

TCN

*Q. Mason*

TEXTILE  
CONSERVATION  
NEWSLETTER



Number 18

SPRING 1990

TCN  
TEXTILE CONSERVATION NEWSLETTER  
SPRING 1990-NUMBER 18

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**TCN COVER**

Detail of Curtain  
Painted and dyed cotton, Coromandel Coast,  
18th Century  
Photo, courtesy of Royal Ontario Museum  
Harry Wearne Collection

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We have received two very interesting articles relating to Health and Safety with a promise of more to come. There are many important issues that concern conservators and curators on this subject. If you have information on Health and Safety or other issues that should be addressed, or know of a colleague that is working on a paper or thesis please let us know. The involvement of our subscribers is important.

In the meantime, please keep writing and sending us submissions for the TEXTILE CONSERVATION NEWSLETTER. They can be long or short but they must be typewritten.

We also accept submissions in french and german. These will be translated into english and published in both languages.

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## FROM THE EDITORS

The 1990 TEXTILE CONSERVATION NEWSLETTER Spring Supplementary will be ready for distribution with the Fall 1990 issue. It will deal with storage, based on the research and information that Jacqueline Beaudoin-Ross, Curator of Costumes and Textiles at the McCord Museum, and Eva Burnham, Senior Textile Conservator at CCI, gathered for the new costume and textile storage facilities at the McCord Museum in Montreal.

The results from the Textile Adhesive Questionnaire sent to conservators in 1986 are now available (TCN) Spring 1987 No. 12). The Questionnaire was initiated by Lisa Mibach, former Head of Conservation at the Provincial Museum of Alberta. Jacinthe Moquin, who worked with Lisa Mibach, compiled the Annotated Bibliography on the Use of Adhesives Used in Textile Conservation (Supplementary to the TCN Spring 1987 Issue). Those who are interested in receiving the results from the Questionnaire can write to TCN for a free copy.

### News Flash!!!

It was recently announced that the Brooklyn Museum has closed the costume department and laid off Elizabeth Ann Coleman, who has worked for the Brooklyn Museum for twenty years, and her two assistants. If anyone wishes to express their concerns about this loss to the costume field, please write to the Chairman of the Board:

Robert S. Ruben  
 Chairman, Board of Trustees  
 c/o Smith, Barney, Harris Upham & Co.  
 1345 Avenue of the Americas  
 49th Street  
 New York, NY  
 10105

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## CORRUGATED POLYPROPYLENE CONTAINERS

Anyone involved in packing artifacts either for storage or shipping will admit that the number one problem is using the right container. Somehow the boxes that are available are either too large, too small or not suitable for that rare, one of a kind artifact that you have to pack, so you have no alternative but to build special containers.

Over the years, we at Canadian Parks Service have constructed shipping and storage containers for a wide range of artifacts, from delicate soft paste french faience to military cannons. The conventional way of building wood boxes and crates is time consuming, expensive and requires wood working equipment. Sometimes we have no other choice but to use wood for strength if we have to crate a heavy artifact, but what about other artifacts that are lighter and could be packed in a lighter container? To save time and money we began using triwall cardboard. Triwall is a laminate of three layers of single ply cardboard instead of plywood, and we were able to build containers that were economical, much lighter and easier to handle. Triwall containers can easily be built using a utility knife or a hand saw and hammer. Although triwall proved to be an improvement over wood we still had the acidity problem. At that time archival supply dealers were beginning to sell polypropylene (Coroplast) containers as the ideal container for artifacts, so our next step was to experiment with this new product.

Coroplast and Corex are brand names for corrugated polypropylene. It looks like plastified single ply cardboard, but that's where the resemblance stops. Unlike cardboard, Coroplast is waterproof, acid free, resistant to most acids and chemicals, has a high tensile strength and does not crease or fold as easily as cardboard. Although it has been on the market for quite a few years, it is only recently that the museum community has started using it to construct boxes,

sleeves, portfolios and special containers for artifact storage or handling.

Polypropylene tends to be highly static. This could cause problems with certain types of artifacts such as textiles, but this problem can easily be overcome by using an antistatic wand or cloth. Static free Coroplast is available but is expensive.

One of the problems in the storage or handling of artifacts is that the containers that you need are not standard, and in most cases you only need a few of a certain size. Acid free containers made of either cardboard or Coroplast are available from archival supplies companies and some of the commercial box manufacturers, but in most cases unless you order a large quantity, the cost per unit could be quite expensive depending on the size and quantity of containers that you require, and unless your museum can afford these containers, you have no other option but to construct your own.

By using the same techniques that we used for triwall cardboard, we began using Coroplast and eventually through trial and error were able to build other styles of containers. Anybody with a utility knife, a straight edge, a tape measure and a little imagination plus common sense can build Coroplast boxes.

There are several methods that you can use to make your own containers. One that we favour is to use heat to fold, and then to assemble with plastic rivets.

### a) Style and Size:

Decide on the style and size of the container that you need (see illustrations for examples). In designing your box you must allow for the thickness of the Coroplast at each fold (usually 4 mm), then cut out the shape of the container from the Coroplast.

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**b) Tracing Lines for Folds:**

Trace where you want to fold the Coroplast. Remember to allow 4mm for every fold and when overlapping you must allow for two folds and for the thickness of the Coroplast.

**c) Scoring and Bending:**

Scoring can be implemented by running a round-ended object or tool (round-off a broken screwdriver) along a straight edge where you have traced the creases. When scoring along the length of the corrugations, one or two passes should be sufficient, but scoring against the corrugations will need more pressure and passes.

When you have completed all the scoring, you will find that the Coroplast has a memory and returns to its original shape. If you find this method unacceptable to your needs, you can remedy the situation by applying heat to your creases using a heat gun, hair dryer or any other heat source you may have handy. If you have a heat source available, you can do all of your bending over the edge of a table or work bench. Since Coroplast has a low melting point, start at the lowest heat setting until you reach the correct temperature. When using heat you will find that your container or sleeve seems to be more rigid and stronger than just scoring. Another method is to cut a "V" groove in the Coroplast using a table saw where you have traced the creases, this eases the folding of the Coroplast. If you need a lid for your container, its construction is the same as the bottom part.

**d) Assembly and Fastening:**

There are numerous ways that you can do this. The end use, size and design of your container will dictate which is the best way to assemble your box. If you have designed and cut a blank that has tabs and slots for assembly, your container is finished. The following is a list of the different methods of fastening that we tried, some with more success than others:

**1) Glue**

Gluing would probably be the fastest way of assembly but unfortunately polypropylene does not glue easily. In order to obtain a good bond, you must perforate both layers of polypropylene, and with a hot glue gun ensure that the melted glue finds its way in the corrugations as well as through to both sides of the Coroplast. Then you have to trim off the excess glue after it has cooled down. This is a slow and messy process which may be acceptable for the assembly of smaller containers, but will not survive much pressure or weight. If you choose this method, ensure that the glue that you are using will not be harmful to artifacts when cured.

**2) Adhesive Transfer Tapes**

Adhesive transfer tapes are available that are much easier and faster to use than glues with almost the same results, but again this method of assembly does not withstand much pressure or weight.

**3) Tape**

The conventional method of using tape to assemble boxes does work to some extent, but you have to use cloth tape which is expensive. For best results you should wrap the tape around the box and apply it tape to tape. Again, this method is easier if you use heat when folding the coroplast.

**4) Plastic Rivets**

Plastic rivets, channels and corners are probably the easiest and one of the fastest ways to assemble Coroplast boxes. Depending on the size of your box, rivets may be all that you need, but for larger containers you may have to use plastic channels and corners for more rigidity.

**5) Staples**

Staples are not usually used around artifacts, but if the end use of your containers allow you to use them, they are by far the fastest way of assembling coroplast containers.

Monel staples are probably your best bet and for certain applications quite acceptable. For cosmetic reasons you can easily cover the staples with cloth tape.

6) Welding

A sonic welder is available that can fuse polypropylene, but the cost is between Cdn. \$2,000 for a small unit to Cdn. \$6,000 or more for an industrial model. For obvious reasons we have not been able to try this method.

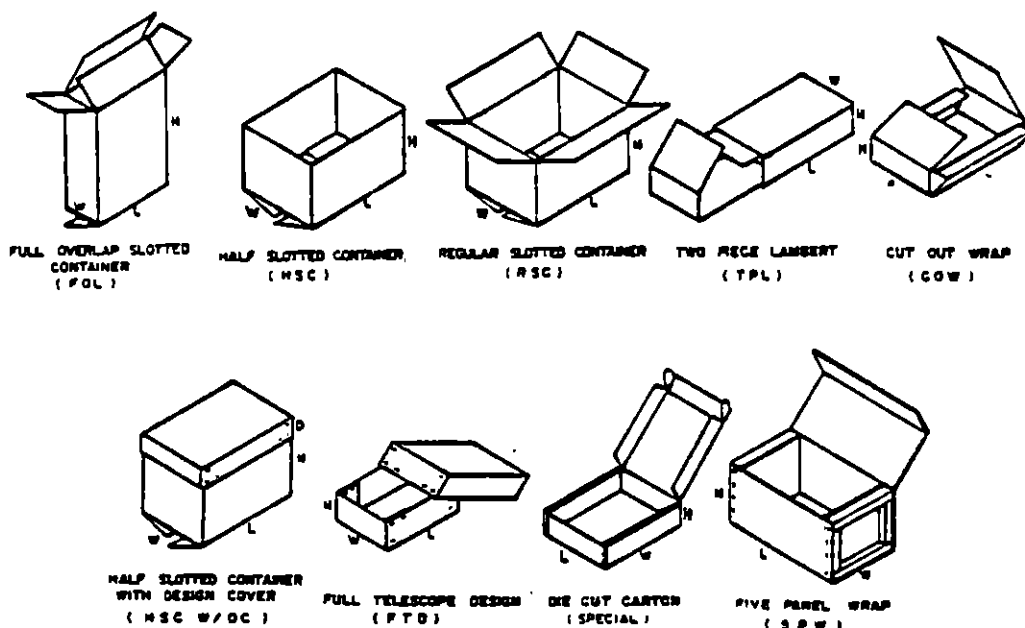
Coroplast is available in 4mm x 4' x 8' coloured sheets. Other sizes are available on special order. Coroplast, plastic rivets, channel and corners are available from:

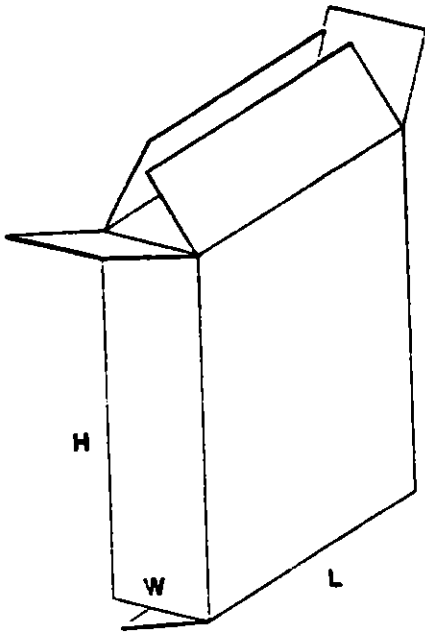
Smith Packaging Limited  
 10 Capella Court  
 Ottawa, Ontario  
 (613) 224-9526

They will provide technical data on request. Anti-static wand or cloth is available from your Photographic Equipment suppliers.

