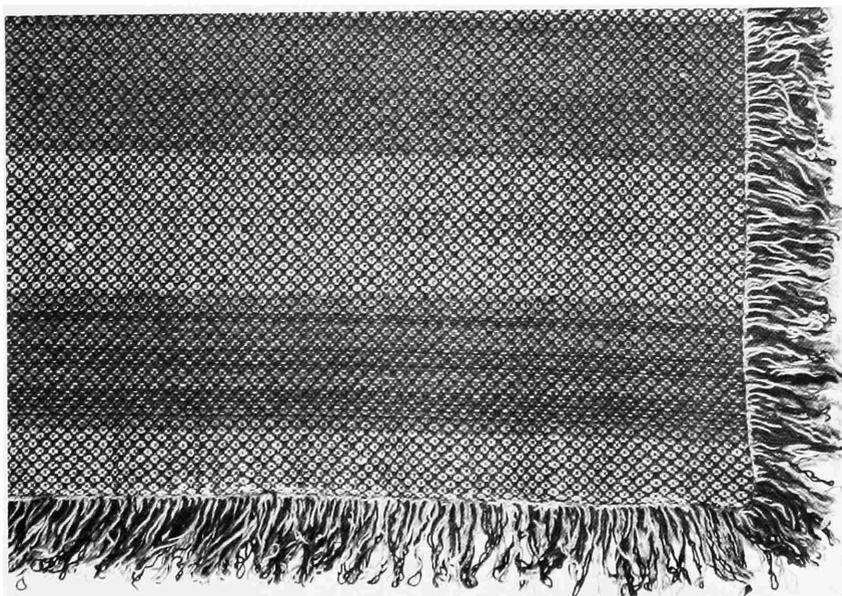


FIGURE 48.—Corner detail of birdseye weave coverlet. (Smithsonian photo 61291-A.)

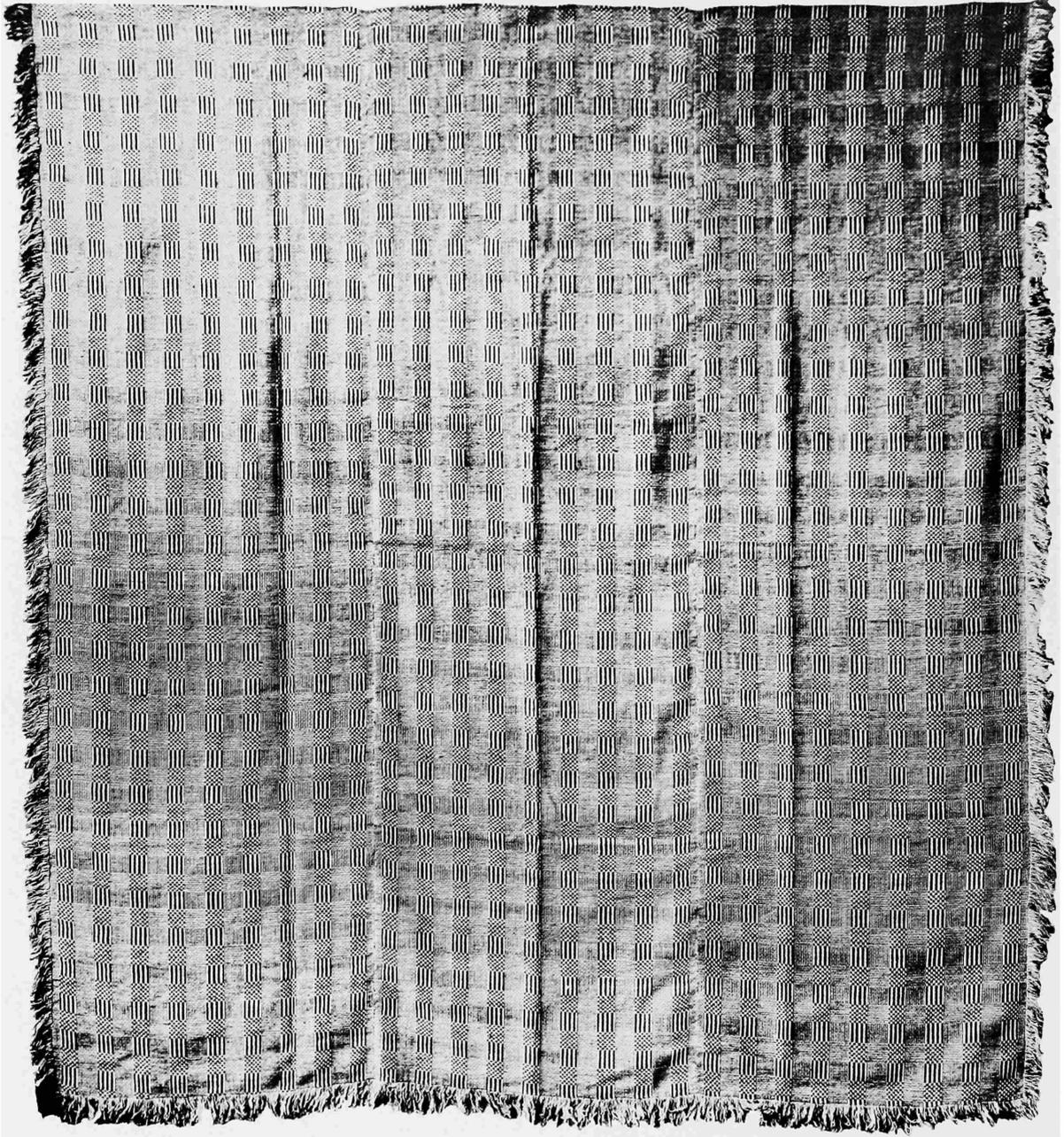


FIGURE 49.—Monks belt weave coverlet in linen, cotton, and wool. (Smithsonian photo 32795.)

winter weave. Although some weaving was done in many early homes, most coverlets were probably the product of a professional weaver. It would not have been uncommon for the handspun yarns to have been produced by the family for whom the coverlet

was being woven. There are five excellent coverlet examples in the Copp collection.

Overshot weave coverlet (Figure 46), 95 by 85½ inches (excluding fringe), woven in two sections each 42¾ inches wide; thread count 20 by 43; warp yarns

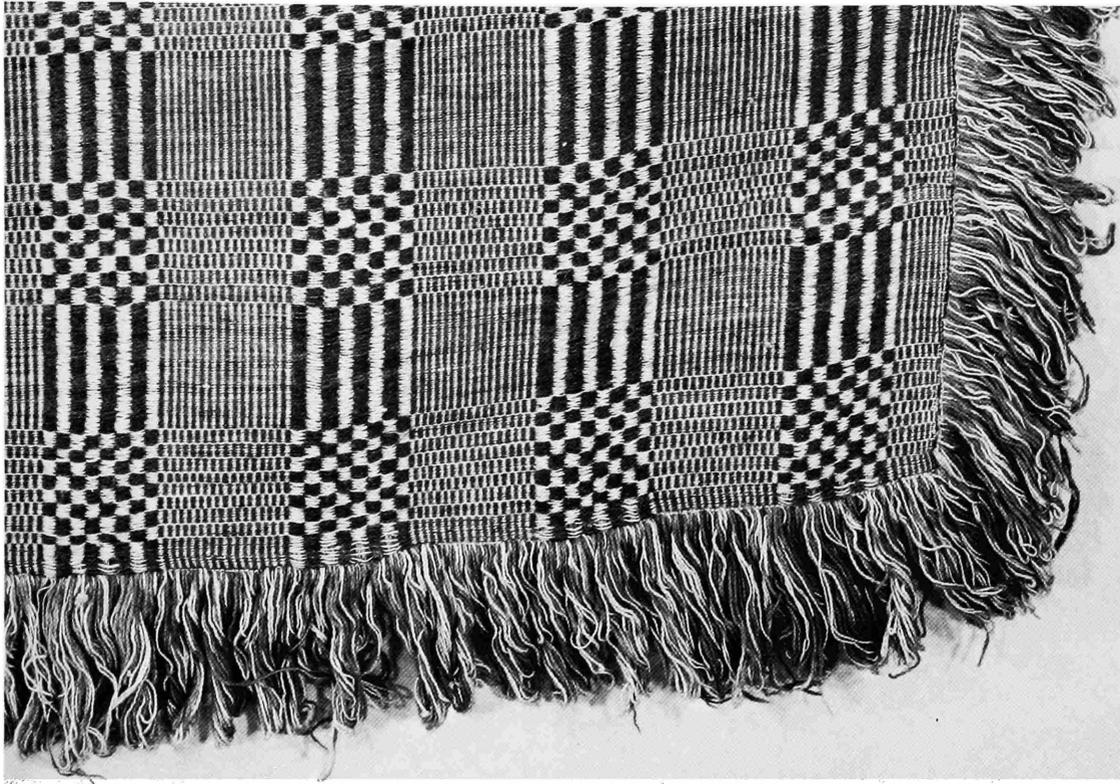


FIGURE 50.—Corner detail of coverlet shown in Figure 49. (Smithsonian photo 61040-D.)

two-ply S-twist linen, weft yarns for the plain or tabby parts single-ply Z-twist linen, for the pattern parts, light blue and indigo blue two-ply S-twist wool. The pattern is similar to "White Mountain"²⁵ and also resembles a variant of "Granite State."²⁶ Finished with a five-inch knotted self-fringe made of the warp yarns, on the lower end only; the two pieces of coverlet stitched together with two-ply S-twist linen thread. Probably woven in the eighteenth century, it is an excellent example of a coverlet of this period. *H.6677*

Birdseye weave coverlet (Figure 48), 95½ by 86 inches (excluding fringe). Woven in two sections each 43 inches wide; thread count 21 by 20; warp yarns two-ply S-twist wool in gold and reddish rose, weft yarns in two-ply S-twist wool in brown; small diamond pattern created by the different-colored yarns in the warp and weft, while the whole is set

against a regular vertical striped design created by the two-color warp in alternating stripes of 3¼ inches of gold and 3¼ inches of reddish rose; finished with a 2¾-inch handwoven, uncut loop fringe in alternating gold and brown wool yarns, stitched to three sides of the coverlet with two-ply S-twist yellow cotton thread. The two pieces of coverlet are stitched together with two-ply S-twist linen thread, which was also used for the end hems. Probably woven in the very late or early nineteenth century, it is an interesting example of a weave less commonly used for coverlets. *H.6676*

Monks belt weave coverlet (Figure 49), 102½ by 94½ inches (excluding fringe). Woven in three sections each 31½ inches wide; thread count 39 by 65; warp yarns single-ply Z-twist linen, weft yarns single-ply Z-twist white cotton and single-ply Z-twist red wool. Checked pattern in 1¾-inch squares, small checkerboard sections with each check measuring ¾ inch and striped sections measuring the same. Finished with a 2¾ inch handwoven, uncut loop

²⁵ Atwater, *Shuttlecraft Book*, p. 51, fig. 23.

