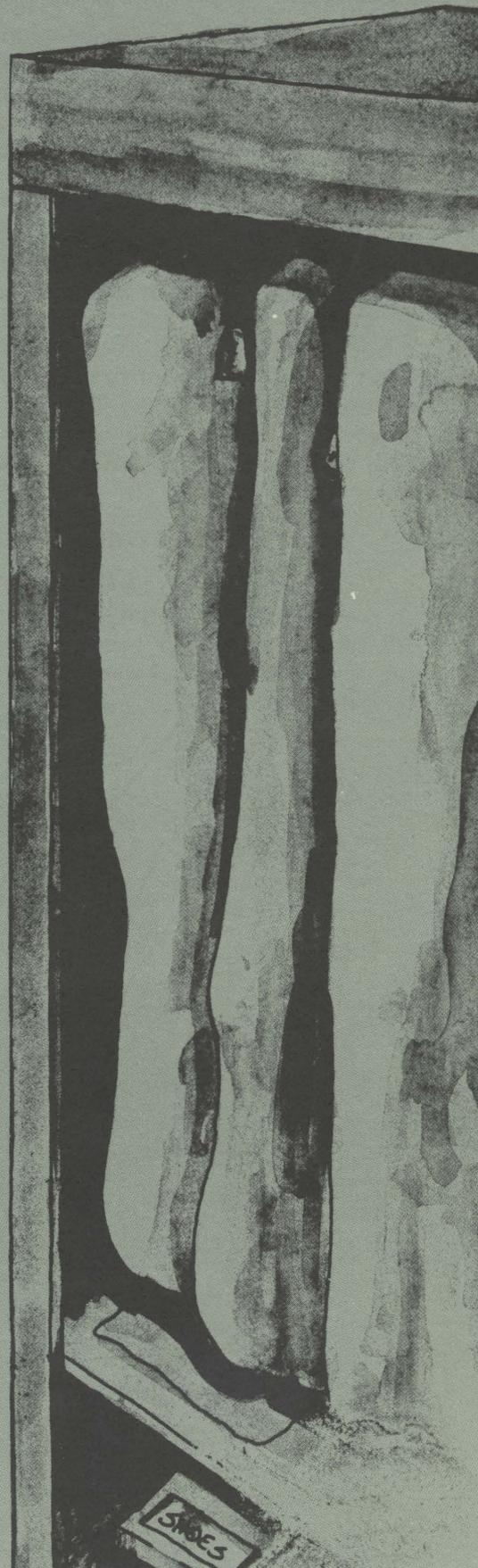