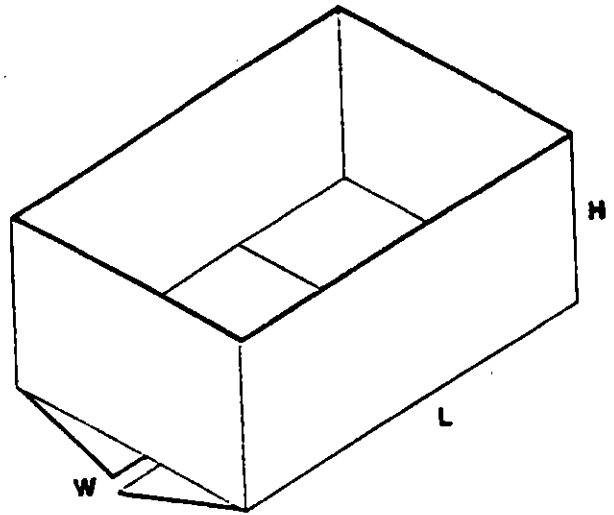
For more information contact:

André Isabelle  
 Head Custodian, Interpretation  
 National Historic Parks and Sites  
 Canadian Parks Service  
 2630 Sheffield Road  
 Ottawa, Ontario  
 K1A 0H3

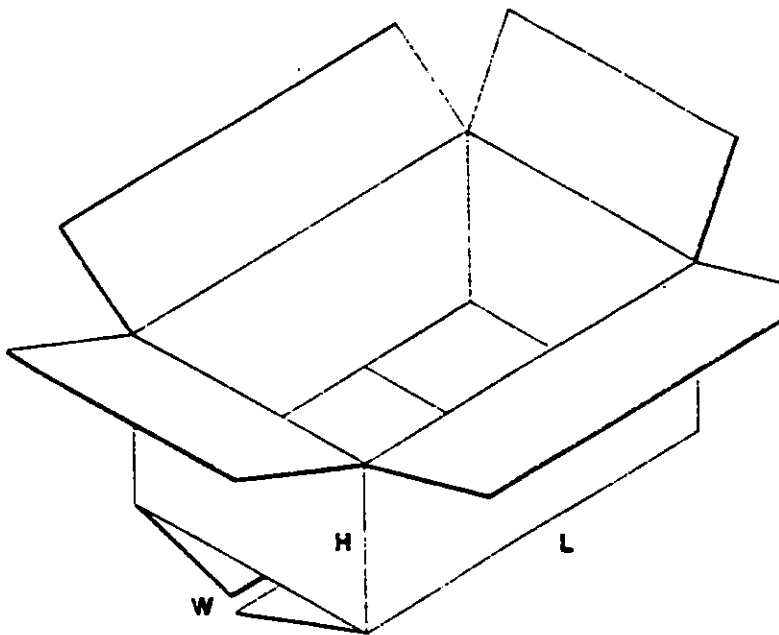




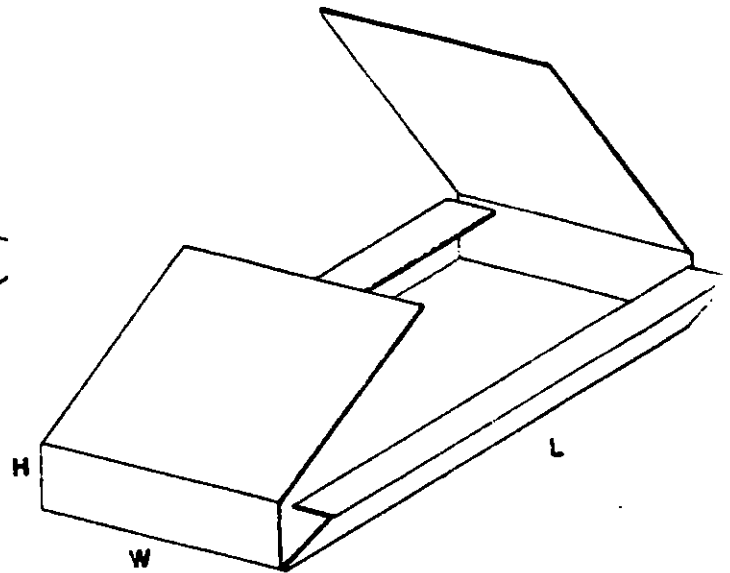
Full Overlap Slotted



Half Slotted

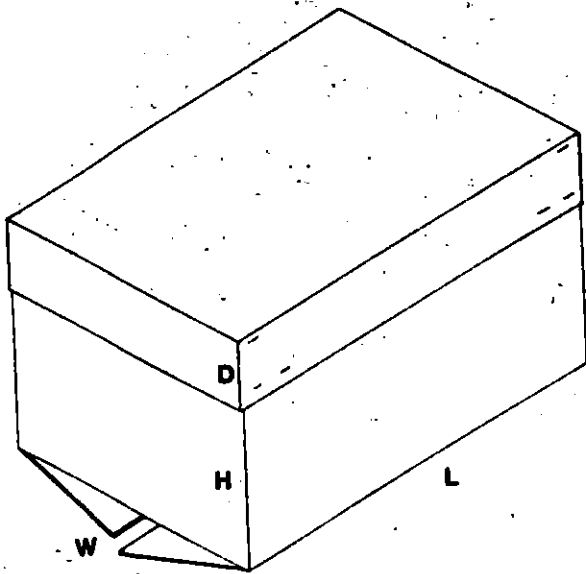


Regular Slotted

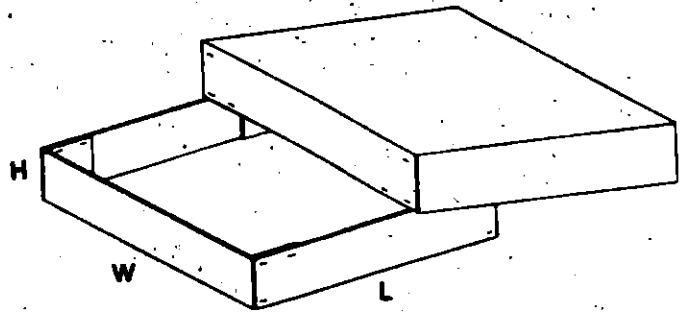


Cut Out Wrap

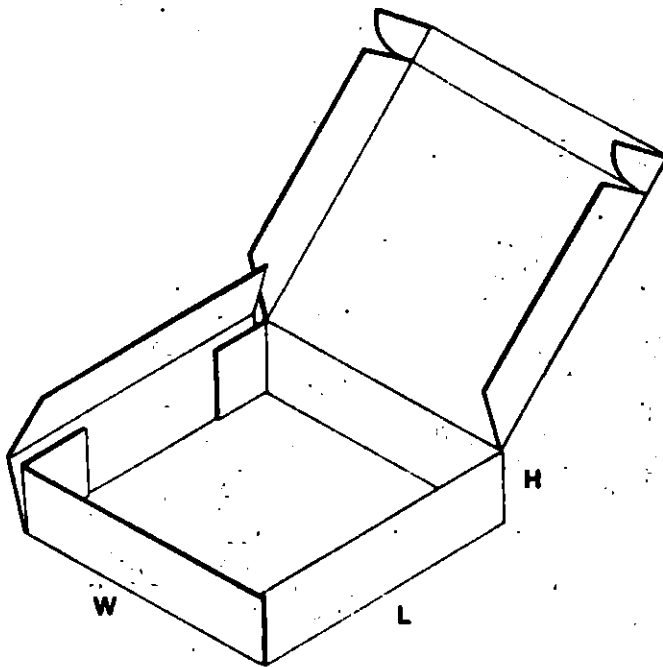




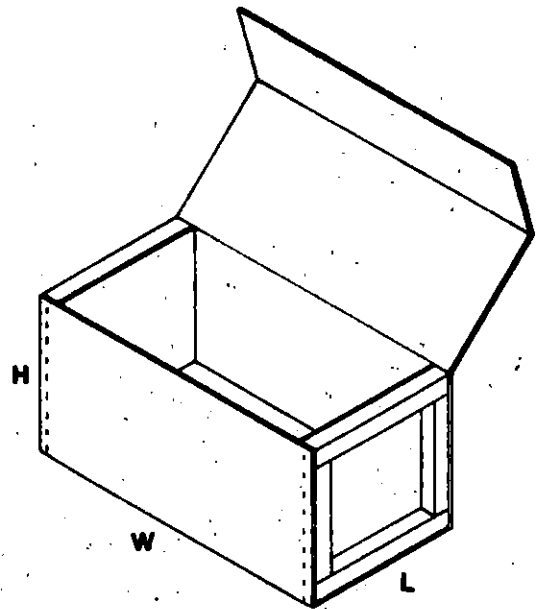
Half Slotted With  
Design Cover



Full Telescope Design



Die Cut Carton



Five Panel Wrap

## THE CONSERVATION OF A BAG WIG, c.1820

In the 18th century it was fashionable and general practice for men of all social classes to wear wigs, both for day wear and for formal evening or 'dress' wear. By the end of the 18th century the practice had declined due to the imposition of a tax on hair powder used in their preparation, but wigs were worn by the learned professions well into the 19th century, and were essential for formal wear.

Attendant to the wig was a black, silk padded draw-string bag embellished with a silk ribbon rosette. This was worn tied at the nape of the neck to contain the plait and gives rise to the name 'Bag Wig'. The Bag Wig is a formal style.

Materials used for making wigs were many and varied: horsehair, human hair, goats hair, cow hair, calves tails, foxtails, mohair, worsted, silk, feathers, and copper and metal wire spiral curls. All these materials were used for wigs and are mentioned in Cunningham (1).

### Examination:

The Bag Wig in question was of a white hair, constructed on a linen net ground made up in 2 layers. Linen tape was stitched around the perimeter of the wig to define the shape, and to strengthen the edges. The side pieces which come down just in front of the ears were wired to help hold the shape, and to keep the wig close to the side of the head during wear. The hair was arranged in tufts in concentric lines and circles around the head starting at the crown. The lines were set at approximately 7mm apart. The hair was fixed in small tufts knotted and sewn into each line at 5mm to 10mm spaces. This gave a uniform overall covering of hair. On the crown, front and sides the hair was approximately 6cms in length. The hair was approximately 36cm long in the back to form a plait.

A few loose hairs were collected and examined using a Leitz orthoplan microscope at up to 320X magnification. Casts of scale patterns were made

and cross-sections and whole mounts were prepared. The samples were compared with a reference collection and identified as probably cow hair.

The wig was clean, the structure was sound and strong and there were no traces of hair powder or other dressing to be found on the hair. The wig was, however, crushed and dishevelled, due to being stored for many years folded in half without any padding to support the shape. The once formal curls were now flat and in disarray (see figure 1). The silk bag was also crushed, but basically sound, only needing a new ribbon tie to replace that which was missing.

### Conservation:

The wig was gently steamed to relax the lined substructure and to slightly relax the hair. It was then placed on a polythene covered wooden head stand in order that it could be thoroughly examined with regard to style. The arrangement of the crushed curls was closely studied.