²⁶ *Heirlooms from Old Looms*, p. 51.

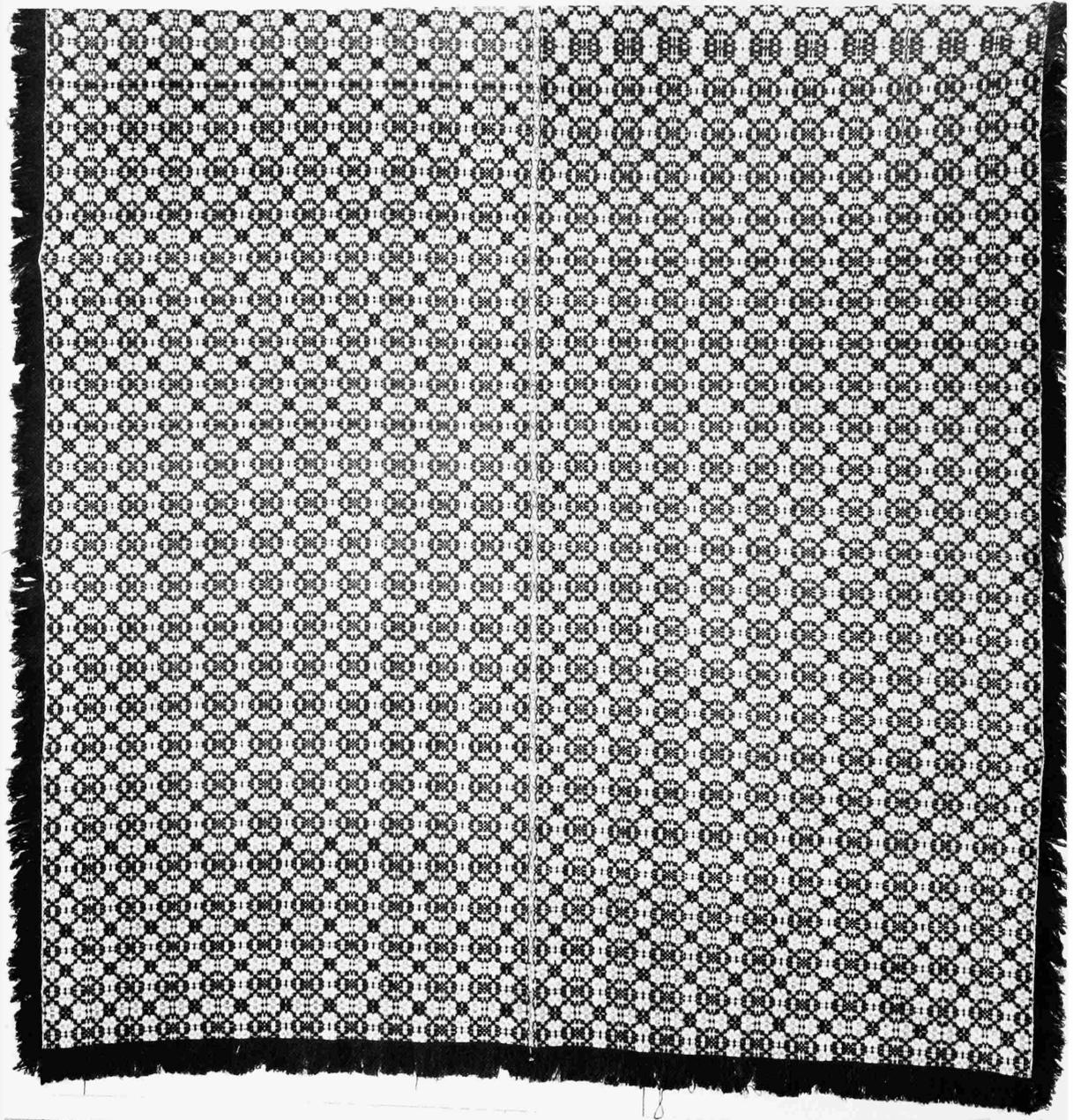


FIGURE 51.—Overshoot weave coverlet in cotton and green and garnet wool. (Smithsonian photo 61041-B.)

fringe in alternating single-ply S-twist red wool and two-ply S-twist white cotton—the red is from a different dye lot than the coverlet—stitched to three sides of the coverlet with two-ply S-twist linen; the three sections of the coverlet are stitched

together with the same thread. Probably woven in the late eighteenth century, it is a very interesting example of a little-seen and unusually time-consuming weave for coverlets. *H.6675*

Overshoot weave coverlet (Figure 51), $88\frac{3}{4}$ by 84

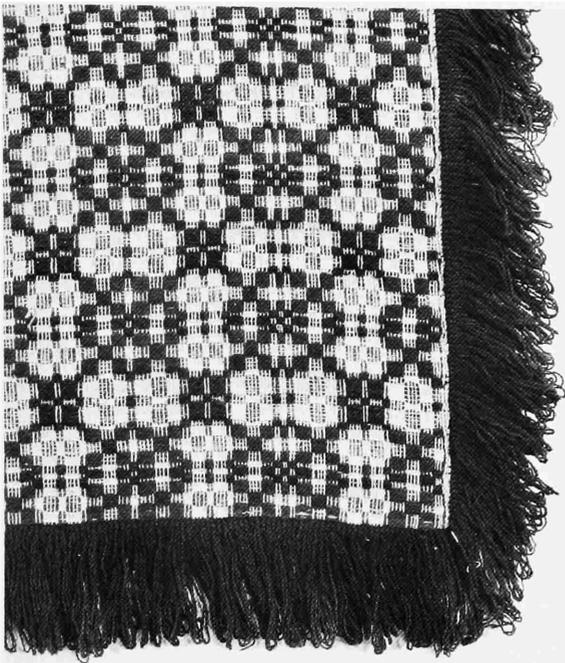


FIGURE 52.—Corner detail of coverlet shown in Figure 51. (Smithsonian photo 61042.)

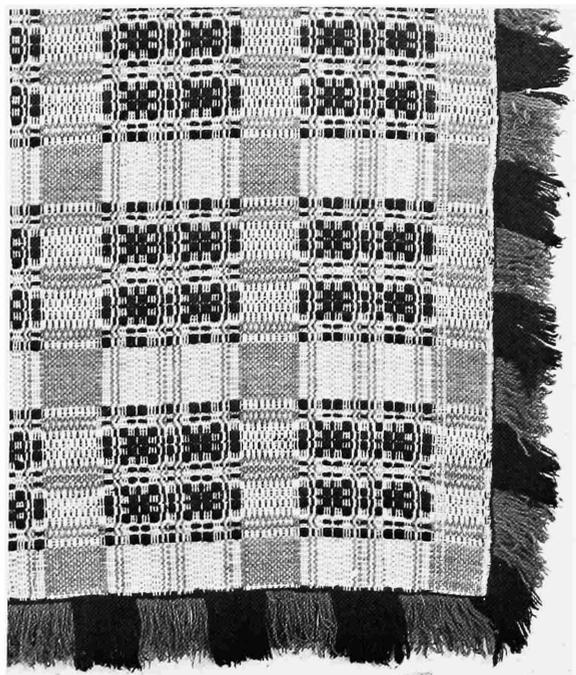


FIGURE 53.—Corner detail of overshot weave coverlet in plain cotton and indigo and light blue wool. (Smithsonian photo 61041-D.)

inches (excluding fringe). Woven in two sections each 42 inches wide; thread count 24 by 48; warp yarns two-ply S-twist cotton, weft yarns for the plain or tabby parts single-ply Z-twist cotton, for the pattern parts two-ply S-twist olive green and garnet wool; woven in a wheel pattern similar to "World's Wonder."²⁷ Finished with a $2\frac{3}{4}$ -inch handwoven garnet and green uncut loop fringe; the two colors of wool are the same as the pattern weft and in $2\frac{1}{2}$ -inch alternating sections, while mixed with the red at one end are orange-red loops of single-ply Z-twist wool; the fringe is stitched to the coverlet with dark brown two-ply S-twist wool, while the center seam and hems are stitched with two-ply S-twist cotton. Probably woven in the early nineteenth century, this coverlet is a well-woven precisely-matched example in excellent condition. *H.6674*

Overshot weave coverlet (Figure 53), 90 by 84 inches (excluding fringe). Woven in two sections each 42 inches wide; thread count 20 by 33; warp

yarns two-ply S-twist cotton, weft yarns for the plain parts single-ply Z-twist cotton, for the pattern parts two-ply S-twist indigo and light blue wool. A four-rose and table pattern; finished with a $2\frac{1}{2}$ -inch handwoven two-tone blue cut fringe; the two colors of wool are the same as the pattern weft and used in $2\frac{1}{2}$ -inch alternating sections; the stitching of the seams, hems, and fringe are with two-ply S-twist cotton. This coverlet although of a different pattern is the same width and construction as the one in Figure 51. The fringe is the same with the exception that the loops are cut rather than being left as loops. Probably woven in the early nineteenth century,²⁸ this coverlet is another example of good workmanship. *H.6678*

In the eighteenth and early nineteenth centuries, a rug on the floor was pure luxury. There were varying types; some were more expensive than others but a floor rug was the exception rather than

²⁷ Atwater, *Shuttlecraft Book*, draft 67, p. 167.

²⁸ Although two-ply cotton strong enough to be used as the warp was produced in the very late eighteenth century, the probability is that most coverlets with a cotton warp date from the nineteenth century.