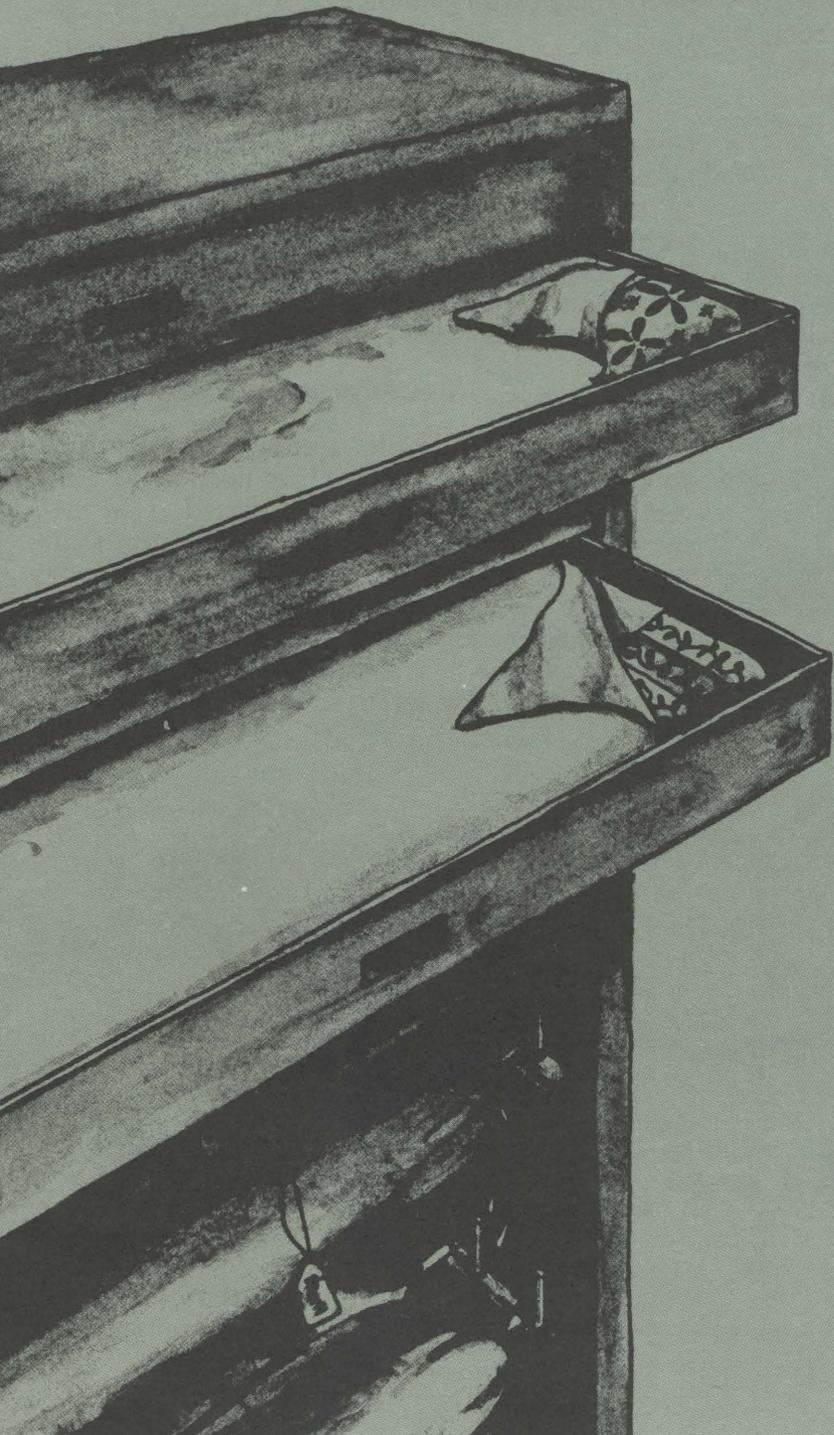