Reference was made to Handbook of English Costume in the 18th Century (1), and Perukes and Periwigs, A Survey from 1660-1740 (2). It was possible to determine the most likely style of the wig and therefore it was viable to re-create it.

Divisions of hair were separated and curled on 15mm in diameter and 8cm in length plastic rollers held in place using stainless pin curl clips. The rollers were arranged in lines around the head to approximate the original style of the wig. The curls were thoroughly steamed until uniformly damp, then dried using a warm heat from a hair dryer. The wig was then left to cool completely (see figures 2 and 3).

When the rollers were removed the curls were firm and springy. The curls were gently teased to separate them, were arranged in rows around the head, and from the crown down to the ears at the sides.



The Wig partly set



Bag Wig before conservation



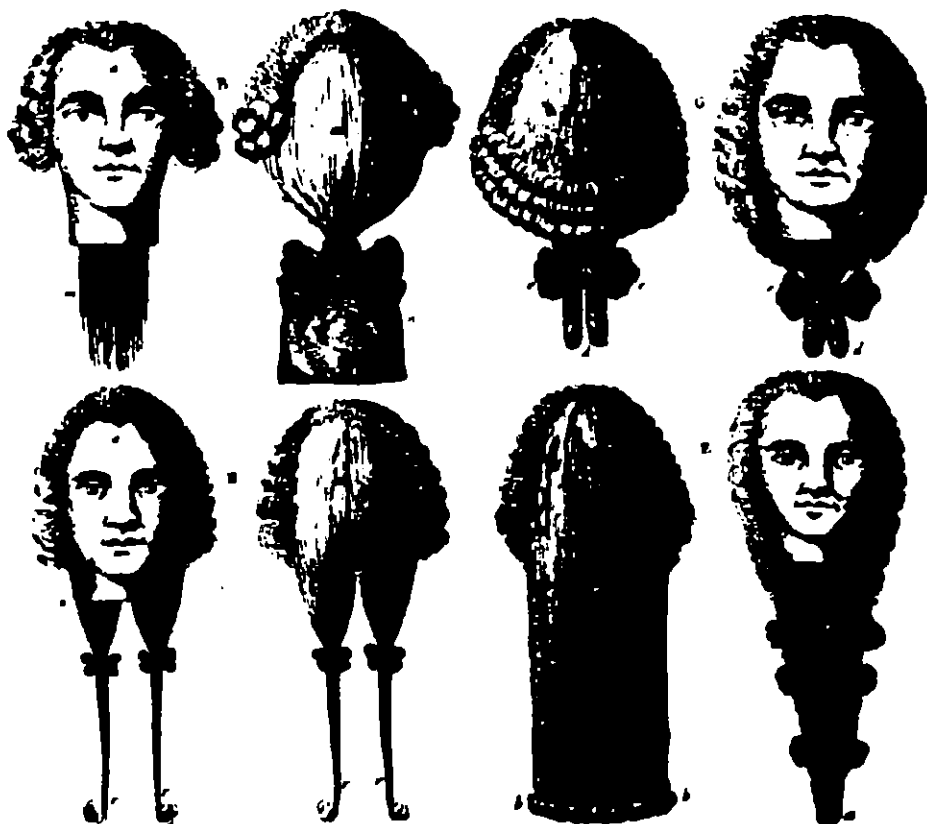
Bag Wig after conservation

The plait was unfastened, steamed lightly, then re-plaited and dried with the hair dryer. It was tied at the bottom with a short piece of narrow black ribbon. The bag was steamed and a new cotton ribbon was inserted into the gathering channel. The plait was then coiled up and put into the bag which was firmly tied on to hold it securely in place (see figure 4).

#### References:

- a) Handbook of English Costume in the 18th Century, by C. Willet Cunnington & Phyllis Cunnington.
- b) Perukes & Periwigs. A Survey from 1660-1740, by Janet Arnold, published by H.M.S.O. - 1970.

Marion Kite  
Textile Conservator  
Victoria and Albert Museum  
London



Diderot's Encyclopedia

## DUAL BLEACHING OF A LACE SHAWL

### Oxidizing and Reducing Treatments:

A cream-coloured lace shawl belonging to a yellow 18th century dress was sent to the Canadian Conservation Institute Textile Division for treatment from the Dugald Costume Museum in Manitoba. The lace was identified from a photograph by Pat Ernshaw, a lace expert from England, as being Carrickmacross. She was unable to further date the shawl without actually seeing it, but it could be 1830-1920. It is definitely not 18th century lace. The shawl is triangular and measures 250 cm across the top.

The shawl was generally yellowed and soiled, with some small hole tears and snags as well as many small orange-coloured stains. Overall, it was still very soft and fairly elastic. It was decided that the shawl's appearance would benefit greatly from washing, but we realized that washing would not get rid of the orange stains that were scattered over the surface. We thought that the orange stains might be iron, but no reaction occurred when they were tested with 3% hydrogen peroxide. We decided that they must not be iron which was important to determine since iron tends to decompose bleaches, thus contributing to fibre degradation as well as lessening their effectiveness. If the test had been positive, the stains would have had to be removed prior to the bleaching treatment.

A literature review suggested that stabilized hydrogen peroxide solution would be the most suitable choice for a bleach. In order to be an effective bleach, H<sub>2</sub>O<sub>2</sub> must be alkaline. The increased decomposition of peroxide at high pH necessitates chemical stabilization of the solution.

Stabilized hydrogen peroxide had the advantages of producing a good whitening effect that can be easily controlled, and is less likely to revert than chlorine-based bleaches. It also does not produce a "super white", but more of an off-white, which is more acceptable for historic lace and probably closer to the original colour.

Degradation of cellulose is negligible and it's low toxicity reduces handling problems. Stabilized hydrogen peroxide was also the choice of Leene and Landi, two well respected textile conservators. In "terms of limiting fibre degradation in cellulosic, it is the best oxidizing bleach available" (Burgess and Hanlan, 1979).

Since Helen Burgess, Senior Conservation Scientist, who works in the Conservation Processes Research Laboratory at CCI, has much expertise and experience with bleaching cellulose, she was consulted for her advice and opinions. She agreed that a stabilized hydrogen peroxide bleach would be the most suitable oxidizing treatment for the shawl. She also suggested that we follow the oxidation with a reduction treatment, a borohydride derivative. This dual treatment would allow the stains and discoloration to respond to both bleaches, and the borohydride would also help reverse some of the fibre oxidation, thereby producing a more stable white.

There are many recipes in the literature for a stabilized hydrogen peroxide bleach. We chose Helen Burgess' because it was the most complete, and was the only one using sodium silicate as a stabilizer. Helen's recipe also included magnesium sulphate which would help protect against oxidation by binding to the sites where oxidation would normally occur.

The treatment of the lace shawl started with washing it in a 0.2% solution of the detergent Canpac 645. While the washing was taking place, the various solutions for the bleach baths were prepared. For the hydrogen peroxide, this meant combining the reagents according to the recipe to create a 2% solution and then adjusting it to a pH of 9.0. For the borohydride, we used a 1% solution and the bath consisted of dissolving the chemical in anhydrous ethanol. This bath was shielded with a plexiglass cover until we were ready for it so that no fumes would escape.

After washing, the shawl was transferred onto a strainer that fit the photography trays we were using for the bleach baths. This facilitated easier lifting and moving of it and less mechanical handling.

It was then treated with the hydrogen peroxide by immersing it in the bath for 25 minutes. There were no obvious problems such as bubbling or gas evolution. The whitening and a general improvement in the appearance of the shawl was noticeable.

The shawl was then rinsed in distilled water, blotted with chromatography paper and immersed in a bath of pure alcohol to further remove any water. It was then moved into the borohydride bleach bath. Once again, noticeable results and whitening were apparent while problems were not, so it was left in for 15 minutes. It was followed by another short immersion in the pure alcohol, this time to rinse away the borohydride salts and to prevent a reaction between borohydride residue and the water to be used in the subsequent washing step.

The shawl was then lifted from the strainer and placed into a tub of running water for the washing period of one hour. While it was in this rinse, a spot test with sodium dithionite dissolved in distilled water was tried on one of the orange stains that was still noticeable. The stain was not affected though, which tends to confirm that iron was not present. When the hour for the rinse had elapsed, the shawl was placed in a tray of distilled water for 15 minutes and then in a tray of distilled water plus 20ppm of magnesium sulphate for an additional 15 minutes. This final soak was to replace any magnesium lost during the treatment. The shawl was then pinned to the correct shape on plastic covered Tentest boards to dry. The result from the bleaching was a noticeably whiter appearance. The overall discoloration had disappeared, many of the stains were gone and the most obvious ones had lightened considerably. There did not appear to be any more holes or noticeable fibre degradation: the treatment was a success. Numerous References were consulted (too many to list here), but following are the references cited in the text:

Burgess, H.D.  
"Practical Considerations for  
Conservation Bleaching"  
J.IIC-CG, Volume 13, pp.11-26, 1988.

Burgess, H.D. and Hanlan, J.F.  
"Degradation of Cellulose in  
Conservation Bleaching Treatments".  
J.IIC-CG, Volume 4, No. 2  
pp.15-22, 1979.

Landi, S.  
The Textile Conservator's Manual  
London: Butterworth & Co.  
(Publishers) Ltd. 1985

Leene, J.E.  
Textile Conservation  
London: Butterworth & Co.  
(Publishers) Ltd. 1972, pp.73-75.

Susan Weber-Fuhr

Susan Weber-Fuhr was an intern in the Textile Division at CCI from September to April 1990. She is now working in the University of Alberta costume and textile collection.



Lace Shawl Before Treatment

Photo: Canadian Conservation Institute  
Department of Communications



## TROUSERS FOUND IN MONTGOMERY'S INN

In restoring Montgomery's Inn, in Etobicoke, [Ontario] very few original artifacts were found. We were extremely rich in paper, ledgers, day books, letters, etc., but personal artifacts were decidedly lacking. Rumours had abounded about some items, but most turned out to be misleading or inconclusive.

In 1987, the Toronto Historical Board was cleaning out their artifact storage, which we all do from time to time, and found a pair of trousers that had come to them in the early days of the Inn's restoration. The trousers had been found jammed between two joists in the attic, and a more pathetic hunk of rolled up fabric cannot be imagined as an artifact. Originally they may have been stuffed in the attic to stop birds from nesting. We are sincerely grateful to the person who made the decision to keep them, and for not having the normal reaction to carry them at arm's length using sterilized tongs and drop them in the garbage.

### Condition:

After they had been discarded by their last owner they became the home of many families of rodents, nesting material for birds, and a pantry for generations of webbing clothes moths and other bugs. Insect damage was extensive, with large areas (such as the back gusset) completely consumed. Had the trousers not been so extensively patched with cotton and lined fabrics, it might have been impossible to distinguish their shape. In their 'working' lifetime the trousers had acquired seventeen different patches (ten different fabrics, in addition to the wool twill of the original construction). Some construction details were impossible to discern. Where the only detail left was a looped linen thread *eee* we knew that a simple seam using a back stitch had existed. A diagonal thread *nn* indicated a whipped edge. Some tears had been repaired with a whip stitch, and in at least one place a hole had been darned. The quality of the needlework in these repairs varies considerably.