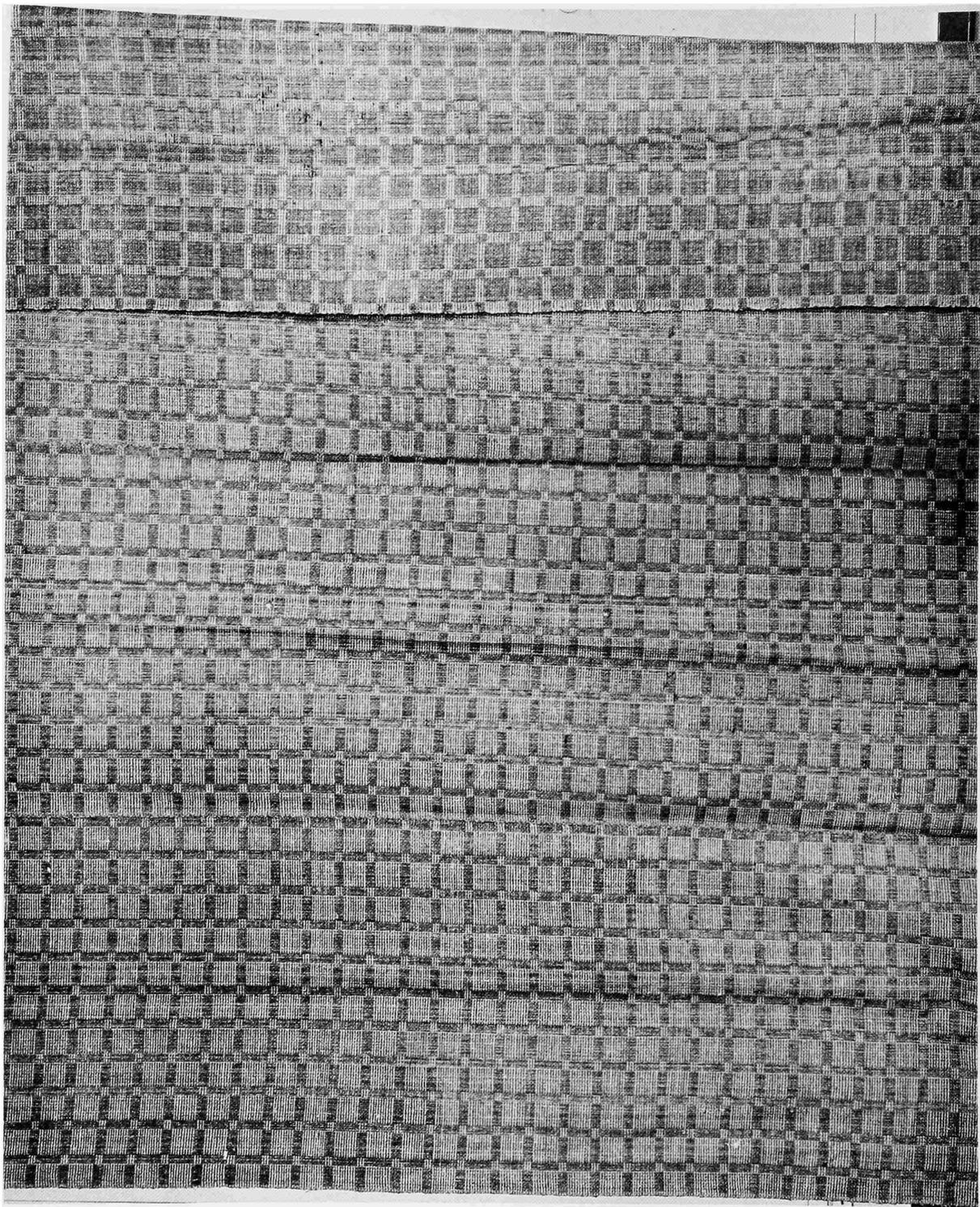


FIGURE 54.—Rug woven in a reversible block pattern, with portion at top turned over to show reverse coloring. (Smithsonian photo 65159.)

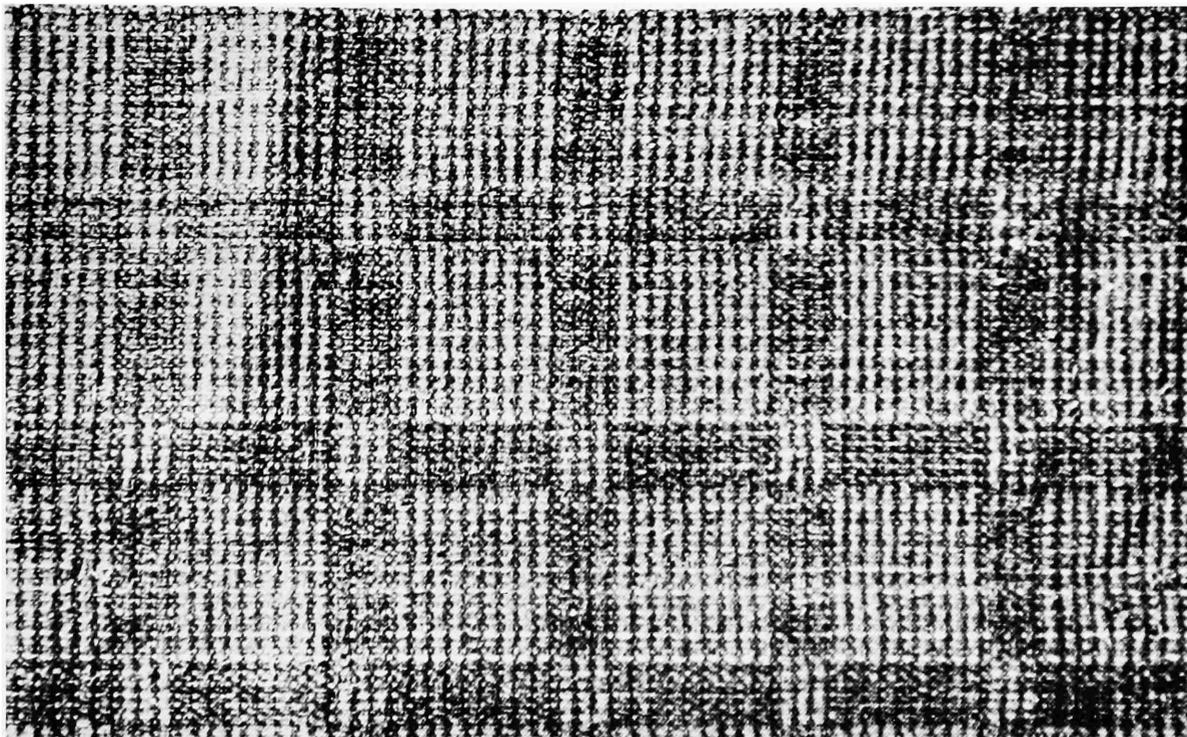


FIGURE 55.—Detail showing texture of rug in Figure 54. (Smithsonian photo 61012.)

the rule²⁹ until after the invention of powered carpet looms in the second quarter of the nineteenth century.³⁰ There is one rug in the Copp collection shown in Figure 54. It is an excellent example made up of widths of carpeting of the type generally classified as “common,” that is, woven on a common or plain loom. It was most probably the work of a professional weaver. The carpeting is woven in a warp-faced plain weave, “Log Cabin” system,³¹ the block pattern is reversible with one side showing two sizes of yellow-red squares on blacks on green, while the reverse side appears as green on yellow-red. Since warp and weft elements do not necessarily have to be used singly in the plain weave, the elements of either or both can be used in pairs (or more), regularly or irregularly. If the order of interlacing is

continuous alternation, the fabric is still a plain weave.³² In weaving this rug, the threading of the multiple color warp together with the use of both single and double wefts in combinations repeated at specific intervals made possible a reversible block pattern. The rug is an irregular shape made up of four widths of the carpeting, probably stitched to fit a specific room; the length at longest point is 26 feet $7\frac{1}{4}$ inches; thread count is 13 by 8; warp yarns in yellow, red, and green of two-ply S-twist wool; weft in heavy natural brown wool of single-ply Z-twist yarns and brown linen of two-ply S-twist thread; the warp is threaded red, yellow, green, red, (once), green, yellow, green, red (seven times), yellow, green, yellow, green, (once), red, green, yellow, green, (twice), and the whole repeated; the weft of linen is inserted single, the weft of wool is inserted double in regular alternation, (single, single) once, (double, single) nine times, (single, double)

²⁹ Roth, *Floor Coverings*, p. 58.

³⁰ There is a good account of carpets in early nineteenth century America in *Manufactures of the United States in 1860; Compiled from the Original Returns of the Eighth Census* (Washington, D.C., U.S. Government Printing Office, 1865), pp. li-lix.

³¹ Black, *New Key to Weaving*.

³² Emery, *The Primary Structures of Fabrics*, pp. 76-77.

three times, and the whole repeated; the large block of the pattern is approximately $3\frac{3}{8}$ inches wide and $3\frac{1}{8}$ inches high; the lengths of carpeting are stitched together with two-ply linen thread; the ends are

bound with strips of both cotton and wool fabric. Probably woven in the early nineteenth century, this carpeting is another example of excellent workmanship.

IMPORTED FABRICS

We like to think of the early settlers in America as being ruggedly independent and self-sufficient. Many times our ideas of life in the seventeenth and eighteenth centuries seem to stem from our image of frontier life, where from necessity the family might produce all or most of their household goods. But, in the coastal ports, the cities, and even the small villages, professional specialization became a reality very early. Not only were services performed by skilled artisans but also when better goods could be

imported, they were; or when goods of equal quality could be imported more cheaply than they could be produced at home, seldom did a nationalistic feeling keep the Americans—either as colonists or as independents—from considering their purse. Imported fabrics have always played an important part in the life of this country, even in colonial days, as illustrated by this news item in *The New-York Gazette or the Weekly Post-Boy*, 15 October 1767:

Extract of a letter from a Gentleman in London, to one of the Members of the Society for Arts in this City, dated July 22, 1767.

. . . The People of New-York, seem to me, to be too infatuated with a foreign Trade, ever to make any great Progress in Manufactures; and unless you sell your Linnen, at least as cheap as they can have it from Silesia, Austria, Bohemia, and Russia, thro' England, Holland or Hamburg, I fear you will not establish an extensive Manufactory: You live in as plentiful a Country as any, and your People might work as cheap: I don't mean in the City of New-York; Cities are not calculated for Manufactures, since its always dearer living in them than in the Country.

From the eighteenth-century newspapers we can glean a good idea of the many kinds of fabrics that were available.

English Goods, a great Variety imported from London, in the last Ships; and to be Sold by Albert Dennie, by Wholesale or Retail, at his House on the Mill Bridge, upon the right Hand leading to Charlestown-Ferry, all for ready Cash, viz. Allum, Balladine sewing silk, raw silk, colour'd and waxed Threads, Pins, Ozenbrigs, *India Dimetys*, black Bombazeen and Alapene, silk Damask, Horse hair Buttons, Hair Shapes, Wadding, Linnen and *Cotton Checks*, Velvet, and Everlasting for Wastcoats, worsted Stuff plain and flower'd, worsted Damasks, Ruffels, Fearnothing Great Coats, Kerseys, Druggets, Swanikins, Broad Cloths, Serges, worsted & hair Plushes, Caps, Stockings, Cambricks, Shalloons, Camblets, Garlets, yard wide Linnens, bed Ticks, *cotton Stockings*, *Chinces*, *Callicoos*, Buttons and Mohair, Hats, *Muslims*, *white Callicoos*, Ribbands, Necklaces, Fans, Scots Snuff, Pewter, Nails, Buckles, Knives, Needles, Thimbles, short Cloaks, Taffeties, Persians, Velvets, Hangers or Cutlasses, Looking Glasses, Wigg Cauls, Shirt Buttons, Indigo, half Thick, bed Quilts, brass Wire, Horse Whips, bed Baskets, Saws, and sundry Sorts of brazery Ware, Paper for Room, Gloves, Sailors Cloths ready made, *blue Callicoos* (author's italics).³³

DANIEL COPP,
Has just received a fresh and general
supply of EUROPEAN and INDIA
GOODS;
Among which are,
ELEGANT light and dark Chintzes and
Calicoes; corded Dimities; plain,
book and Jaconet Muslins; tambor'd Do.
Lawns; do. Handkerchiefs; Cambrics;
Linens; Humhums; Gingham; plain,
strip'd and clouded Nankeens; a beautiful
assortment of fashionable Vest-patterns;
black Laces and Edgings; white Edgings;
Ruffels; Calimancoes; Durants; Tammiies;
Shalloons; Moreens; Threads; Tapes;
a pleasing assortment of Ribbons & Tastes,
of all figures; black India and changeable
Lucestrings; ladies' Satin; chintz and
purple Shawls; tambor'd muslin Di-to;
mens' Neck-cloths; bandanno, Barcelona
and pocket Handkerchiefs; a variety of
fashionable Stockings.
HE ALSO HAS ON HAND,
Groceries, of all kinds; Snuff, per
bladder; Flour, per bbl. a quantity of
excellent dried Codfish; Crockery; and
Salt, suitable for dairies, &c. &c.