Care and Storage of Textile Heirlooms

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Care and Storage of Textile Heirlooms in the Home

An interest in genealogy among many has caused increased interest in textile heirlooms and items of the past. People are remembering all the items that have been packed away for years and now are wanting to display them and make them part of their everyday lives.

The decision has to be made "Do I display, use, and enjoy these heirlooms and probably shorten their life?" or "Do I carefully pack them away and have them for a longer period of time?" If your item is very fragile and already in poor condition, then perhaps it's best to store it carefully and try to preserve it for future generations. But if the textile has been cared for properly and is a very sturdy item, then you may want to display it carefully and give others as well as yourself a chance to enjoy its beauty.

Cleaning Textile Heirlooms

All textiles should be kept as clean as possible to preserve their condition and lengthen their life. It's important to remove as much dust and dirt as possible as dirt particles can cut fibers through friction and abrasion.

The type and amount of soil, fiber content, dye, and condition of the textile must be considered when you are deciding what cleaning procedure to use. If an item is very fragile and the dye is not colorfast or if the fiber will be damaged by water, it should not be wet cleaned. Often the only cleaning that is possible is airing and vacuuming. Begin cleaning each textile by vacuuming. If you determine that the textile can be wet or dry cleaned, then proceed with caution.

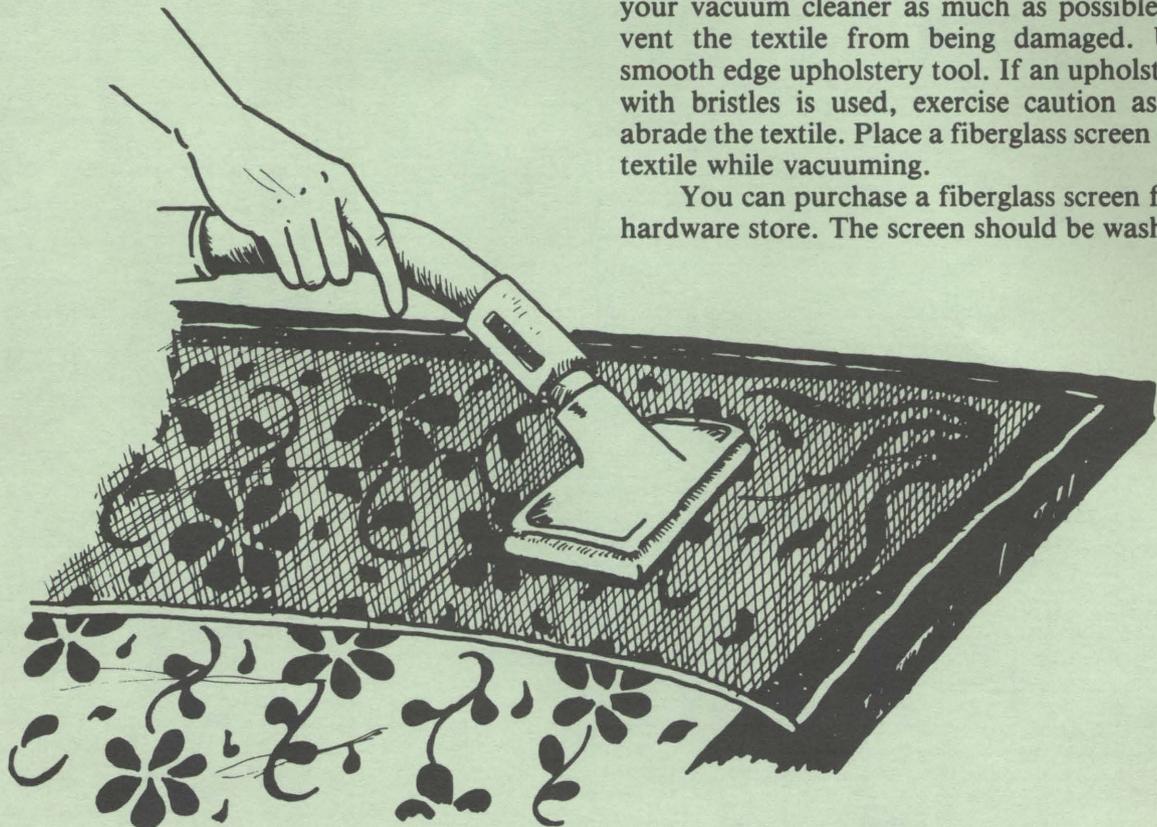
Airing

If the textile has a musty smell, begin by airing it outdoors, away from direct sunlight and protected from birds. Do not beat or shake the textile as this may cause damage. If the textile is heavy, such as a quilt or coverlet, make certain the weight of the textile is evenly supported when airing it. Do not hang it over a clothes line, as doing so causes severe stress in a limited area.

Vacuuming

To vacuum a textile, reduce the suction on your vacuum cleaner as much as possible to prevent the textile from being damaged. Use the smooth edge upholstery tool. If an upholstery tool with bristles is used, exercise caution as it may abrade the textile. Place a fiberglass screen over the textile while vacuuming.

You can purchase a fiberglass screen from the hardware store. The screen should be washed with



Vacuuming helps clean a sturdy textile.

soap and warm water to remove oil. Sew a colorfast binding or bias tape around the edge of the screen to protect the textile. Then vacuum both sides of the textile. If the textile is extremely dirty, you may want to vacuum it several times.