Signs of wear are in predictable areas: seat, knees (frequently re-patched), hem of legs (particularly at inside seam). A coarse lining was inserted inside the seat after the patches were attached, and the front fall was completely covered by a patch.

They had acquired not only insect and rodent debris, but also the curious gritty deposit peculiar to attics, as well as the soil and stains of a long (and probably unlaundered) working life.

### Conservation Treatment:

Every stage of treatment was recorded and photographed.

The trousers were quite fragile, so a supporting frame was constructed to enable their position to be adjusted on the work surface without putting any strain on the fabric. A stretcher frame 48" x 30" was sanded and sealed with urethane; then nylon net was stretched over the frame and secured with Monel staples.

The trousers were gently straightened on the stretcher frame. The major chunks of debris were removed with tweezers, assisted by a low-suction vacuum cleaner. The vacuum cleaner had net fastened over its nozzle and was held at an angle a little above the fabric surface to remove loosened dirt. The whole surface was cleaned with the vacuum and a brush. The net on the frame allowed dirt from the reverse of the trousers to fall through onto the table. The garment was turned over, and the process repeated.

The trousers were too fragile to turn inside-out, so cleaning the inside was somewhat like mining, using rolled acid-free card to form a 'tunnel' in which to work. Removing filth from between layers of fabric was almost impossible. Every time the artifact was moved more debris was dislodged.

As the more fragile areas were vacuumed, they were temporarily stabilized by basting to nylon net. The wool was extremely brittle and hard to pin and stitch, which would prove a problem for

attaching to any sort of lining material. The trousers were also producing an increasingly noticeable odour. Careful washing seemed to be the answer.

In preparation for washing, the trousers were stitched between two layers of nylon net, and reinforced with twill tape to prevent stretching. They were washed in lukewarm water with a non-ionic detergent (WA Paste) and rinsed frequently. The rinse water was surprisingly clear by the fourth rinse, but small, heavy particles continued to be washed out for many more. The trousers were dried on their frame on trestles over a fan to speed up the process.

After this, they were much more pleasant to work on! Both the wool and cotton fabrics became more pliable, and easier to stitch.

With so many areas of loss, and the weakness of the wool fabric, inserting a lining seemed the best way of preserving them. A cotton twill fabric was chosen that was strong enough to support the artifact, but of a light weight that would not put undue strain on the original textiles. The artifact was so stained, blotchy and patched, there seemed no point in dyeing lining to match; instead, a compatible colour and texture were chosen. The lining fabric was prewashed. Silk organza was dyed with tea, rinsed; then pulled apart to make a fine, strong sewing thread.

To date, the lining has been secured at all seams, and all loose portions and threads will be secured to it. It is possible, with high magnification and infinite patience, to achieve a certain amount of 'invisible' mending. However, greatly improved though these trousers are, they will always look disreputable. So they will be 'consolidated' rather than 'restored', and perhaps they will be completed within one conservator's lifetime.

#### Historical Notes:

The original main fabric was an even (2/2) twill weave, and might be called serge. It was all wool - warp and weft, albeit showing a mixture of quality in the fibres, from fine to coarse. This was the only fabric examined that was all wool; a

couple were cotton warp with wool weft, but most were all cotton, with one all flax (linen). The trousers show the workmanship of a fine tailor in their original sections, not the work of a less experienced hand. Thomas Montgomery's accounts show that he outfitted himself regularly at tailoring establishments in Toronto, and he could well afford such a garment.

The design of the trousers reflects the styling of the 1820s and early 1830s with a vent or gusset at the centre back, a narrow front fall and squared flap pockets at the side waist. The eyelets on either side of the gusset and the original buttonholes on the pockets and front flap have been worked in a "nate and workmanlike manner", and show the original fine tailoring. On the right hand side of the waistband is a small welt pocket, commonly referred to as a watch pocket, that has been sewn up with the inside of the pocket missing.

The trousers certainly had a change in circumstance, starting as part of a gentleman's wardrobe and sliding down the social scale patch by patch, ending up being used as a workingman's garb. They show us how precious clothing could be in the early nineteenth century, that so much attention was given to maintaining them as a useful garment.

A right leg front patch is sewn with flax thread, and (if cotton is the warp) is a 2/1 RH twill weave, cotton warp, wool and cotton blend weft.

The patch covering the whole of the front fall is a quite finely woven cotton twill (2/1 LH).

The patch on the middle back seam could be called moleskin, being a compound weave fabric, all cotton, extra floating yarns in a satin weave construction, providing the suede-like napped surface of this sturdy fabric.

The underpatch at the lower right leg is a weft face satin weave (1/4), all cotton.

The doe coloured outer patch on the right lower leg is coarser, and entirely of flax.

As to sewing threads, the original construction was done with a double strand of flax thread, 2 ply (one ply much finer than the other). The thread for the overpatch on the right leg is finer than the original construction thread, 2 ply, of flax. The "fabric detective" in this investigation was startled to find the front fall patch whip-stitched with silk thread. (It had darkened greatly with age). Your amateur historical sleuth wondered wildly whether the workman possessing the pants at this stage had a brief encounter with some "Lady C"??

One over-riding impact on the fabric "private eye" was the simplicity of choice of fibres, compared to a fibre identification on today's fabrics; another was that this period in the 19th century was, indeed, when cotton became "King"; a number of substantial fabrics which might have been guessed to contain at least some wool were made entirely of cotton!

Montgomery's Inn has developed a reproduction pattern adapted to today's sizing and using modern and traditional construction techniques.

For details write to:

Montgomery's Inn  
4709 Dundas St. West  
Etobicoke, Ontario  
M9A 1A8.

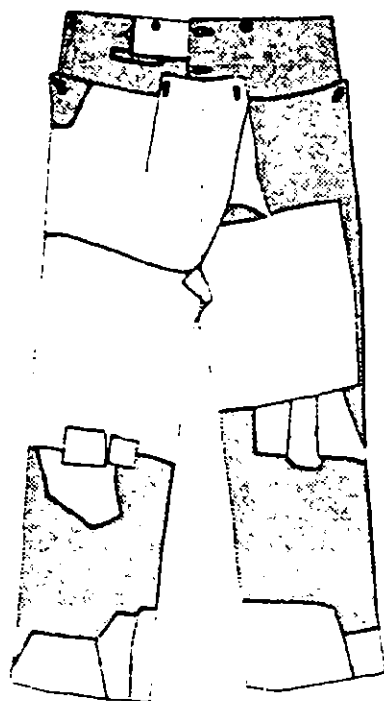
Conservator: Hilary Dawson,

Montgomery's Inn  
Costume Research  
and Pattern: Joyce Hack,

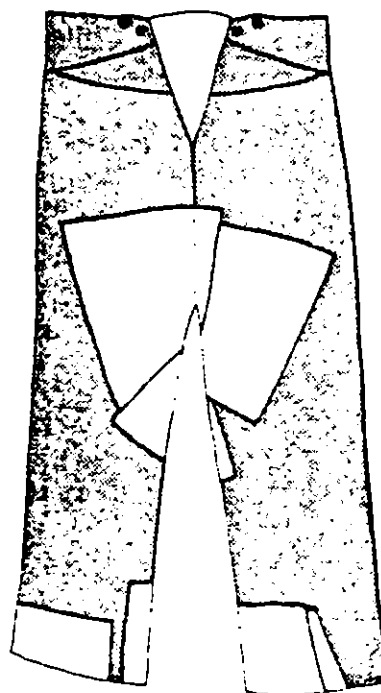
Montgomery's Inn  
Fabric  
Identification: Mary Humpries,

Seneca College  
Illustrations: Caroline Routh.

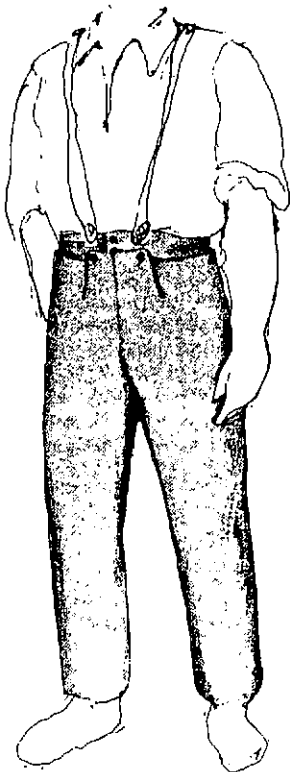
Reprinted with kind permission from the  
Newsletter of the Costume Society of Ontario  
(Vol.19 No.1-89) and Montgomery's  
Inn, Toronto.



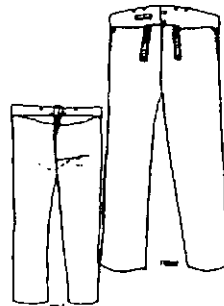
Front



Back



Reconstruction of Montgomery's Inn Trousers



4709 Dundas Street West, Etobicoke, Ontario M9A 1A8 Tel. 416-394-8117

**PATTERN - TROUSERS CIRCA 1830**

Gentleman's reproduction croucher pattern circa 1830. Full front style with side pockets, back yoke and faced gusset at centre back. The wide waistband at front has a small welt pocket on right hand side and the waistband narrows toward the back. Individual patterns are made for sizes 30 to 40.

The pattern has been adapted from an original garment found during the restoration of Montgomery's Inn in 1975. In their lifetime the trousers had been patched seventeen times. With this history of preservation we felt they were worthy of reproduction.

Conservation and historic notes included.

MAIL ORDER FORM

MONTGOMERY'S INN TROUSERS CIRCA 1830

Price per size: \$15.00

Size	Number	Price
30		
32		
34		
36		
38		
40		
Above total		
*Postage & Handling		
*Ont. res. July 1st 8%		
TOTAL \$		

\*Purchasers please add the following for postage and handling: Canada - 10%, U.S.A. - 12%, overseas - 15%; Ontario residents add 8% sales tax.

Payment by cheque or money order in Canadian funds, made payable to the City of Etobicoke.

Payment enclosed \$ \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Code \_\_\_\_\_

Mail to - Montgomery's Inn  
4709 Dundas St. West  
Etobicoke, Ontario, Canada  
M9A 1A8

## HEALTH AND SAFETY

### An Unexpected Hazard in a Textile Storage Room:

In 1988 two members of staff, Izabella Krasuski and Judith Cseleney narrowly missed severe injury, possibly even death, when the heavy textile cabinet at which they were working tipped forward and crashed to the ground.

The cabinet in question was made of enamelled metal, is sixty inches wide by sixty inches deep by forty-eight inches high and has eleven shallow drawers. Even unloaded it is very heavy. It was stacked on top of another identical set of drawers as part of a compact storage system where the entire bank of cabinets can be shifted at the touch of a button, and it is of a type quite commonly recommended for the storage of textiles and natural history collections. Because of their broad base and comparatively low height, it is apparently not considered necessary to bolt the upper, lower and adjacent cabinets together as is often done with the smaller, narrow cabinets used in compact storage systems. Nothing in its appearance gave any impression of instability.