FIGURE 56.—Advertisement from *The Connecticut Gazette*, 6 June 1798. Library of Congress collection. (Smithsonian photo 60948.)

³³ Quoted from *Boston Gazette*, 27 May 1746 in Dow, *The Arts and Crafts in New England, from 1704–1776*, p. 160. Italicized items indicate cotton goods.

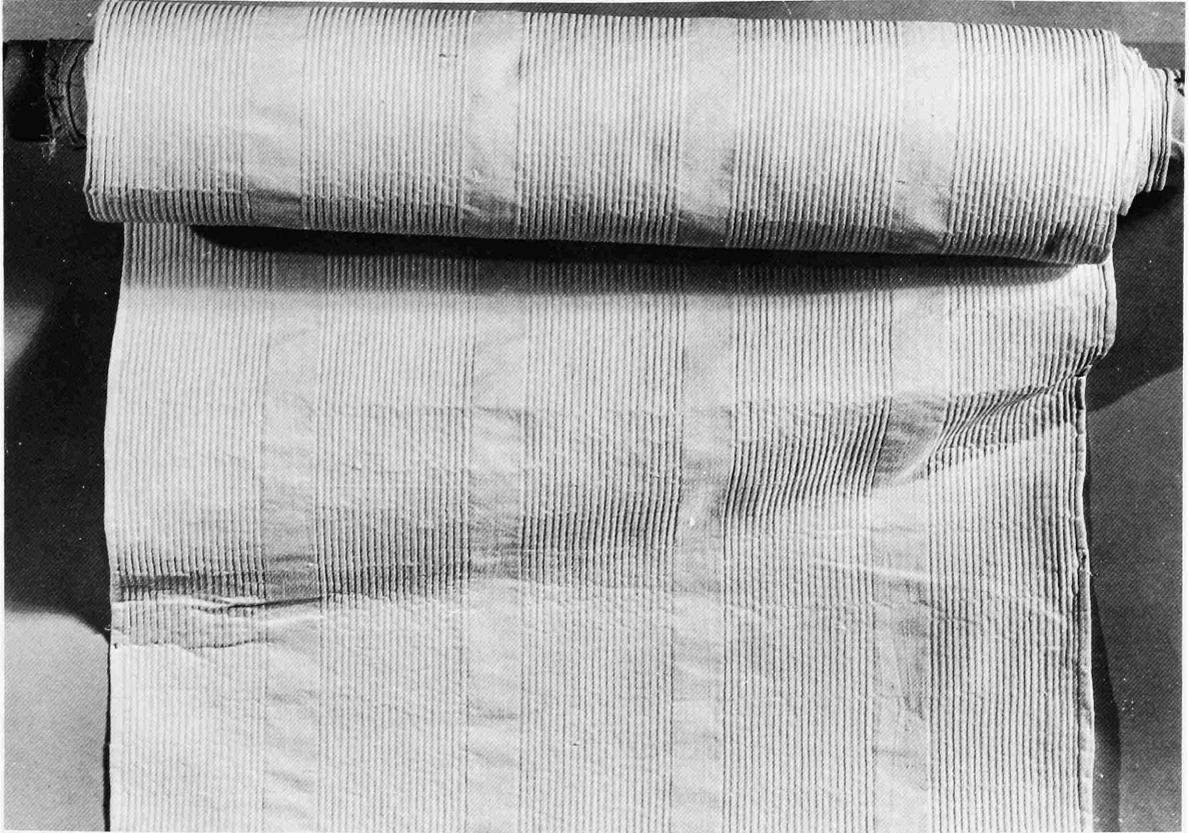


FIGURE 57.—Dimity yardage, probably of English manufacture. (Smithsonian photo 61043.)

Fifty-two years after this was printed, in 1798, merchant Daniel Copp advertised that he had “just received a fresh and general supply of European and India GOODS” (Figure 56). Both before and after the American Revolution imported fabrics including cottons were in common use in this country. Certain classes of goods, such as fine worsteds, silk fabrics, and almost all cottons, can be identified as imported wares, as little or no manufacture of these textiles was being carried on here in the eighteenth century. Items such as “yard wide Linnens, bed Ticks,” “Stockings,” “Linen and Cotton Checks,” although imported, could have been produced in eighteenth-century America; therefore, it is exceedingly difficult to know which articles of this description were, in fact, of domestic and which of foreign manufacture. In the next chapter, more details will be given concerning the textile manufacture that was being carried on in America—in the home, in the mill, and by professional craftsmen—to offer some limited

guide lines to the kinds of textiles that were produced.

In addition to the wool fabric in the bed hangings, the glazed wool fabric in the quilted counterpane, the many chintzes, calicoes, and muslins in the quilts, there are three additional household fabrics of foreign manufacture in the Copp collection.

Dimity, yardage (Figure 57), 25 inches by 7 yards 6 inches, cotton, single-ply Z-twist warp, single-ply S-twist weft; thread count 74 by 85. Probably of English manufacture, family history records it as “bought in New York in 1800.” Although the manufacture of dimities originated in the East, they were manufactured in France as early as the late sixteenth century.³⁴ After the invention of the spinning machinery in England in the second half of the eighteenth century, many of the types of cotton

³⁴ Hazel E. Cummin, “What Was Dimity in 1790?” *The Magazine Antiques*, volume 38, no. 1 (July), pp. 23–24.



FIGURE 58.—Border-printed cotton. (Smithsonian photo 61037-A.)

goods originally produced in India could successfully be imitated by power spun cotton yarns, including dimities, calicoes, muslins, and so forth. This yardage might have been put to use by the Copps in

making bed or window curtains or even for articles of clothing. *Cleaned T.67.102. H.6654*

Printed Cotton (Figure 58), in a pair of simple curtains, probably remade from original style. Fabric

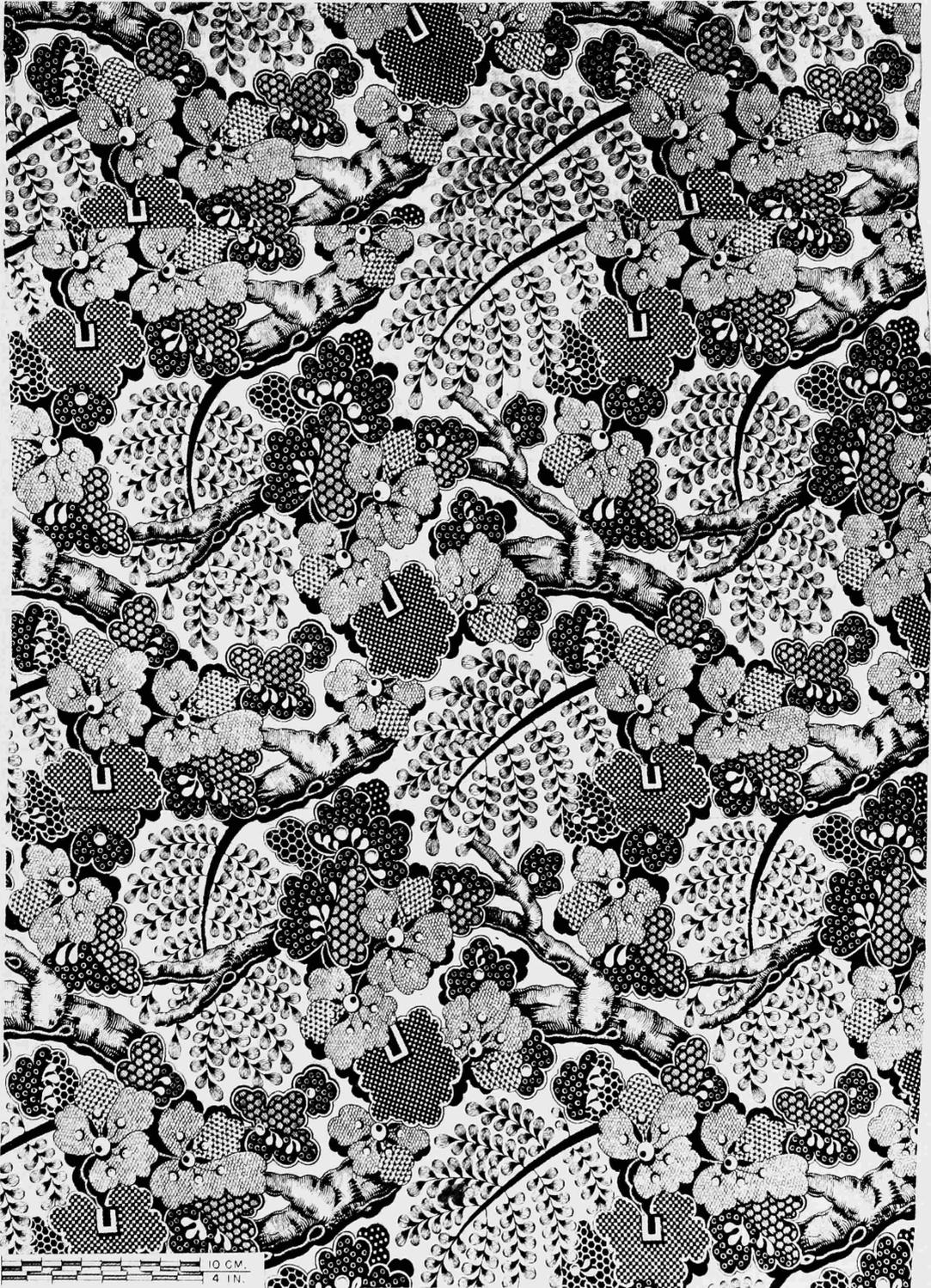


FIGURE 59.—Roller-printed cotton. (Smithsonian photo 61036-C.)

width 26 inches; block printed, probably English, first decade nineteenth century; mustardy gold ground with dark red and brown in a border print, repeat of border design, $9\frac{1}{4}$ inches width by $9\frac{3}{16}$ inches vertical; small leaf pattern as the "filling."³⁵

³⁵ During the late eighteenth and early nineteenth century, many woodblock chintz designs were arranged not as an overall repeated pattern, but in vertical stripes about nine inches wide. This provided a flexibility unobtainable in the copperplate prints. The fabric could use the design as a single (border), double, or triple stripe. In each the blank areas could be printed with an overall small repeated design called a filling.