Wet Cleaning

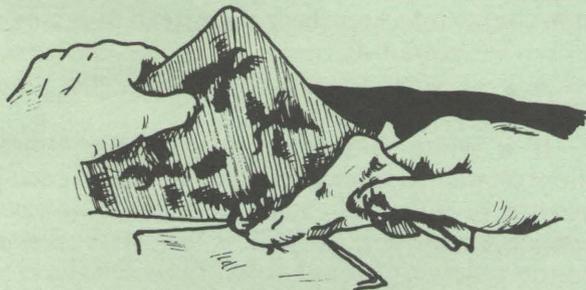
Wet cleaning cotton and linen textiles (both cellulosic fibers) removes the acid buildup in the fiber and leaves them cleaner and more flexible—and usually prolongs the life of a textile. If the textile is not too fragile, wet cleaning in most cases can be very beneficial.

Wool and silk (protein fiber) on the other hand are especially difficult to wet clean as they become weakened when wet. Some damaged cellulosic fibers may also be weaker when wet and require special handling. Many silks contain metallic salts and dyes that make them unsuitable for wet cleaning.

Colorfastness

First determine if the dyes on a fabric are colorfast. Put several drops of the water to be used on the textile, let it soak in, and press with a white cloth or absorbent paper. Repeat this process at least three times in the same spot. If there is no color on the blotting material, then drop several drops of the detergent solution to be used and test again.

Some dyes are fast to water but not to detergent solutions. If there are a number of colors on the textile, each one must be tested for colorfastness. The same applies for needlework. Each different color of yarn must be checked for fastness. If the piece is extremely soiled, repeat the fastness test additional times. In some cases the water has to work its way through the soil to get to the fiber. If any portion of the textile is not colorfast, it cannot be wet cleaned.



Test for color fastness before wet cleaning.

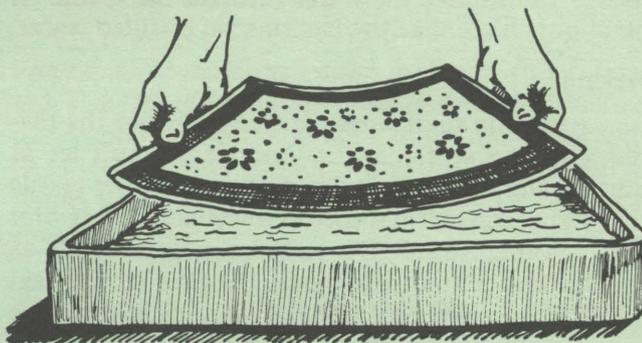
Preparation for Cleaning

If there are portions of the textile, such as silk ribbons, collars, etc., that should not be wet cleaned and if they are easily removed, do so and replace them after cleaning. Also remove metal hooks and

eyes before wet cleaning. If there are torn places, these should be supported by carefully stitching a lightweight support fabric such as organza over the area.

When textiles are wet, they become much heavier and the extra weight of the water could cause damage. It's best to support textiles by using a fiberglass screen while they are being placed into and out of the bath solutions. If a small textile is very fragile, you may want to attach it to a layer of net using loose stitches or sandwich it between two layers of net which are then basted together. This not only will support the textile as it is being cleaned but also will increase the number of times needed to rinse after a detergent soak.

You can do wet cleaning in a sink, bathtub, glass or stainless steel container, or you can make your own containers by building a wooden frame and lining it with polyethylene plastic. It's best if the textile is not folded during wet cleaning. Folding makes it more difficult to remove both the soil and the detergent during rinsing.



A fiberglass screen protects textile being wet cleaned.

Presoak

The textile should be placed in a presoak of lukewarm clean water for about 30 minutes. The water should be as soft as possible. For very small textile items, you may choose to use distilled water; but this can be very expensive. If the textile is not heavily soiled, this may be all the cleaning that is needed. If presoak water becomes cloudy or dirty, repeat until the presoak does not remove any more soil. If the article still appears soiled, proceed to the detergent soak.

Detergent Soak

Prepare the detergent soak using one tablespoonful of liquid detergent to each four gallons of water. Use a mild liquid detergent such as Ivory or Lux dishwashing detergent. Do not use soap, heavy duty or nonphosphate detergent. The temperature of the water may vary with the type of textile.