The accident was thought to have been caused by the excessive weight of the textiles in the upper three drawers, which was much greater than the weight in the lower drawers. At the time, they were working with two or three of these upper drawers open (or partly open), while they examined the contents. These are not abnormal conditions; in many storage systems artifacts are stored according to their provenance, type or cultural context, rather than their weight, and it is not uncommon to examine several artifacts simultaneously when assessing material for exhibition. However, regardless of the exact circumstances leading to that particular collapse, there seems to be a weakness in the system because this type of cabinet can be induced to tip forward with only one normally loaded top drawer open. If the top drawer is fully extended, as is necessary for removal of some of the larger dresses and their supporting boards, and pressure is applied to the outer edge of the open drawer, as

could easily happen when somebody leans over to reach into the back of the drawer, there is sufficient leverage to tip the cabinet very slightly. The slight tilt makes all the drawers (which by design run very smoothly) slide out. The sudden extension of all the drawers and the thud as they reach the end of their runners is enough to upset the whole cabinet. The entire process from the application of pressure to the front of the drawer to the collapse of the cabinet could take place in less than ten seconds, which does not allow much time for evasive action.

The two staff members were fortunate enough to escape with relatively minor injuries because of a fortunate combination of circumstances:

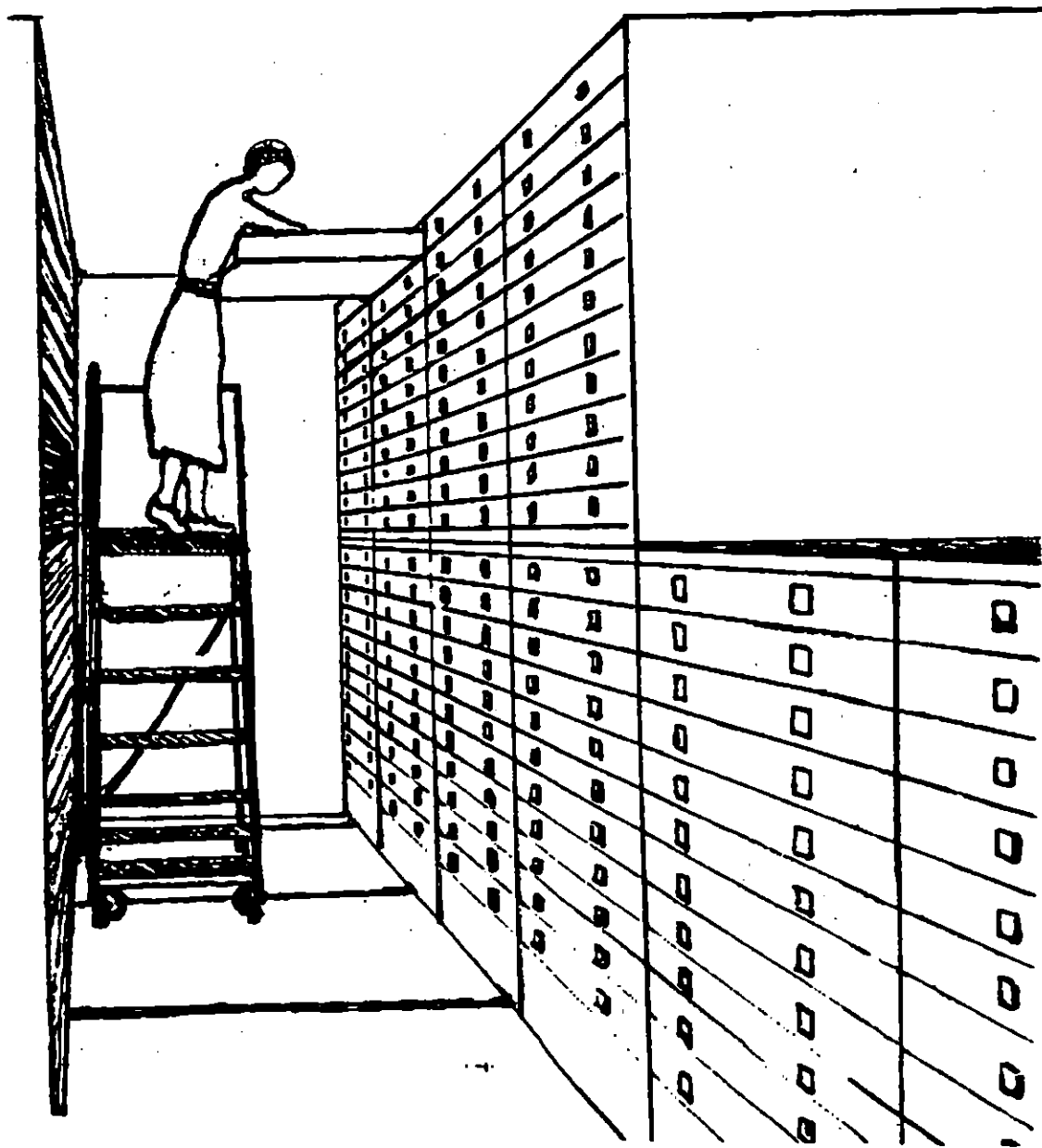
- a) They were standing on a particularly sturdy ladder, which when struck by the cabinet skidded backwards into the aisle without falling over;
- b) The initial impact of the cabinet was taken by the ladder, protecting them from all but glancing blows from the drawers, but even so, one member of the staff was very extensively bruised; and
- c) They were both actually standing on the ladder at the time instead of one person standing on the ground while the other passed down the textiles.

Had they been pinned by the falling cabinet it is unlikely that they would have been missed for at least an hour, or possibly longer, because people in the storage areas often work in isolation for long periods at a time. The tremendous crash of the cabinet smashing itself on the floor could have passed unheard.

The existing cabinets could presumably be made safe by strapping them to other units in the same rank to insure that individual units could not tip forward independently. This in turn would prevent the drawers from slipping out and altering the centre of gravity.

The accident happened more than two years ago, but it seems worth reviving the issue because similar storage units, which rely solely on their weight and broad base for stability, are still being sold. I don't believe the problem has been very widely publicised in other museums and institutions where such storage systems are likely to have been installed, so please, take a look at yours!

Julia Fenn  
Royal Ontario Museum  
Toronto, Ontario



## HEALTH AND SAFETY CONSIDERATIONS FOR GARMENT AND TEXTILE CONSERVATORS

The fascination of working with historic garments and textiles often disguises many potential health and safety hazards. The concept of museum safety tends to revolve around the safety of the collections and of the public that comes to view them. A field study that surveyed institutions with garment collections of different sizes, locations and types found several areas for concern.

Virtually all tasks associated with the acquisition, cleaning, repairing, cataloguing, storing and displaying of historic garments presented a health or safety risk. Since there are seldom dramatic and instant results or reactions, these hazards are often overlooked. However, repeated exposure over time may result in serious harm.

The most common areas of threat are from chemical, biological and ergonomic agents.

**Chemical:** Solvents, fumigants and dyes are frequently poorly labelled, handled and stored.

**Biological:** Curators and conservators are often exposed to molds and fungi during any number of their duties. These usually appear in the form of allergic pnueementis or cold-like symptoms.

**Ergonomic:** Few museums have the luxury of properly designed work spaces. Many collections are stored in make shift closets, drawers and trunks, with cleaning being done in bath tubs and sinks, and repair taking place with insufficient light and back straining seating. The convenience of computer cataloguing is sometimes off set by screen glare and improperly placed keyboards.

This study found curators and conservators to be very concerned with health and safety issues. In researching individual backgrounds, it was discovered that a large number of professionals came up through the ranks and had "on the job

"training. While others did complete specialized training for conservation and/or curatorial skills, safety has traditionally been slanted toward the safety of the garment. Currently, educators are teaching conservation techniques that are less chemically invasive. It is expected that biological and ergonomic exposures will predominate in the future.

**C. O. Lindholm:**  
Associate Professor, School of Design  
University of Cincinnati

**R. J. Simmons:**  
Associate Professor  
Department of Mechanical and  
Industrial Engineering  
University of Cincinnati

### Note:

The editors received a letter recently from Christina Lindholm giving more background on the study she and Ron Simmons undertook. She explained that this article was based on a study that was supported by a grant from the University of Cincinnati Research Council. Fifteen institutions ranging from university collections, state historical societies, a private conservator, and national museums were visited. The size of the collections, state historical societies, a private conservator, and national museums were visited. The size of the collections surveyed were from 300 to over 1 million pieces. A form was completed for each site to insure that the same aspects were completed for each site to insure that the same aspects were considered in all cases. The institutions visited were located on the east and west coasts of the U.S., New York City, and throughout the central and mid-western U.S.

The research findings were presented at the 9th International System Safety Conference, Long Beach, California, July 17-21, 1989, in the "System Safety in the Work Place" session. Lindholm and Simmons are working on an article covering the second phase which will deal with how to reduce the risks.

The Editors

## NEWS FROM THE CANADIAN MUSEUM OF CIVILIZATION

### Move to the New Museum:

On April 2nd, the Conservation Services Division of CMC moved into its new laboratories and offices at Parc Laurier. Our new address is:

100 Laurier Street  
P.O. Box 3100  
Station B  
Hull, P.Q.  
J8X 4H2  
Fax: (819) 776-8300

We are all delighted to be settled in - of course the situation will be even better when all the collections have been moved over as well. We will be hosting an Open House in the fall.

### Staff:

We are pleased to welcome Dora Borowyk to the permanent staff of the lab. Dora was the Textile Custodian with the Canadian Centre for Folk Culture Studies (CMC) since 1972. Her expertise and knowledge of the collection is a welcome contribution to the work in our lab.

Donna Butler and Eva Kaczowski continue working with us on contract, and as of May 22nd, Leslie Redman, who has trained in a variety of places including Queen's University, will be doing a four-month internship with us.

### Exhibits:

Since the completion of work for the flag exhibit (see last TCN), our treatments have been mainly for textiles for the show entitled "Coat of Many Colours - Two Centuries of Jewish Life in Canada" (April 6 to September 16, 1990). This show explores the rich traditions of Canada's Jewish Community, from Jewish involvement in Canada's burgeoning fur trade in the late 18th century to the challenges faced by recent immigrants. After Parc Laurier, the exhibit will tour museums across Canada, and go on to

New York City before reaching its final venue, Beth Hatefutsoth, The Museum of the Jewish Diaspora, in Tel Aviv, Isreal, in 1993.

Textiles prepared for the exhibit included a gold-painted silk wedding canopy (1864), a silk circumcision gown and bonnet (1917), and several commemorative silk ribbons - a total of about 40 textiles.

The wedding canopy was vacuumed; weak areas were supported with silk fabric, and the piece was mounted on Gatorboard, padded with fibrefill and covered with fine cotton fabric. It was then exhibited suspended in an appropriate manner according to its use, but out of arm's reach.

Extensive use was made of various forms of Ethafoam mounts and mannequins.

Silk crepeline ribbons proved to be extremely useful for encasing the very deteriorated silk ribbons on the circumcision gown, as well as in association with the mounting of textiles (in some cases instead of cotton tapes - the crepeline being almost invisible). Thanks to CCI for the tip about the crepeline in ribbon form.

### Care of Collections:

We are currently treating artifacts for "care of collections" - an 1828 "Kings Dragoon Guards" jacket (loan from the Niagara Historical Society), a Drummer's jacket (loan from the New Brunswick Museum), and several other textiles intended for the History Hall.

An infestation of carpet beetles was also recently discovered during a routine check in one of our off-site storage areas. Textiles are being vacuumed, bagged, frozen, cleaned where necessary and repacked for storage here at Parc Laurier.