Cleaned T.67.99. H.6651

Printed Cotton (Figure 59), made into a small curtain, probably the original use. Fabric width $24\frac{1}{2}$ inches; roller printed, probably English about 1830; brown on white; design of flowers and leaves in various "net" patterns; pattern repeat 11 inches. Size of curtain, $18\frac{1}{2}$ by 47 inches, one full width of fabric and one width cut up the center and stitched to each side; seams and hem in three-ply cotton thread; narrow drawstring hem at the top of curtain.

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Textile Manufacture in America in the Eighteenth Century

DURING THE EARLIEST YEARS of the American Colonies, England provided the settlers with almost all their fabric needs, encouraging them to restrict their work to the production of raw materials. By 1640, however, communication with the mother country almost ceased and the colonists found it necessary to supply most of their own wants, including the production of fabrics. One of the first mills, built in 1643 at Rowley, Massachusetts, was a fulling mill where wool cloth was washed, shrunk, and finished. In the mill, large wooden hammers supplanted the operation earlier performed by the feet in tramping the wool fabric placed in water-filled troughs (Figure 60).

As the need for more fabric increased, the local governments began to encourage and even order the manufacture of cloth, which was carried on primarily in the home with the finishing of the wool cloth in the fulling mill, just as the farmer depended on the miller to grind his grain. The records of the Massachusetts Bay Colony in 1645 report:

Forasmuch as wollen cloth is so usefull a comodity, without which wee cannot so comfortably subsist in these pts by reason of could winters, it being also at present very scarce & deare among us, & is likely shortly so to be in all those pts from whence wee can expect it, by reason of the warrs in Europe destroying, in a great measure, the flocks of sheepe amongst them, & also the trade & meanes it selfs of making woollen cloaths & stuffs, . . . knowing how usefull & necessary wollen cloths & stufs would be for our more comfortable clothing, & how profitable a marchandize it is like to be to transport to other parts, [the Court of the Massachusetts Bay Colony] doth hereby desire all the townes in generall, & every one in particuler within the jurisdiction, seriously to weigh the promises & accordingly that you will carefully indeavor the preservation & increase of such sheape as they have already, as also to procure more, with all convenient speede, into their severall townes, by all such lawfull wayes & meanes as God shall put into their hands.³⁶

³⁶ "The Record of the Colony of The Massachusetts Bay in New England," entry 14 May 1645, in volume 2 of the published records.

A later development was the professional weaver (Figure 61), who together with other specialized craftsmen, became a part of the American scene. A Stonington, Connecticut, weaver, Manasseh Minor (also spelled Miner), left a diary that verified his professional activities in the late seventeenth and early eighteenth century. In addition to weaving for the people in the area, he also permitted them to use his loom and taught weaving. Although yarn was frequently furnished by the customer, Minor's entries report that he also produced yarn as a part of the farmer-weaver's yearly cycle. The wool-

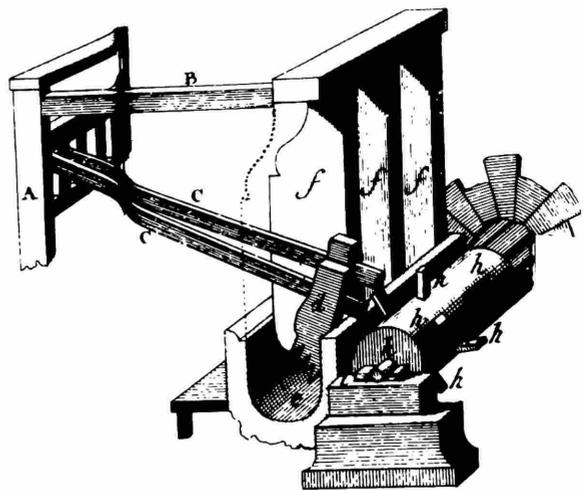


FIGURE 60.—Cutaway view of a fulling mill, as illustrated in a French encyclopedia published in 1786. This eighteenth-century European fulling mill would not be technically different from an American one of the seventeenth century. The use of water power to drive the large wooden hammers, which dropped onto the fabric in the trough, did not change in general concept until the nineteenth century. (Smithsonian photo 74590.)



FIGURE 61.—Weaver. Engraving from *The Book of Trades*, published in White Hall, New York, in 1807. (Smithsonian photo 55509.)

producing activities began in May when the sheep were put out to the common to graze, a practice initiated as early as 1648.³⁷ Later the sheep were washed and sheared and if the wool were to be spun as worsted it was taken to the comber (Figure 62). In combing, the fibers were laid parallel to permit the spinning of a tighter, more compact yarn. The combing skill had become a common textile trade in America by the early eighteenth century.

According to Minor the finished “wusted” was woven in October or November—after the harvest had been gathered. If a *woolen* yarn was to be spun,

³⁷ “. . . for as much as all places are not fit (or) convenient for that end, it is therefore ordered that (hence) forth it shall be lawful for any man to keepe sheape in (any) common.” *Ibid.*, entry 18 October 1648.



FIGURE 62.—Wool Comber. Engraving from *The Book of Trades*, published in 1807. (Smithsonian photo 55506.)

which called for a softer, less compact yarn than the worsted, the wool fibers were carded. To produce this spongier yarn, the shorter fibers were used and spun perpendicular to the direction in which they were carded. Carding, unlike combing, was done in the home until quite late in the eighteenth century when mechanical carding was introduced; but card-making was an important trade (Figure 63) and well established by the mid-eighteenth century.³⁸ The wool combs used by the comber were made by the ironmonger. If the several operations relating to the preparation of wool were performed in one establishment, it was called a clothier shop or mill. A

³⁸ Rogers, *Scholfield Wool-Carding Machines*, p. 8.

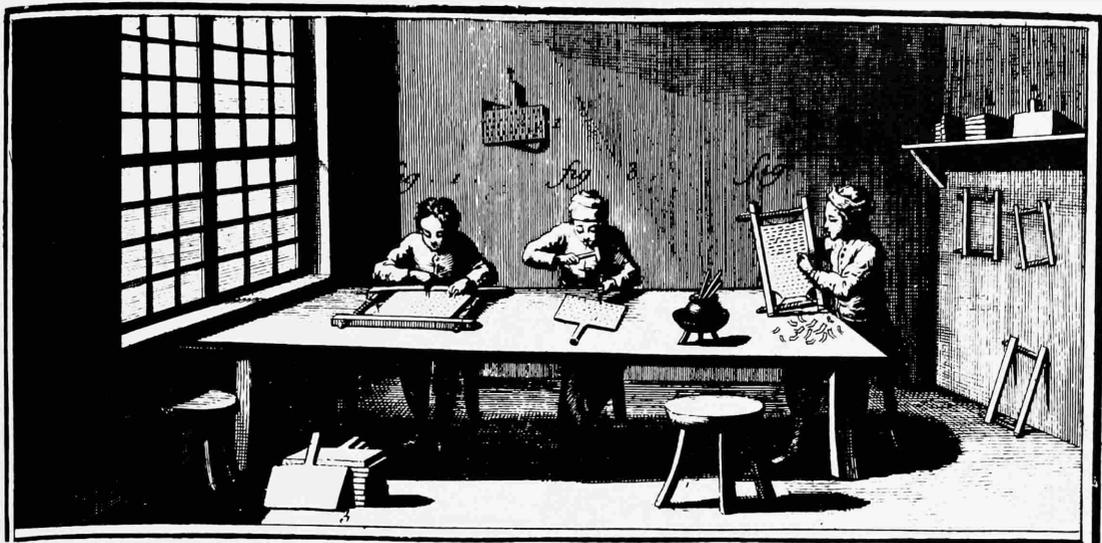


FIGURE 63.—Card Making. Cards used to prepare short fibers, such as cotton or wool, were made by embedding wire teeth into pieces of leather which, in turn, were mounted onto paddlelike pieces of wood. American card makers used a technique similar to that shown in this French engraving. From the *Diderot Encyclopaedia*, 1763. (Smithsonian photo 43995-B.)

Boston clothier, Samuel Foster, was the master of a worsted comber in 1737.³⁹

The production of linen fabrics also was a cooperative venture. From the contemporary records we find that it was not uncommon for the family to grow their own flax; have it retted, swingled and hackled by the Flax Dresser (Figure 64); returned to them for spinning and reeling; woven at home or sent to a professional weaver; and then sent to the bleach fields and/or the dyer.⁴⁰ To the question of whether such a textile is a home or a professional (or commercial) product, one must answer that it is both.

Although used in more limited quantities, we know some cotton was processed, as we find a card maker advertising both "Wool and Cotton Cards" in Boston in 1746.⁴¹ But, until after the introduction of the cotton spinning machines, cotton yarn was used only for the weft. Warp yarns, which had to

be kept under tension in the loom, were of the stronger handspun linen; union fabrics of cotton and linen were frequently referred to as "cotton" adding confusion when such contemporary entries are found. We do find that the cotton fabrics imported from India were printed in the American Colonies. Francis Gray, "Callicoe Printer from Holland; Prints all sorts of Callicoes of several Colours to hold Washing, at his house in Loxbury near the Meeting-House," according to the *Boston Gazette*, in both the 16 June and the 23 June 1735 issues. And much later in 1773, in the 13 May issue of the *Boston News-Letter* an advertisement reported, "To be Sold, very cheap for Cash, by the Person who Prints the dark Callicoes, an excellent Sett of Prints (blocks) for the Same. The Person who has them to dispose of would Instruct the Purchaser in the Use of them if required." (Figure 65).

The word calicoe, in its various spellings, originally referred to the particular type and weight of plain woven all-cotton cloth from India. By the 1770s, calicoe—handwoven of machine-spun cotton—was being produced and exported by the British. Painted (and printed) calicoe from India was termed "chint." But the entry "white Calico" in a 1749 advertisement would give us reason to believe that the term

³⁹ "Worsted Comber by Trade, run-away from his master Mr. Samuel Foster, of Boston, Clothier," *Boston News-Letter*, 28 April and 5 May 1737.