Linen and cotton textiles can be cleaned in temperatures up to 110 °F.; this is about as hot as the hands can stand. Wool and silk should not be cleaned in temperatures higher than 90 °F. The warmer the water, the better the detergent works.

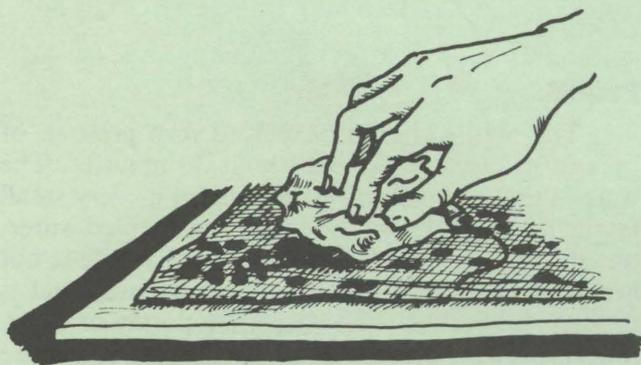
Place the already wet textile in the detergent soak for about 30 minutes. Do not scrub or rub the textile in any way. The only agitation should be an up-and-down movement with the open hand gently pressing down and lifting up to move the water through the textile. Repeat the detergent soak if the water continues to discolor because of the soil.

Rinsing

Thorough rinsing is imperative after a detergent soak; the temperature of the rinse water should be lukewarm. Rinse soak the textile at least four to five times for 15–30 minutes each time or until no trace of detergent is obvious in the rinse water or on the textile. The heavier and more dense a textile, the more rinsing will be required. The only agitation should be an up-and-down movement with the open hand gently pressing down and lifting up to move the water through the textile. If at all possible, make the last rinse in distilled water.

Drying

After the final rinse carefully remove the textile with the screen still supporting it and let as much water as possible drain out. Place the textile still on the screen on a cotton towel and gently blot with another towel. Do not use paper towels as these often contain chemicals harmful to the textile. Let the textile air dry flat. It should never be dried in a dryer or hung on a clothes line.



Carefully smooth textile on fiberglass screen to dry.

For a very large textile, such as a quilt or coverlet, you can place it on a white bed sheet on top of a piece of polyethylene on the grass on a warm, cloudy or overcast day. Dry colored textiles in the shade. If a quilt has a white or light-colored back, drying it upside down in the sun may bleach the fabric without hurting it.

A small flat textile that is not fragile may be blocked while damp. This is done by removing the textile from the screen and placing it on a piece of glass or plexiglass and gently smoothing out the wrinkles. Do not stretch the textile. It can be gently smoothed out and the warp and filling yarns lined up. When the textile is dry, it will have an ironed appearance.

It's best not to iron old textiles as the heat and pressure are damaging. If the item (such as a christening gown) is to be used, press as little as possible using low heat and with as little pressure as possible.

Special Procedures

The following information should be helpful in special care of your textile.

Stain Removal

Staining materials that have been in contact with fabric for a long time are hard, if not impossible, to remove. Attempts to remove some stains are unwise. Rust, blood, and other iron-bearing stains should not be given special treatment because the staining material probably has weakened yarns. Removing the stain would also remove the stained yarns and would therefore leave a hole. If you still want to try to remove the stain, plan to do so immediately after the "detergent soak," as described under "Wet Cleaning."

Some stains may be removed by using a facial sponge and applying a stronger amount of detergent solution. Again do not rub, but use an up-and-down motion with the facial sponge. Other stains may be removed by prespotting with a dry-cleaning solvent and then using a detergent soak to remove the solvent.

The layered construction of quilts makes spot cleaning difficult. Spot cleaning with a solvent often simply relocates the stain instead of removing it.

Bleaching

If a white cotton or linen textile appears yellow or stained after the detergent soak, it can be bleached to a limited extent. Bleaching, however, does not remove dirt. But it does remove some stains and the yellowing brought on by age. On the other hand, bleaching may make some stains appear darker by lightening the value of the background.