Julie Hughes  
Anna Jakobiec  
Textiles Conservation Lab  
Canadian Museum of Civilization  
Hull, Quebec



## NOUVELLES EN PROVENANCE DU C.C.Q.

Sharon Little-Raquisich a repris, depuis le 5 février 1990, son poste de restauratrice en chef de l'atelier de textiles, après un congé de maternité de près de trois ans. Ses projets actuels comprennent l'enlèvement de réparations douteuses sur un fragment de tapisserie flamande du XVI<sup>e</sup> siècle. Ils comprennent aussi le traitement en vue de la photographie d'une superbe ceinture fléchée parée de perles et d'une jupe huronne de cérémonie fabriquée en laine, en tissu et en ruban de soie, qui seront partie d'un livre édité en l'honneur de l'inauguration du Musée de la civilisation du Québec.

Un autre projet présentement en cours concerne le traitement des textiles après un sinistre. Il servira aux deux journées de formation portant sur La Sauvegarde des collections qui auront lieu au C.C.Q. les 24 et 25 avril, en liaison avec la Société des musées québécois.

Louise Lalonger travaille dans l'atelier comme contractuelle en restauration des textiles. Elle vient de terminer des traitements d'objets appartenant au Musée de la civilisation à Québec. Un sac à main brodé du début du XX<sup>e</sup> siècle ainsi qu'une robe d'enfant et un corsage de robe de la fin du XIX<sup>e</sup> siècle ont été nettoyés et consolidés pour fins d'exposition, alors que dix vêtements et sous-vêtements d'une poupée de l'époque victorienne ont été traités pour être photographiés en prévision d'un catalogue sur la collection.

Présentement, elle travaille à nettoyer et consolider un gilet pour homme, en soie brodé en fils de soie et d'argent. Ce gilet a appartenu au Sieur de St-Ours, officier sous Montcalm, qui décéda sur les plaines d'Abraham en 1759. Ce vêtement est actuellement la propriété de la Commission des champs de bataille nationaux.

Translation: Carole Dignard

## NEWS FROM THE CENTRE DE CONSERVATION DU QUÉBEC

On February 5, 1990, Sharon Little-Raquisich returned to her position as Chief Conservator of Textiles after a 3 year maternity leave. Recent projects include the removal of unsightly repairs to a fragment of a Flemish tapestry, circa 16th century. A lovely beaded ceinture fléchée and ceremonial Huron skirt of wool fabric and silk ribbons were treated in view of their photographic documentation in a book being compiled in honour of the inauguration of the new Musée de la civilisation du Québec.

A presentation on the treatment of textiles following a disaster is being prepared for a two-day training session on "La Sauvegarde des collections", to be held at the C.C.Q. April 24-25, 1990, in conjunction with la Société des musées québécois.

Louise Lalonger is now working on contract in the Textile Laboratory. She has just recently finished the conservation treatment of several works from the Musée de la civilisation in Québec. An embroidered purse of the early XXth century along with a child's dress and a bodice from the end of the XIXth century were cleaned and consolidated in preparation for their display. Ten garments and their undergarments which were to be photographed for a catalogue of the collection were also treated.

Presently, Louise is working on the cleaning and consolidation of a man's silk vest embroidered with silk and silver threads. This vest was owned by the Sieur de St-Ours, an officer under General Montcalm who died on the Plains of Abraham in 1759. This piece is now the property of the National Battlefields Commission.

## CONFERENCE REPORTS

### Upholstery Conservation Symposium:

February 2-4, 1990  
Colonial Williamsburg  
Virginia

The recent symposium on Upholstery Conservation held at Colonial Williamsburg attracted almost 200 participants from the U.S.A., Europe and Canada. The first paper was presented by Elizabeth Lahikainen, Head Upholstery Conservator at the Society for the Preservation of New England Antiquities. Entitled Upholstery Conservation - A Review of the Issues, it introduced many topics which were further developed during the course of the three-day conference. Ms. Lahikainen stated that complete reupholstery, often carried out by a commercial upholsterer, was considered an acceptable practice until recently by many museum professionals. However, an attitude of appreciation and respect for the original materials is now emerging. This has led to a reassessment of the use of traditional techniques, the development of creative, alternative solutions and a new awareness of the importance of thorough documentation and analysis prior to treatment.

In addition to an initial overview, the presentations were divided into five subject areas: Analysis and Documentation, Upholstery Materials, Upholstery Styles and Techniques, General Conservation Treatment and finally, Treatment Case Histories. Because of the large number of papers presented, it is not possible to comment on each one in the space of this brief article. Only a few highlights can be offered.

Sherry Doyal, Conservation Assistant (Upholstery), Metropolitan Museum of Art, was the first speaker to address the issues of Analysis and Documentation. She likened upholstery to archaeology in that the disturbance or removal of layers could result in the irretrievable loss of information. A range of options was presented for written and visual methods of recording as well as a variety of techniques for technical and

scientific analysis. The published version of Ms. Doyal's paper contained a useful bibliography of terminology, technology and materials in addition to several examples of documentation forms for upholstered objects.

On a similar topic, a paper presented by F. Carey Howlett entitled The Identification of Grasses and other Plant Materials used in Historic Upholstery, emphasized the importance of detailed documentation as an aid to further scholarly research. Identification of plant materials has become a routine feature in the examination of historic upholstered furniture at Colonial Williamsburg. Broadening this study to include information from other collections, Mr. Howlett suggested, could lead to the initiation of a much broader research project addressing the questions of furniture provenance as well as regional patterns of use of plant materials.

The session on Upholstery Materials featured a useful discussion by Kathryn Gill, Upholstery Conservator, Metropolitan Museum of Art, on The History, Manufacture and Characteristics of some Underupholstery Materials. Rita Adrosko, Curator, Smithsonian Institution, spoke on Identifying Late 19th Century Upholstery Fabrics. Ms. Adrosko reviewed the most common identifying features for textiles and went on to describe a number of upholstery fabrics popular in the late 19th century. With the aid of slides, Ms. Adrosko guided the audience through the intricacies of applying terms now forgotten such as rep, terry and tabaret. The first of several papers concerning upholstery in the 20th century was presented by Lesley Wilson, a private conservator from England. Entitled Developments in Upholstery Construction In Britain During The First Half of the 20th Century, this presentation examined the impact of the introduction of new products such as latex foam rubber and tension springs on upholstery construction. The effects of World War II on the British furniture industry were also discussed.

A highlight of the third session featuring Upholstery Styles and Techniques was an account of the history of upholstery entitled Towards the Future of Historical Upholstery Technique in

America, presented by Robert F. Trent, Curator, Winterthur Museum. Brief yet wide-ranging, this overview commenced with an inquiry into the origins of upholstery which probably resulted from the fusion of three separate trades: the saddler, the upholster and the coffer-maker. The history of upholstery techniques in Europe and North America was covered from the 17th to the 20th centuries, ending with the introduction of the staple gun and latex foam rubber.

The session on General Conservation Treatment featured a number of informative presentations ranging from experiments with "tackless" upholstery (Joe Twichell, SPNEA), to an exploration of custom dyeing (Nancy Britton, SPNEA) and the treatment of seating frames (Leroy Graves, Colonial Williamsburg). The second paper presented by Kathryn Gill, entitled Approaches in the Treatment of 20th Century Upholstered Furniture addressed the problem of synthetic materials present in much 20th century furniture. After a brief history of the use of synthetics such as vinyl, polyurethane and polystyrene, Ms. Gill considered the impact on the furniture industry of the development of synthetic vat dyes and modern fabric finishes. The deterioration of synthetic materials was described in some detail and specific problems from the collections of the Museum were cited including Colombo's "Tube Chair" and Jacobsen's "Egg Chair". Margot Brunn, Assistant Conservator at the Provincial Museum of Alberta presented the concluding talk in this session on the Treatment of Cellulose Nitrate Coated Upholstery. In addition to a discussion of the mechanisms of deterioration of cellulose nitrate, Ms. Brunn gave a brief history of coated upholstery fabrics and described simple tests for the identification of a number of these materials.

The final session on Treatment Case Histories included ten papers featuring specific treatments performed on objects ranging from chairs to footstools to a chariot (a type of horse-drawn carriage). The restoration of an historic house interior was discussed in the presentation entitled The Restoration of Mills Mansion State Historic Site, by Melodye Moore and Deborah Lee Trupin. The formidable problem of preserving

the cohesiveness of the interior spaces whilst addressing the conservation needs of individual artifacts led to the adoption of a holistic approach at Mills Mansion. A project team was formed and the advice of consultants was sought in a two-day brainstorming session. As a result of this co-operative approach, the project achieved a tighter focus. A coherent set of guidelines was established which is allowing manageable objectives to be achieved within set time limits. The value of this paper, in my opinion, is that it stressed the necessity of stepping back and taking in the "big picture". As conservators, it is all too easy to take a myopic approach as our attention becomes diverted by the details.

The Upholstery Conservation Symposium provided a stimulating forum for the exchange of ideas between experts in many disciplines. On the negative side, it seemed surprising that there was no arranged tour of the conservation laboratories at Colonial Williamsburg. In addition, I would question the wisdom of the organizers in scheduling fourteen papers in a single day; a timetable formidable enough to bring on mental indigestion among even the most dedicated of conference-goers. However, indigestion was definitely not a problem at the excellent banquet, served by candlelight, in one of Williamsburg's historic inns. The choice of location is to be commended as is the prompt distribution of the pre-prints in a volume which, although not referenced, will provide a most useful source of information regarding this rapidly-developing aspect of conservation.

Krysia Spirydowicz  
Art Conservation Program  
Queen's University  
Kingston, Ontario

The preprints of the papers from this conference entitled Upholstery Conservation are available as a softbound volume of 462 pages, for U.S. \$30.00 plus \$5.00 for shipping, from: American Conservation Consortium, Ltd., 87 Depot Road, East Kingston, New Hampshire 03827 USA.

## Carpet Conservation Symposium

January 3-4,  
Textile Museum  
Washington, DC

The Carpet Conservation Symposium held by the Textile Museum last January was originally intended to be a small round-table forum. As the registration grew, the format changed to a series of more formal presentations. Nonetheless, there were lively times for discussion. Sara Wolf-Green questioned the delineation of the history of rug restoration with the evolution of rug conservation. Where these approaches overlapped (since "restoration" can be a part of conservation), there is a blurring of these two. Perhaps in fact conservation, in part, is a distillation of restoration. In Carol Bier's "The Curatorial View", the first thing we have to ask ourselves is what we are trying to say. There are many levels of evaluating an object, purely from a historical standpoint, a structural standpoint, or an artistic one. This is going to reflect how we are to view an object - in this case the carpet. What does one do with such a carpet as the Ardabil Carpet at Los Angeles Country Museum of Art, which is historically, artistically and structurally important? After careful re-investigation by Catherine McLean and comparison with the companion Ardabil Carpet at the Victoria and Albert Museum, it was concluded that the LACMA Ardabil Carpet is more intact than previously thought. But the question remains - what is the safest and most practical way to exhibit something of this fragility and large size which would command long periods of viewing by the public? Sarah Gates presented her methods for the mounting of several historically important kilims, many in very fragmented condition that would eventually be travelling to different venues for exhibition. Jane Merritt reviewed several approaches to carpet exhibition in Europe, noting some light controls within galleries. Along with the discussion on detergent formulation by Gilbert Delcroix of France, there were several papers on treatment. Anne Ennes gave a very good overview and comparison on the stabilization of edges and ends. Sara Wolf-Green and Julia Swetsoff discussed traditional methods and

passive fills in compensation for loss. They illustrated two "plug" techniques, separately woven fill, for pile and flat woven carpets. Harold F. Mailand gave a summation of his experience in the conservation and exhibition of carpets. Zoe Annis Perkins and Jeanne Brako demonstrated an approach to selective and/or partial re-knotting to compensate for loss or for replacing old repairs. Paul Czabay presented different instruments that could aid us in the evaluation of colour and dyeing of yarns. In a discussion on ethics we were reminded of the question of form and function, as opposed to artistic artifact.