⁴⁰ Dow, *The Arts and Crafts in New England, 1704-1776*, p. 189, and Gottesman, *The Arts and Crafts in New York, 1726-1776*, pp. 250, 251.

⁴¹ Dow, *The Arts and Crafts in New England, 1704-1776*, p. 258.

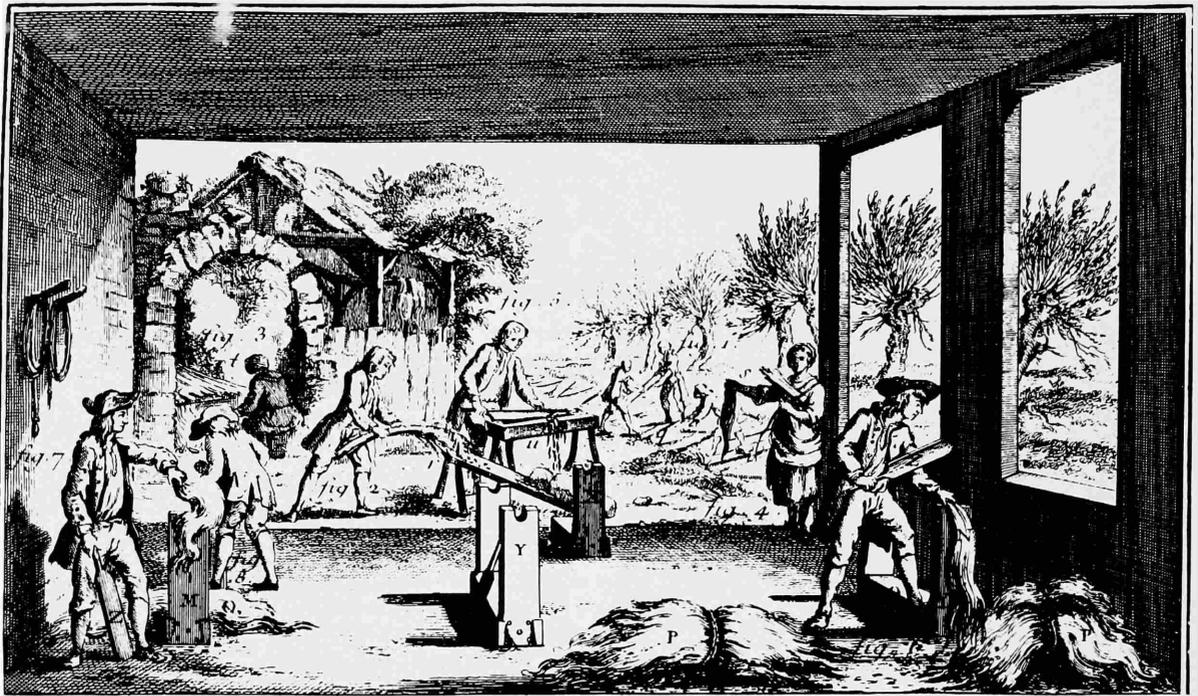


FIGURE 64.—Growing and Processing Flax. This French engraving shows the rippling (removing the flax seedpods), the breaking (of the outer stalk to free the fiber), and the swingling (beating the fibers to remove the chaff). The implements and techniques used in the American colonies were quite similar to those shown. From the *Diderot Encyclopaedia*, 1762. (Smithsonian photo 43993-C.)

calicoe was at times used to mean a printed fabric as well as being used to mean the unprinted fabric.⁴² It was not uncommon for the American calicoe printers to print linens also and for the Linen Printers to include calicoes.

Many attempts were made to produce raw silk but this never developed into a profitable commodity; the skilled labor required to reel the silk was too expensive. There were attempts to raise the silkworms and ship the cocoons to England for reeling, and also to reel the cocoons here and use the silk for stockings, thread gloves, lace and so forth. These are the products covered in contemporary references to "Silk Manufacture." One of the more common trades was concerned with silks already in use. This was the Scourer who "cleaned ladies and gentlemen's clothes, taking out spots and stains, lace and silk stockings." Sometimes they were listed as "Silk

Dyer and Scourer"⁴³ and their work does not sound very different from the "Cleaners and Dyers" of today.

Because of the textile manufacturing that was being carried on in the colonies, the British merchants and manufacturers began to complain in 1731 about the colonists' effort to substitute articles and fabrics of their own manufacture for English goods on the grounds that it was injuring the commerce and industries of the mother country. The Governor of the Massachusetts Bay Colony answered that it was true that in some parts the people worked their wool and flax into an ordinary coarse cloth for their own use, but that the bulk of their woolen and linen clothing was imported from Great Britain and sometimes Ireland. Even while bounties were being offered for every piece of duck or canvas made in the prov-

⁴² *Ibid.*, p. 161.

⁴³ Gottesman, *The Arts and Crafts in New York, 1726-1776*, p. 284.



FIGURE 65.—Calico Printer. From *The Book of Trades*, published in 1807. (Smithsonian photo 55511.)

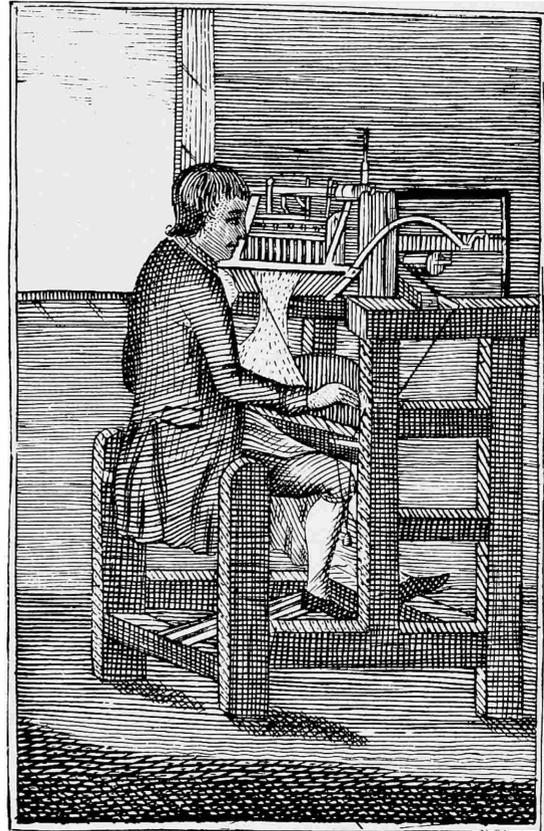


FIGURE 66.—Stocking Maker. From *the Book of Trades*. (Smithsonian photo 55514.)

ince, the Governor wrote that the country people who used to make most of their clothing out of their own wool no longer made even as little as one-third of what they wore and they were mostly clothed with British manufacture. At this point, the modern reader begins to suspect that the Governor was trying to placate his superior in London.

By the middle of the century a new movement was inaugurated for the promotion of manufacture both for the employment of the poor and to relieve the constant drain of money for the excess of imports over exports. In the *Massachusetts Gazette*, 19 November 1767, we find:

Young ladies in town and those that live round,
Let a friend, at this season, advise you,
Since money's so scarce, and times growing worse,
Strange things may soon hap and surprise you.
First, then, throw aside your top-knots of pride,

Wear none but your own country linen.
Of economy boast, let your pride be the most
To show cloaths of your own make and spinning.
What if homespun, they say, is not quite so gay
As brocades, yet be not in passion;
For when it is known this is much wore in town,
One and all will cry out, "Tis the fashion,"
And, as one and all, agree that you'll not married be
To such as will wear London Factory;
But, at first sight, refuse; tell 'em such you do chuse
As encourage our own manufactory.

The first news article in the *Massachusetts Gazette* of 7 January 1768, and printed in oversize type, read:

The Senior class of scholars at the University in Cambridge have unanimously agreed to take their degrees next commencement dressed altogether in the manufacture of this country.

Such encouragement was spreading.

As a farther specimen of the Practicability of Manufacturing our own Cloaths in this country, we can assure the public of the following persons in Woodbridge in New Jersey, making in their Families, within the year past, both woollen and linen of their own raising, the Quantities of following Viz. Mr. Isaac Freeman, 599 yards, Mr. James Smith, 567 yards and Mr. Nathaniel Heard, 414 yards.⁴⁴

In Newport, Rhode Island, it was reported that “within Eighteen months past 487 yards of cloth and thirty-six Pairs of Stockings have been spun and knit in the family of Mr. James Nixon of this town. . . . These instances of Industry were mentioned with a view to demonstrate how easily it will be for those colonies, in a short time, to be independent of any other country for cloathing; and at the same time to excite others to imitate Examples so highly beneficial to themselves and the Community.”⁴⁵

By 1770 a Newark, New Jersey, manufacturer proposed a scheme to surpass the “Family Weaving” establishment and employ a number of hands to spin, weave, dye, and full about “6000 Yards of different Sorts, such as Camblets, Callimancoes, Cambletees, plain, striped, and figured Stuffs, Druggets, Sagathies, German Serges, Everlastings, Plushes, etc.” Whether this all-inclusive mill was successful at this time we have no record.⁴⁶

Spinning matches were encouraged and news items appeared, like this one in the *Boston News Letter*, 1 March 1770:

Patriot ladies met at the house of John Gore [he had encouraged spinning]. . . . The laudable practice of spinning is almost universally in vogue among the female children of the town, whereby they are not only useful to the community, but the poorer sort are able in some measure to assist their parents in getting a livelihood. The use of the spinning wheel is now encouraged, and the pernicious practice of tea drinking discountenanced by all the ladies of the town . . . excepting those whose husbands are Tories.

But at the same time many importers were still bringing from Great Britain “The Best Wilton Carpeting, . . . stained [printed] bed quilts, . . . cotton counterpanes.”⁴⁷ This commerce continued into the war years as shown by the fact that “a few pieces of the most elegant chintz, both for firmness and richness of pattern, that has been imported into this country” were advertised in the *Pennsylvania Journal*, 23 February 1782.⁴⁸

The American Revolution did not seem to de-

⁴⁴ Ibid., p. 259, *The New York Gazette or the Weekly Post Boy*, 18 January 1768.

⁴⁵ Ibid., p. 260.

⁴⁶ Ibid., p. 262.

⁴⁷ Prime, *The Arts and Crafts in Philadelphia, Maryland, and South Carolina, 1721-1786*, p. 209.

⁴⁸ Ibid., p. 213-214.

crease the amount of goods coming from England. Lord Sheffield wrote that in the year 1778, when the revolt was at its height, over three million yards of broad woolens and over two million yards of narrow woolens were manufactured in England and several references were made to goods exported to the colonies. And by the year 1782, each category had increased by almost a million yards.⁴⁹ The preference given by Americans to British manufactures, even during the war, displeased the French. To prevent the loss of French aid a law was passed prohibiting the importation of English goods. But as late as the year before the peace British goods imported through Holland were seized. It is quite evident that the Americans did not provide all their own textile needs even when their feeling of independence was running at its peak.