Bleach your textile only when absolutely necessary. Bleaching does not benefit the textile; in fact, it can be damaging. Also, if a textile is to be stored for some time before being exhibited, it may yellow again since bleaching is only a temporary treatment.

Chlorine bleach should never be used on textile heirlooms as it is too harsh and can damage the fibers. If bleaching is a must, use an oxygen bleach, such as Snowy Bleach or Clorox II. Make up a dilute solution and completely submerge the textile for 30 minutes.

Repeat the detergent soak process and proceed to rinsing.

Starch Removal

Remove all starch from cotton and linen textile heirlooms before you store them. The starch will discolor and cause the textile to appear yellow. Starch also attracts insects and rodents, which can severely damage textiles. To remove starch from cotton and linen textiles, the water temperature must be up to 110°F. during the soak cycle.

Dry Cleaning

Dry cleaning can be very damaging to textile heirlooms. Dry cleaning solvents remove oily soils well. But dry cleaning machines use friction and agitation to clean and heat to remove the solvent; this is hard on all but the newest, simplest textiles. Also, the cleaning solvent removes oils and waxes that natural fibers need to stay flexible.

If you decide to dry clean a textile, ask the cleaner to use a fresh or filtered supply of solvent. Used solvent can redeposit more soil than it removes. Also, specify that the textile should not be steamed or pressed after cleaning.

Dry cleaning solvents can be used as spot removers to lift or soften oily soils, but circling may result. If spot cleaning is followed by wet cleaning, circles should disappear in the detergent solution.

Textile Storage

Once the textile is cleaned, it should be properly stored. There are three ways to store textiles: flat, rolled, or on a hanger. But consider the type and condition of the textile and space available.

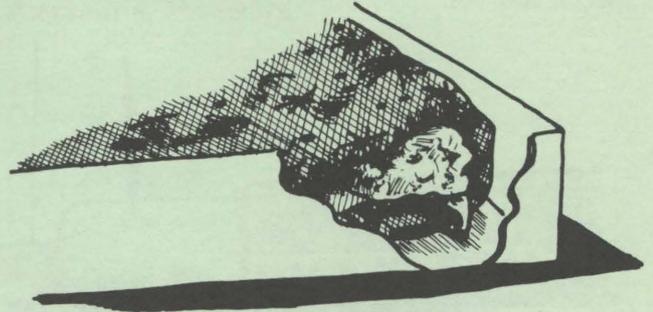
Flat Storage

Storing a textile flat without folds is considered the best method, but often this is not possible because of the size of some large textiles. If the item must be folded, pad the folds with crumpled tissue paper or unbleached, washed muslin using as few folds as possible. Reposition the folds several times a year as textiles tend to split where consistent creases and pressure are placed. Then wrap the textile in a clean white cotton cloth, such as an old sheet or pillowcase or washed muslin.

Never wrap textiles in plastic because it prevents air circulation which can cause mold and

mildew; creates static electricity which attracts dust and dirt; gives off chemicals which deteriorate the textile; and does not protect the textile from light if it is a clear plastic.

If you must stack textiles to store them, never place a larger or a heavier textile on top of a smaller or more fragile one. Separate each piece with tissue paper or washed muslin. If the textile contains metallic yarns, interleaf the complete textile with washed muslin or tissue to protect other areas of the textile from coming into contact with the oxidation (tarnishing) process.



Store cleaned textile, padded by tissue paper.

If folding a garment, fold it following natural body lines or seamlines, such as the waistline, armholes, etc. Sleeves should be folded carefully across the front. Sleeves, shoulders, and other parts may need to be lightly padded with soft cotton cloth or tissue paper to keep such parts of the garment smooth.

See that your textiles do not come in direct contact with wood, newspaper, or boxes, as they will become acidic and accelerate the chemical breakdown of the fiber. If the textile is stored in a drawer, trunk, or on a wooden shelf, be sure to seal the wood with several coats of polyurethane varnish and line it with washed muslin.