These pages should be published for the most part in *The Textile Museum Journal* in the near future.

R. Bruce Hutchison  
Textile Conservator  
The Cathedral Church of  
St. John the Divine  
New York

## The Textile Society of America

The first conference of the Textile Society of America was held September 15-18, 1988, at the Minneapolis Institute of Arts. The general subject of the meetings was "Textiles as Primary Sources," and was intended to examine the philosophical, methodological and conceptual issues that shape and inform studies in textile history.

The day theme for Friday was "Strategies and Methodologies for Gathering and Extracting Data." The keynote address was given by Elizabeth Barber, and discussed the challenges of prehistoric textiles. Following this most interesting presentation, Milton Sondag (Cooper-Hewitt Museum) spoke on "Validity of Structural and Pattern Analysis in Comparisons from Specific Cultural and Historical Cases," and Clarita Anderson (University of Maryland) presented "Creating a Data Base Inventory for Handwoven Coverlets from the mid-Atlantic Region."

The afternoon speakers were: Mokhtar el-Homossani (Royal Ontario Museum) - "Creating a Protocol for Reconstructing Weaving Technology: Weft-faced Compound Non-silks Found in Egypt (3rd to 7th century)"; Dorothy Washburn (University of Rochester) - "Symmetry Analysis of Pattern within Cultural context - Southeast Asia, West Africa, South America"; Jan Hoskins (University of Manitoba) - "Survey of Computer Assisted Design and Structural Analysis." Five other speakers in the late afternoon reported on research in progress.

The day theme for Saturday was "Textiles as Cultural Signatures" with the keynote address given by Richard Martin (FIT) on "Transmutations of the Tartan: attributed Meanings to Textile Design." Other speakers for this day included Peggy Gilfoy (Indianapolis Museum of Art) - "How We Know the Shawl is French, or In the Beginning Was the Fibre"; Ann Lane Hedlund (Arizona State University) - "Dyeing Among the Navajo"; and Sandra Niessen (Museum of Anthropology, University of British Columbia) - "Indonesian Batik Textile Industry". Again, five brief reports on research in progress ended the day.

Sunday included several more research-in-progress reports, an evaluation discussion of this first symposium, and a general business meeting.

It was agreed by all attendees that this first meeting was a very successful and informative both by means of formal presentations as well as through the many opportunities for informal conversations with people from a wide variety of textile related fields.

Mary Ann Butterfield

This report is republished with kind permission from the Textile Conservation Group Newsletter, New York, Volume XI, No. 1, October 1988.

## CONFERENCES

### Textiles in Trade

September 14, 15, 16, 1990  
Washington D.C.

Textiles have been an important element in man's commerce and communications throughout the ages. They have acted as currency and served to transport motifs and technology. Their acquisition has been a goal of kingly treasuries and ethnic systems of exchange. These and other aspects of Textiles in Trade will be the topic of the next Textile Society of American's symposium. For further information about registration, please contact:

Sheri Price  
Office of Conference Services  
Smithsonian Institution  
S. Dillon Ripley Center, Suite 3123  
Washington, D.C. 20560  
Tel: (202) 357-4789  
Fax: (202) 786-2557  
Tel: (202) 357-1696

For more information about the program please contact:

Mattiebelle Gittinger  
The Textile Museum  
2320 S. Street N.W.  
Washington, D.C. 20008  
USA  
Tel: (202) 667-0441

November 8-9, 1990. Washington, D.C. **Textiles and Costumes on Parade: Exhibition Successes and Disasters.** 10th Preservation Symposium of The Harpers Ferry Regional Textile Group to be held at the Smithsonian Institution's National Museum of American History. Registration contact:

Katheleen Betts  
Anderson House Museum  
2118 Mass. Ave., N.W.  
Washington, D.C. 20008  
Tel: (202) 785-2040.

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**Saving the Twentieth Century****The Degradation and  
Conservation of Modern Materials****SYMPOSIUM 91**

The Canadian Conservation Institute, a programme of Communications Canada, is hosting a symposium from the 16th to 20th September, 1991 to be held in Ottawa, Canada. The Conference theme will be devoted to the conservation of objects made from modern materials. The focus will be synthetic and modified natural polymers, metals and composites.

Conservators and scientists will address conservation practices, as well as scientific aspects of the degradation and stabilization of modern materials.

A formal call for papers will appear at a later date; however, preliminary submissions of papers are welcomed.

To receive further details write to  
Cliff McCawley or David Grattan.  
Symposium 91  
Canadian Conservation Institute  
Department of Communications  
1030 Innes Road  
Ottawa, Canada  
K1A 0C8

**Sauvegarder le XX<sup>e</sup> siècle****La dégradation et la conservation  
des matériaux modernes****SYMPOSIUM**

L'Institut canadien de conservation, qui relève de Communications Canada, organise un symposium qui se tiendra à Ottawa (Canada) du 16 au 20 septembre 1991. Cette conférence aura pour thème la préservation des objets faits de matériaux modernes et sera centrée sur les polymères synthétiques, les polymères naturels modifiés, les métaux et les composites.

Restaurateurs et scientifiques s'intéresseront aux pratiques de conservation ainsi qu'aux aspects scientifiques de la dégradation et de la stabilisation des matériaux modernes.

Une invitation officielle à soumettre des articles sera lancée plus tard; les personnes qui le désirent peuvent toutefois envoyer leurs articles plus tôt.

Pour de plus amples renseignements, prière d'écrire à l'adresse suivante:

Cliff McCawley ou David Grattan  
Symposium 91  
Institut canadien de conservation  
Ministère des Communications  
1030, chemin Innes  
Ottawa, (Ontario) Canada  
K1A 0C8

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## EXHIBIT REVIEW

### Measure for Measure - Measuring Up:

'Measure for Measure', the new permanent exhibit in the Costumes and Textiles Gallery at the Royal Ontario Museum, TCN Fall 1989 No. 17, has approximately 40 pieces or ensembles arranged not by period, style, or country, but by approach to constructing clothing. It is divided into four categories:

- 1) Draping - the wrapping, hanging, and arranging of fabric on the body;
- 2) Straight cutting - the cutting and assembling of straight panels, rectangles, and squares into garments;
- 3) Tailoring - the cutting of irregularly shaped pieces of cloth that are sewn together into a 3-dimensional garment; and
- 4) Making to shape - in the construction of the fabric, the shape of the garment sections and pieces are determined.

The garments range in date from the early 17th century to 1988 and in variety from exquisite designer gowns and elaborately embroidered gloves to tailor's shears and a blanket coat called a capote.

An assortment of mounting techniques have been used. In most of the cases, headless ethafoam mannequins covered with either cotton knit or silk knit are used to mount the clothing.

Dressmaker mannequins are used in the tailoring displays, where garments under construction are exhibited. This is very effective because of the degree of realism they add. The summary case exhibits 6 ensembles on Kyoto mannequins, complete with wigs of what looked like paper. The flat pieces (such as a man's embroidered waistcoat ready to be cut out and assembled) are mounted on fabric covered panels which are set at different angles of incline.

According to the Ottawa Citizen, this is the first fully bilingual exhibit at the Royal Ontario Museum.

The only criticism we have of the exhibit is with the printing of the text. Because of the low levels of light that are required to safely exhibit textiles, we felt that the text throughout the exhibit should have been larger and should have been set in colour combinations with higher contrast which would be more easily readable. Someone with less than perfect eyesight would have difficulty reading the labels in several of the cases.

We are looking forward to visiting the exhibit again especially because some of the pieces will be replaced with other examples from the collection.

The Editors: Ruth Mills  
Eva Burnham

See Palmer, A.  
"Mannequins for the Royal Ontario Museum"  
Textile Conservation Newsletters  
Supplementary, Spring 1988



## BOOK REVIEW

**The ATN Guide to Structural Sewing: Terms and Techniques**, by Anne Morrell of the Department of Textiles and Fashion at Manchester Polytechnic, England, was compiled as a guide for identifying and describing the various sewing techniques and stitches used in assembling textile items.

The Archaeological Textiles Newsletter, focuses, among other things, on "the study of weaving techniques and the use of the cloth". The ATN Guide to Structural Sewing: Terms and Techniques, examines the ways "in which the material was manipulated to suit its intended and later purposes". It is a good introductory reference for describing stitches and stitching techniques. A certain level of knowledge in sewing techniques is required in order to understand some of the illustrations, as the simplistic style chosen for the drawings could cause some confusion for the reader with little experience in sewing techniques. There were two illustrations out of over 130 that seemed to have been incorrectly drawn (Invisible Hemming BS6.03, and Openwork Seam BS215). The differences between some techniques did not seem apparent and some techniques such as the key-hole buttonhole were not included. However, it is obvious that considerable research and thought went into the preparation of this work and we applaud the results. The introduction, written by Gillian Vogelsang-Eastwood of Leiden, states to what degree of detail stitches and techniques should be described, which is useful to those unfamiliar with the significance of recording subtle differences.

A numbering system has been used to assist in identifying and making reference to particular stitches and techniques to eliminate the potential confusion caused by incorrect use of terminology, as well as the differences of terminology from nation to nation and discipline to discipline. A short glossary and a list of scholarly works as suggested reading are also included.

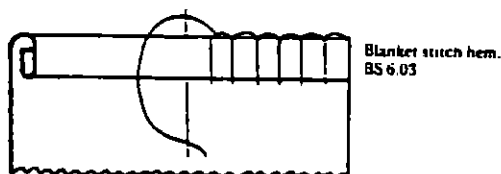
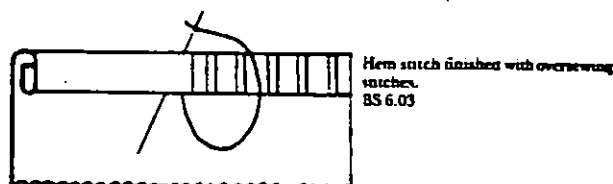
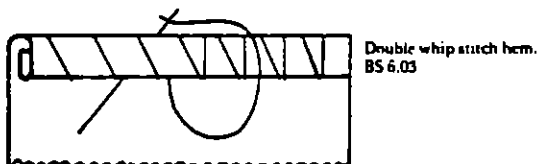
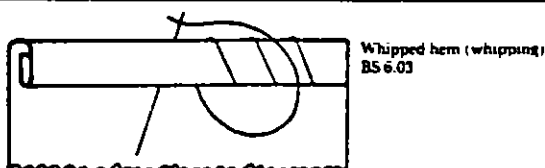
With the publication of this work, a system for distinguishing, recording and labelling different stitches has been established, providing a universal key for archaeologists to work with.