In England, during the middle years of the eighteenth century, several important textile inventions occurred which were to have an important effect on the production of fabrics in the newly created United States of America. One was the idea for a hand-powered multiple spinning machine, reportedly realized by James Hargreaves as he observed the actions of a wool spinning wheel that had been accidentally overturned by his daughter. As the simple, straight-shaft spindle continued to turn while in an upright position, Hargreaves reasoned that in such a position many spindles could easily be turned by a like number of driving belts from a single power source. About 1764 he perfected his first machine, a spinning jenny, that was patented in England in 1770. The Hargreaves jenny was intended for spinning wool or cotton and the principle of drawing, twisting, and winding was exactly the same as that in the common wheel. The spinning jenny was introduced into the American colonies quite early, in the improved form with the changes Hargreaves made after it was patented. An illustration and description of “a new invented machine for Spinning Wool or Cotton . . . By Christopher Tully, who first made and introduced this Machine in this Country” appeared in the *Pennsylvania Magazine* in 1775 (Figure 67).⁵⁰

About the same time, Richard Arkwright of England patented a spinning machine employing a new concept in drawing out the fibers. The prepared roving, lengths of carded fiber, passed through two

⁴⁹ Sheffield, *Observations on the Commerce of the American States*, p. 12.

⁵⁰ *Pennsylvania Magazine*, 1775, p. 158 and the illustration opposite. In Library of Congress collection.

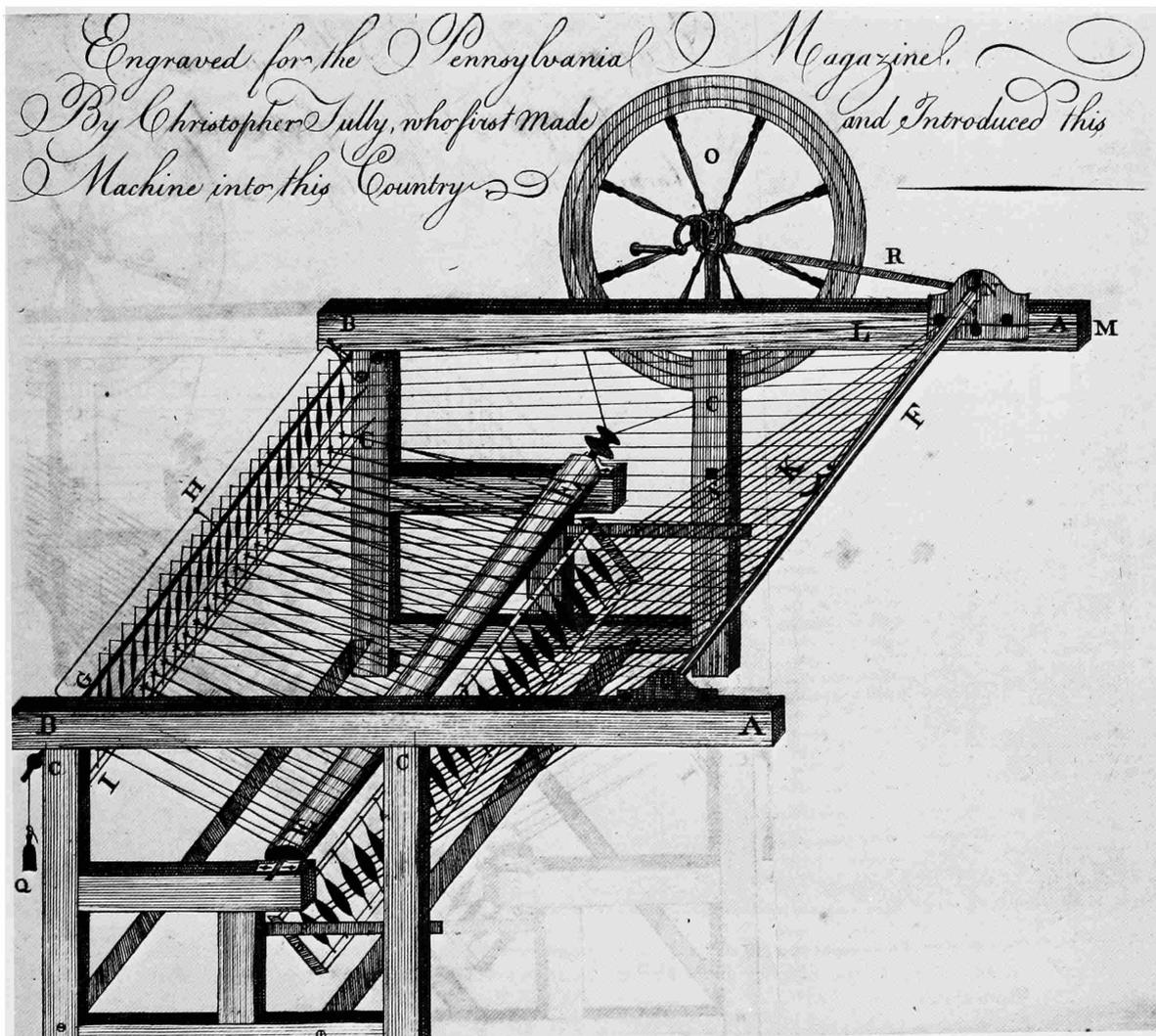


FIGURE 67.—The improved Hargreaves spinning jenny, for spinning wool or cotton, as introduced into the American colonies by Christopher Tully, in 1775. From the *Pennsylvania Magazine*, 1775. (Smithsonian photo 72549.)

or more sets of rollers of which each succeeding pair turned a little faster. The fibers were thus drawn out faster than they were fed in, decreasing the diameter of the roving. The twist was applied by the use of a U-shaped flyer with a free-running bobbin like that of the flax wheel. Arkwright's machines, run by water power, were quickly adopted for mill use. One of the large cotton yarn mills using the Arkwright machines was that of Jedediah Strutt in Milford, England.

A young man, Samuel Slater, was apprenticed to

Mr. Strutt on 8 January 1783. By 1789, after six years of service he was well-qualified to supervise a mill. Less than a month after his training was complete Slater left England and arrived in New York in November 1789. Exactly why he decided to come to America rather than take one of the many opportunities in England is not known. Perhaps the overtures being made to attract men with technical skills to the new country held more promise. Perhaps his reason is expressed in the first sentence of a letter, which Slater received from an old schoolmaster

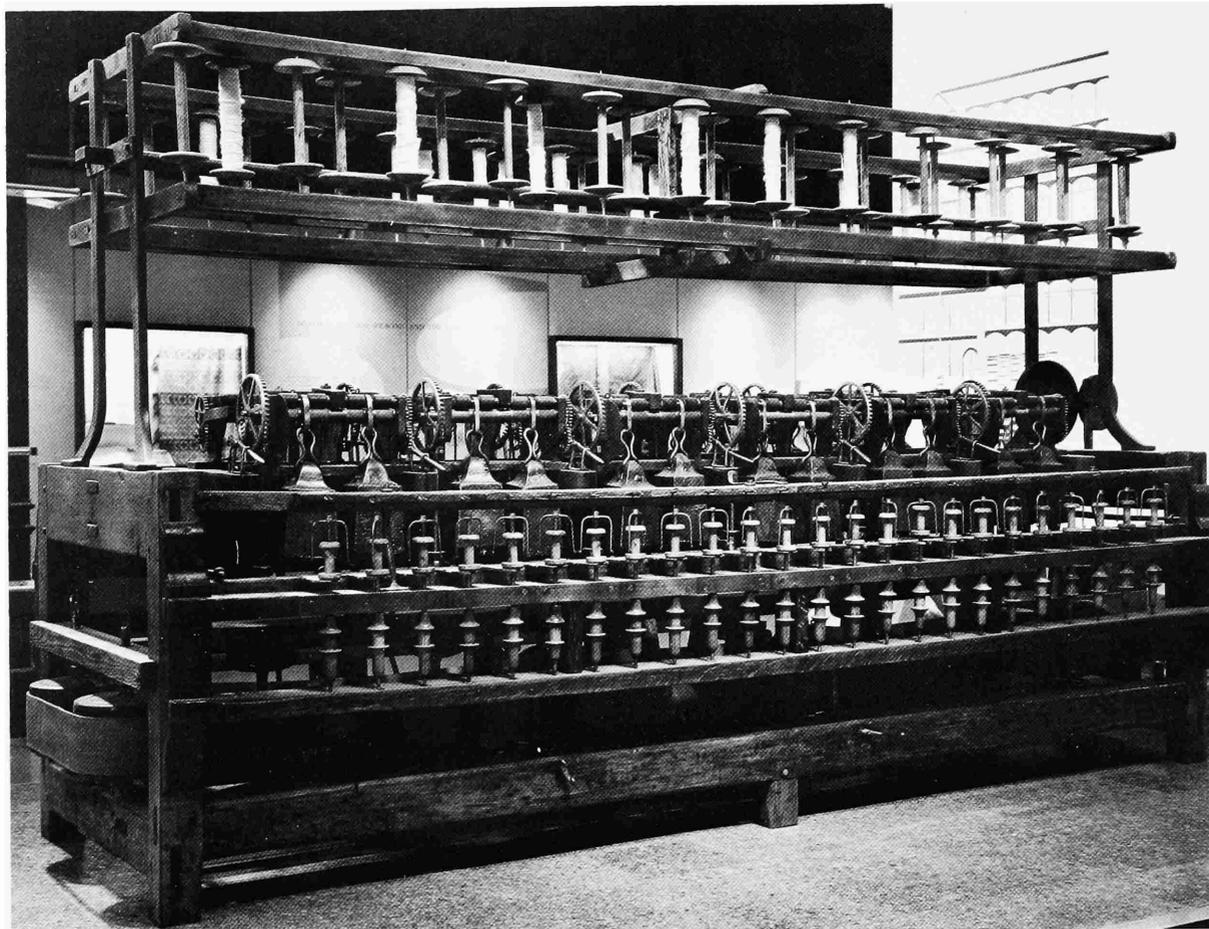


FIGURE 68.—Forty-eight-spindle cotton spinning frame built by Samuel Slater in Pawtucket, Rhode Island, in 1790. In the collection of the National Museum of History and Technology. (Smithsonian photo 45363.)

shortly after he arrived, “I am glad to have so favourable an account of your health when your letters left the western world, *the seat of patriotism and independence.*”⁵¹

After Samuel Slater was in New York a very short time he learned of the concentrated efforts of Moses Brown to start a cotton mill in Rhode Island. He wrote to Brown as follows:

New York, December 2d, 1789

Sir, A few days ago I was informed that you wanted a manager of cotton spinning, etc. in which business I flatter myself that I can give the greatest satisfaction, in making machinery, making good yarns, either for stockings or twist, as any that is made in

England; as I have had opportunity, and an oversight, of Sir Richard Arkwright’s works, and in Mr. Strutt’s mill upwards of eight years. If you are not provided for, should be glad to serve you; though I am in the New York manufactory, and have been for three weeks since I arrived from England. But we have but one card, two machines, two spinning jennies, which I think are not worth using. My encouragement is pretty good, but should much rather have the care of the perpetual carding and spinning. My intention is to erect a perpetual card and spinning [meaning the Arkwright patents]. If you please to drop a line respecting the amount of encouragement you wish to give, by favour of Captain Brown, you will much oblige, sir, your most obedient humble servant,

SAMUEL SLATER

Brown answered within a week.⁵² Thus began the

⁵¹ White, *Memoir of Samuel Slater*, p. 40–41.