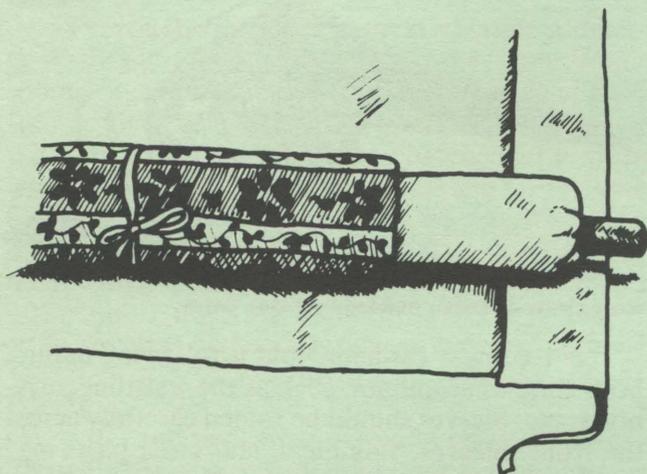
If you store textiles in boxes, be sure the boxes are acid free or line them with washed muslin. Do not store cellulosic fibers (cotton, linen, and rayon) in cedar chests. The acid given off is very harmful to these fibers.

If you must store textiles on a metal shelf, be sure it is lined with washed muslin, and protect the textile from any chance of snags or tears on rough edges. Also be cautious of rust getting on the textile.

Acid-free tissue paper is available to use with textile heirlooms, but it is expensive and has to be ordered from a special source. You can use regular white tissue as long as it is fresh and not some that has been lying around a good while. It should be replaced with fresh tissue yearly. If muslin or sheets are used next to textiles, they should be washed at least once a year to return them to a neutral state. Never use colored paper of any kind next to a textile heirloom.

Rolled Storage

Rolled storage can be used to store textile items that are extremely large or heavy. However, very fragile textiles likely to break along fold lines can also be rolled. The diameter of the roller will vary, depending on the size and weight of the textile to be stored, but it must be large enough to avoid stress. It's best if the roller is long enough so that the textile does not have to be folded to fit on it. Cover the roller with washed muslin to protect the textile. Acid-free tubes are available from special sources.



Large heavy textiles may be stored by rolling on cylinders.

You can get large rollers from carpet retailers. Mailing or fabric tubes are suitable for use with small lightweight textiles. The greatest care must be taken to avoid creasing the fabric in the process of rolling it because creases can split fragile fabrics.

Rolling too tightly could also be harmful; proper tension can be maintained if rolling is done on a table or other flat surface the width of the textile. The textile should rest flat and smooth on the table; as the roller glides along, it picks up the cloth as it moves away from the individual(s) doing the rolling.

If the textile to be rolled has an uneven weave, is very fragile, brittle or abraded, or if special dyes or finishes are present, or if it contains metallic threads, interleaf it with tissue paper or washed unbleached muslin to protect one layer of the textile from another.

After the textile is rolled, cover the roll with washed muslin and secure with cotton twill tape in several places. Special attention must be given to multi-layered, pile or thick textiles, such as coverlets, quilts, tapestries, and carpets. Rolling such objects causes a different tension on the face than it does on the back. Also, this rolling can produce strain on the one side and wrinkles and creases on the other.