Further development of this worthwhile tool should be encouraged. The introduction solicits input from learned colleagues to expand it into a multi-lingual reference which would be invaluable to researchers, archaeologists and conservators alike. It has the potential to be developed into an indispensable document valued throughout the many professions related to historic textiles.

Stephen Davis  
Wearing Apparel Researcher  
Archaeology Branch  
Canadian Parks Service, Ottawa

Ruth K. Mills  
Period Costume Designer  
Interpretation Branch  
Canadian Parks Service, Ottawa

HEAMS





## NEW PUBLICATIONS

### The Cutters' Research Journal

The Cutters' Research Journal is a quarterly publication from the Costume Commission of the United States Institute for Theatre Technology. Its focus is on the latest methods and developments in costume technology, as well as tried and true methods. It is an avenue for disseminating research information. The Journal evolved from the Flat Pattern Newsletter to become a professional forum for technicians and designers. In addition to information exchange it provides academicians with an opportunity to fulfil the tenure requirement of publication. It is tabloid size which allows for the publishing of full sized patterns. Other regular features include book reviews and pattern listing service. Of interest to our readers would be the original pattern drafts and period construction notes that are published in each issue.

Subscription Rate schedule is as follows:

- USITT members - U.S. \$12.00  
 (include copy of current membership card)  
 Non-members - U.S. \$16.00  
 \*Canadian subscribers add U.S. \$2.00  
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 the Performing Arts  
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 61801, USA

NB: Make cheque or money order  
 order out to USITT

### The ATN Guide To Structural Sewing

#### Terms and Techniques:

by Anne Morrell

Department of Textiles and Fashion  
 Manchester Polytechnic

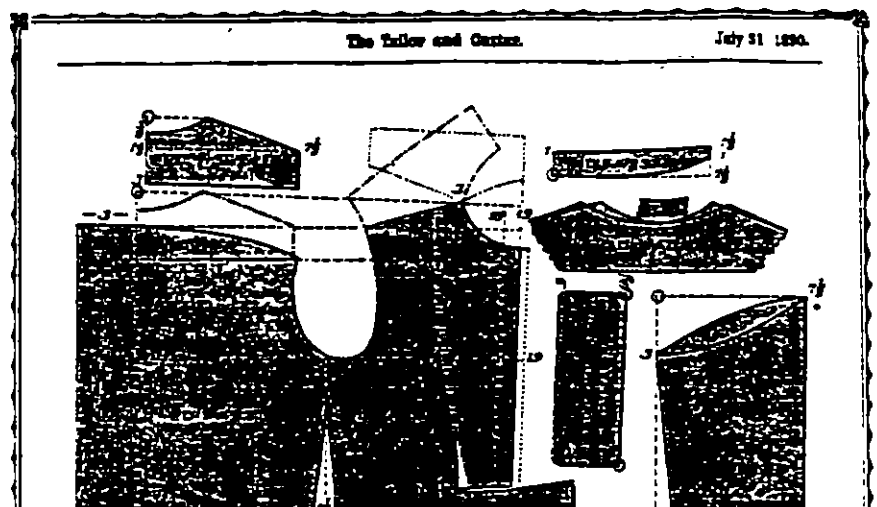
Analysts of archaeological textiles have often felt the need for guidance in identifying and recording vestiges of sewing on their material. Most of the stitches they find are not decorative (embroidery), but basic elements of construction - hems, seams, tucks, patching and the like. With archaeological textiles in mind, Anne Morrell, a leading British artist and teacher of embroidery, has compiled this Guide to the humbler sewing techniques. Each entry has a clear line-drawing of the technique and its working, a cross-reference to the British Standard, and the appropriate English descriptive term. There is a Glossary and short Bibliography.

#### Details:

29 X 21cm, pp.35, 129 figs, printed single-sided on stout cartridge paper with card covers and lay-flat spiral binding.

Post-free Price To ATN subscribers is £4.75 sterling or 15 Dutch Guilders.

To non-subscribers the price is £5.90 sterling or 19 Dutch Guilders.



**Lace and Crafts:**

Lace and Crafts is a monthly magazine published by Eunice Sein in Tallahassee, Florida. The magazine features articles on history, types of lace and related crafts, well illustrated instructions for making lace, patterns and biographies of experts in the field. Lace and Crafts began as Lace Crafts Quarterly. The recent change of name enables the publisher to cover the related crafts such as French hand sewing and openwork embroidery as well as traditional lacemaking.

Nancy Evans, a lace collector and private conservator in Washington state, contributes a column called "Lace: Its Care and Repair". Her audience is mainly the uninitiated who have heirlooms in their closets. She gives simple directions for basic care, cleaning and storage.

Subscribe to:  
Lace and Crafts  
3201 E. Lakeshore Drive  
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Spechler-Vogel products:

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Information from:

Helen Holt  
Conservator  
Canadian War Museum  
Ottawa

## COURSES AND WORKSHOPS

### A New Centre:

A new Centre for Embroidery, Fashion and Textile has been established at 66 New Bond Street, London, England. The Centre was created because of cut-backs in public provision for teaching the subjects of its title.

Karen Finch, formerly Head of the Hampton Court Textile Conservation Centre is undertaking the co-ordination, including a new post-graduate course on the History of Textile Techniques for those who wish to embark on a career as a teacher, textile historian or textile conservator.

The following courses are being offered for 1990-91:

Diploma in Embroidery  
Certificate in Embroidery  
Diploma in the History of Textile Techniques

An Association is also planned for Embroidery, Fashion and Textile Studies with regular meetings at these very central premises, which will include the Coats-Anchor reference library. The intention of the Association is to play a supporting role for Associates working with textiles of any description.

For more information please contact  
Jenny Fitzgerald-Bond, Director,  
The Centre for Embroidery Fashion  
and Textile Studies. 66 New Bond Street,  
London, W1Y 9Df London, England.  
Tel: (071) 439-3545/6

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**Smithsonian Courses, Washington D.C.****Color****Theory and Practical Measurement #C014:**

Color is an important component of works of art. Twentieth century science has analyzed not only how the eye perceives color but also how color absorbed, transmitted, or reflected can be measured. Richard Harold, head of Research and Education at Hunterlab, will review the effect of light sources on perceived color, along with visual and instrumental methods to evaluate color, color change, and color differences. Color evaluation tests for textiles, paper, and paints will be outlined. Yellowness and bleaching formulae for color measurement will be described. Students will learn about various visual and instrumental assessment methods and be expected to practice with different color measurement devices provided. Applications of color measurement to art, research, and conservation works will be outlined briefly by CAL staff.

Dates: July 17-19, 1990

**The Identification of  
Natural Dyes on Historic Textiles****Analysis and Preparation #C105:**

By Dr. Helmut Schweppe

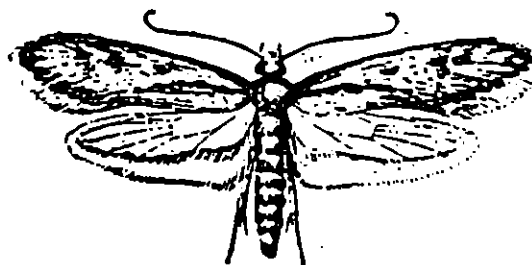
This five day course, taught by the internationally renowned analytical chemist, Dr. Helmut Schweppe, will focus on the identification of natural dyes by means of extraction tests and thin layer chromatography. Lecture and demonstrations will be followed by class participation and actual, supervised, laboratory work. Students will practice dye identification and review their findings with Dr. Schweppe informally. In addition, standard dyeings on natural fibres will be made using early recipes for natural dyes. Sufficient yarn will be dyed so that each participant will have a small collection of known, comparative dyeings for future analytical work.

Dates: October 29-November 2, 1990

**Textiles Pests****Biology, Prevention, Control #C106:**

Gary Alpert, Entomologist

As part of the Conservation Analytical Laboratory's series of conservation courses, Dr. Gary Alpert, noted entomologist and consultant to museums, will give a one day seminar specifically on the bionomics, prevention, and control of insects which attack museum textiles. The continuing evidence of insect damage to textile collections and the increased awareness of health hazards to museum staff from various methods of chemical insect control have prompted the Conservation Analytical Laboratory to offer a one day seminar specifically for textile conservators and curators. The biology, damage potential, and recognition of textile pests will be explored; the use of fumigants, pesticides, repellents, pheromones, and other methods of control will be reviewed. The efficacy of traditional preventive measures will be discussed. Dates: November 17, 1990



Display Materials Workshop #C107

To review appropriate qualitative, analytical tests useful in evaluating the variety of components used in the construction and finishing of display cases in museums.

This course will be primarily a workshop for hands-on practice with standard test methods for case materials, including paint, wood and fabric. It will be open to qualified, practising museum conservators on a first come, first accepted basis. Conservators should have a demonstrable need for such practical analytical work. Each participant will be responsible for evaluating a variety of samples which will demonstrate typical results.

Initial lectures on methodology and developing an approach to analysis will be given. In addition, short talks on laboratory procedures, dyes, paints, wood, plastics, laboratory safety and toxicity will be incorporated into the week long workshop. Further, information on sources of data and previous evaluation of different materials will be reviewed.

Dates: November 13-16, 1990

All courses are held at The Conservation Analytical laboratory  
Suitland, Maryland. For more information please contact:

Mary Ballard  
Tel: (301) 238-238-3792 or

Francine Hall  
Training Secretary  
Tel: (301)238-3700

**EXHIBITIONS**Printed TextilesEuropean and American Fabrics from the Permanent Collection

Allentown Art Museum  
Allentown, Pennsylvania  
USA  
until September 1990

Hand Spinning in the Industrial Age Patented Progress

The Museum of  
American Textile History  
Andover, Massachusetts,  
USA  
until August 3, 1990

Homenatge a Pedro Rodriguez  
Museu Textil i d'Indumentaria

Barcelona, Spain  
until September 30, 1990

"Zahm und Wild": 15th century tapestries from  
Strasbourg and Basel

Historisches Museum  
Basel, Switzerland  
until November 18, 1990

Gloves for Favours, Gifts and Coronations:  
Elizabeth I-Elizabeth II

Brighton Art Gallery  
Brighton, England  
until July 30, 1990

Tapestry, the Narrative Voice: Contemporary  
Tapestries

Glenbow Museum  
Calgary, Alberta  
Canada  
until February 3, 1990

**The TEXTILE CONSERVATION**

**NEWSLETTER** is published twice a year in the spring and fall. For a two year subscription:

North America - \$26.00 Cdn.

Outside North America - \$36.00 Cdn.

**Editors:**

Eva Burnham

Ruth Mills

**Back issues of Textile Conservation Newsletter and Supplementaries:**

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Eva Burnham

North America - \$3.50 Cdn.

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Mannequin Supplement - \$7.00 Cdn.

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**Treasurer:**

Ruth Mills

We welcome submissions on:

Textile Conservation, History Technology, Analysis and information on upcoming courses, conferences and exhibitions. Submissions, address changes and correspondence should be addressed to:

Textile Conservation Newsletter

P.O. Box 4811, Station E

Ottawa, Ontario

Canada

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Deadlines for 1990\91 are:

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