⁵² *Ibid.*, p. 72.

establishment of the first successful cotton mill in America, with Slater becoming the Father of the American cotton industry (Figure 68).

Although the fabrics were still produced in the establishments of professional weavers and not in the mill, cotton spun on the Arkwright system was strong and fine enough to be used as the warp, therefore, sheetings, shirtings, checks, and gingham of all cotton, could, for the first time, be manufactured cheaper in this country than they could be imported.⁵³ But Slater's contribution was more than the cotton mills he established; many of the men trained in his mills went on to other mills and his knowledge spread.

This increased demand for raw cotton encouraged young inventors like Eli Whitney to turn their thoughts to the planters' problem of ginning—separating the fiber from the seed. After this problem had been solved in 1793, the production and manufacture of cotton increased tremendously. In 1794, "American Manufactures from the town of Patterson [New Jersey, listed] calicoes, Furniture calicoes,

chints shawls, Purple shawls, striped jeans, muslinet vest shapes, striped cotton for men's wear and [a small supply of] water and mule twist [cotton yarns]," all of which were cotton goods.⁵⁴ The *New York Manufactory* in 1795 listed:

American Manufactures, made at the New-York cotton and linen manufactory, and for sale by Andrew Stockholm . . . striped and plain nankeens . . . German stripes, thicksets, bridgetts, or rib deleurs sattinets, jeans, pillow fustians, dimities, cossoners, checks and bed ticken, stocking yarn of different qualities, and candle wick. Orders for cotton goods of any quality made to pattern, on the shortest notice.⁵⁵

Although the many important advances related to power weaving did not come until the nineteenth century, it was the power production of cotton yarns that enabled the eighteenth-century American manufacturers to begin to compete in the textile marketplace of the world. The examples of bed ticking (Figure 30) in the Copp collection may well represent this important beginning.

⁵³ *Ibid.*, p. 67.

⁵⁴ Gottesman, *The Arts and Crafts in New York, 1777-1799*, p. 289.

⁵⁵ *Ibid.*, p. 290.

Appendix

METHODS USED TO CLEAN AND PREPARE THE TEXTILES

Cleaning Techniques

One hundred and eighteen of the Copp household textiles have been wet-cleaned in the Textile Laboratory. Most of these were of cellulose fibers—undyed cotton and/or linen—plain-woven textiles, including fringes, table covers, towels, pillow cases, sheets, and fabric yardage. A few of the textiles were dyed or printed. The same general procedure was followed for all undyed fabrics, with minor variations made as needed to suit individual needs.

After the technical identifications were made and the visible appearance recorded, specific recommendations were made for handling each item to be wet-cleaned. All loose dust and dirt was removed from each fabric before any wet-cleaning process. The article was laid flat on a table. Using a layer of fiber-glass screen as a protective shield, a low-suction hand vacuum cleaner was used to remove the dust. In preparation for the wetting process, weak fabrics were sandwiched between two layers of screen. All fringes were also sewn between screens so that the loose ends would not tangle during the cleaning operation. When an article was not between screens it was supported on a single layer of fiber-glass screen. Only one item was processed at a time.

Heavily soiled items, supported on a screen, were lowered into a preliminary soaking bath of room-temperature, distilled water. This initial soaking removed some soil and penetrated the fibers to loosen some stains. Distilled water was used exclusively throughout the process for soaking, bleaching, and rinsing. Containers of molded fiber-glass were found to be the most satisfactory.

Each article was cleaned by placing it in a non-ionic detergent and water solution which was heated to 95° F. When the water appeared dirty, the textile was removed and rinsed in distilled water. If a Ph test indicated it was still in an acid state, the deter-

gent soaking and rinsing process was repeated. The fabric was not squeezed or agitated in solution. Some articles appeared clean and white after this detergent soaking process. These were rinsed thoroughly and dried. The textiles mounted between screens were rinsed many more times, because dirt and detergent became trapped between the screens. Every precaution must always be exercised to assure thorough rinsing.

After the washing process, if stains and discoloration were still present the article was further processed. A mild solution of 1% to 3% hydrogen peroxide in water with a sodium perborate additive (1 oz. to 1 gal.) was made and the article soaked for five minutes. Then it was lifted onto a screen, drained, and wrapped in clear plastic for one to four hours, depending on the degree of discoloration. The article was then unwrapped and rinsed thoroughly. In the first rinse a few drops of acetic acid was added to neutralize the distilled water.

Following the thorough rinsing process, in which the Ph of the water was repeatedly tested until it was neutral, the fabric was smoothed out on a one-half-inch thick sheet of plexiglas. The warps and wefts were lined up perpendicularly. Towels were used to absorb the excess moisture and then were removed to allow the article to dry thoroughly. Fringes were removed from the screens and air dried. After drying they were hand straightened to separate each yarn.⁵⁶

Once dry, the fabrics were removed from the plexiglas surface and their appearance recorded. Flat articles were rolled on fabric-covered cylinders, which were placed on horizontal poles and supported

⁵⁶ A more detailed description of this wet-cleaning process is available upon request to the Division of Textiles, in Information Leaflet 478, *How to Wet-Clean Undyed Cotton and Linen* by Maureen Collins McHugh.

in special racks. Sheets were folded. Fringes were wrapped around fabric-covered cardboard supports, about 10 by 12 inches.

The printed curtains and the dyed fabric lengths, bed hangings and counterpane were cleaned with the same procedure as above with the following changes. First, dyes were tested for fastness in the detergent solution. Second, the procedure using hydrogen peroxide was omitted entirely. The indigo dye in the blue and white linen check showed evidence of some bleeding in the test, but after rinsing and drying it had not visibly affected the white yarns. Since this type of furnishing was meant to be washed and had been during its use, the cleaning process was used successfully.

Mounting Techniques for Exhibition of Large Textiles

The procedures used to prepare textile articles for exhibition vary with the condition, size, and the manner in which the textiles are to be exhibited. Large pieces offer a much greater problem than the smaller ones.

The eighteenth-century overshot coverlet (Figure 46) in the Copp collection is in very good condition and offers an example of one of the simpler methods of preparation for exhibition. A muslin tube is made from a thirteen-inch width of muslin, the length of which is equal to the width of the coverlet. One inch is folded under at each end for the hem. The band of muslin is folded in half lengthwise and stitched to form a tube; it is turned to the right side and pressed. The muslin tube is pinned and stitched to the top of the coverlet at both the upper and lower edge of the muslin using a half-inch basting stitch and sewing between the yarns of the coverlet to prevent splitting the yarns of the old textile with the basting thread. With this type of preparation either a rod can be inserted or hooks can be pinned into the muslin and used to attach the coverlet to a supporting wall.

If the textile is weak, a more substantial method of support must be used. The entire antique textile is backed or lined with a new fabric of a weight suitable to support it but not too heavy to detract from the original texture. This method allows the weight of the old fabric to be evenly supported throughout, rather than being supported by its own strength. One of the white embroidered Copp counterpanes (Figure 16) is prepared in this way. Widths of unbleached muslin are stitched together by machine

to provide a backing the full width and length of the counterpane.

Allowances are made on the two sides and the bottom of the lining for the hems. A three-inch allowance is provided in the muslin backing at the top, which is turned under and machine-stitched to itself to form a substantial hem through which a supporting rod can be run, if desired. The other three sides are hemmed. Before the counterpane is lined, it is laid on a large table, smoothed flat, and the lining fabric pinned to the wrong side. It is pinned at the embroidered areas also. The three sides are pinned only to within eight inches of each edge. Most large textiles, such as quilts or counterpanes, are stretched and therefore distorted while they are being made. Pinning or stitching the lining to the edges gives a puckered or pulled look. With a half-inch basting stitch the lining is handstitched to the counterpane across the full width at the top. A second row of stitching is inserted at the base of the top hem in lining. Additional stitching at both the seams of the counterpane ground fabric and following the embroidered design helps the lining carry the weight of the counterpane. Number fifty mercerized cotton thread with a suitable needle has proved satisfactory for stitching both cottons and linens of substantial weight.

Extremely heavy or very fragile textiles of large dimensions can be given additional support by use of a frame or backing board. It should be constructed of plywood or any material that is manageable and will support the weight of the exhibited item and then is covered with a cotton flannel. The frame is installed in the exhibit case at a slight obtuse angle. This means a textile supported on this frame does not hang free but is supported by the nap of the cotton flannel together with the angle of the frame. Either lining strips or a full lining is stitched where needed and then stitched to the flannel covering of the frame. The quilted counterpane in Figure 1 and the pieced quilt in Figure 4 were mounted in this way for the special Copp Family Textile Exhibit.

These are a few suggested methods for mounting large textiles. However, each old textile to be exhibited is an individual problem and its specific characteristics must be taken into consideration when determining a safe method of mounting, especially for vertical exhibition.

In addition to mounting precautions, the following check list is used in the Department of Textiles at

the National Museum of History and Technology for textiles to be placed on exhibition.

1. Cataloged textiles must be exhibited behind glass, or plastic, as a protection from visitors' hands and the dust in the air. The glass or plastic must not touch the textile. In rare instances, such as the exhibition of a tapestry, permission may be given to exhibit it in the open, providing adequate provision is made for a railing and the tapestry is hung out of reach.

2. The textiles must be placed a minimum of eighteen inches from any artificial light source. The level of light should be kept as low as practicable. Filters must be provided on the light fixtures; incandescent light is less harmful than florescent.

Natural sunlight should not be used to illuminate textile material.

3. Before the textile is placed on exhibition, the interior of the case should be cleaned, especially the wall or surface onto which the textile will be placed. If the area has been painted, it should be checked to be certain that the paint is dry and that there is no chance that it will crock (rub off). If there is any doubt, or if the surface is raw wood, polished metal, or any reactive surface or if there are sharp edges on rigid plastic, or rough finishes, then a plastic liner with a fabric liner must be used. The fabric liner should be placed between the plastic and the original textile. Stained wood that does not have a varnish or other protective coating should never be used.

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