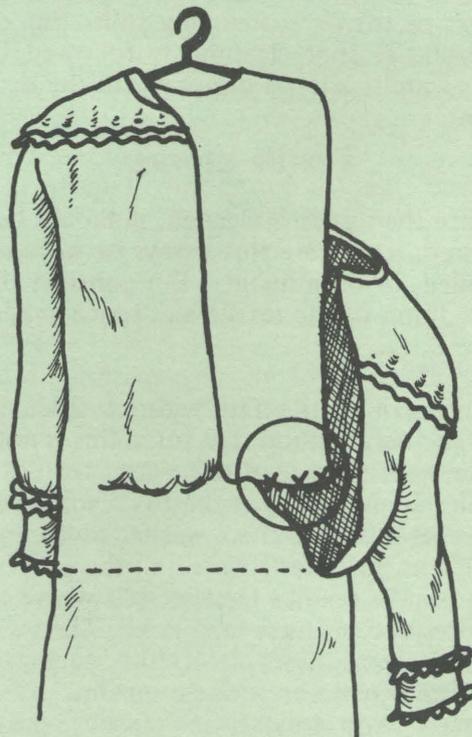
Once the textiles are rolled, the sturdy ones can be stacked on a shelf as long as they are not stacked too high, as this would create too much weight and pressure on the bottom textile. It's best not to stack fragile, rolled textiles. Rolled textiles can be stored by placing a wooden dowel, conduit, or heavy gauge pipe through the cardboard tube and suspending it in some manner.

Hanging Storage

Do not hang very fragile garments. If the garment is in good condition and is to be stored on a hanger, make certain that the hanger is well padded and covered with washed muslin. Wooden, plastic, or metal hangers should not be used unless they are padded and covered with washed muslin.

If the skirt of the garment is very heavy, it should be supported by making a simple muslin shell that fits over the hanger and is hand stitched around the inside waistline seam. Do not use straight pins or clothes pins to ensure that the garment stays on the hanger.

If the bodice tends to fall off the hanger, make cotton twill tape loops to secure to the inside of the bodice at a seamline and around the neck of the clothes hanger. The garment should be covered with washed muslin to protect it from dust and light. The garment should be stored in a closet where it will not be crushed by other items. If hanging causes too much strain on a garment, move it to flat storage.



Weight of skirt is supported by shell.

Storage Location

Store textiles away from light because fibers are damaged by the ultraviolet component in sunlight and fluorescent lights. The ideal temperature should be close to 60–65°F. and the relative humidity around 50%. Do not store textiles in attics, basements, or in any area that is not heated in the winter or cooled in the summer. Also do not store textiles in an area that is too humid, as humidity will promote growth of mold and mildew.

Keep storage area free of dust and dirt and well ventilated. Select a storage area that gets very little traffic. Store away from the kitchen and laundry area or away from any type of mechanical operation. And try to store away from an outside wall.

Insects and Microorganisms

If soiled textiles are stored, the chances of insect, mold, or mildew problems increase.

Do not let insecticides come in contact with the fabric, but you can spray baseboards and cracks in the storage area.

If you have a problem with moths on a wool textile, here are several possible solutions: dry cleaning (see section on dry cleaning), freezing for about two months, vacuuming (see section on vacuuming), and then treating with paradichlorobenzene (PDCB) for a limited time.

Use paradichlorobenzene or moth balls with care. The chemical should not come in contact with fabric and should be used in a sealed container since it is toxic to humans. Its fumes are heavier than air; so it should be placed above the fabric to be treated. A high concentration of PDCB should be used for two months rather than a small amount continuously. Do not store textiles in PDCB permanently; treat infested items in a sealed container or closet, thoroughly air, and then return to regular storage that is cleaned and checked on a regular basis.

Conserving Textiles

Conservation of textiles is a rather new field, and there is much yet to be learned. Numerous publications are available on care, storage, and display of textiles for museums, but very little has been written for conserving textiles at home. Review of the available materials makes it obvious that there are many different theories on conserving textiles, and often they do not agree on one "best" method. As more is learned through research, perhaps new and better methods will be developed to store textiles at home.

As no two textile heirlooms are exactly alike, it is difficult to give specific directions for their care

and storage. The information in this leaflet should be used as a guide. You will have to make the final decision as to what is best for the textile heirloom you want to conserve.

Sources for Conservation Supplies

(Contact the following and request a catalog of supplies)

Conservation Resources
International, Inc.
1111 N. Royal Street
Alexandria, VA 22314
(703) 549-6610

The Hollinger Corporation
P.O. Box 6185
Arlington, VA 22206
(703) 671-6600

Process Materials Corp.
301 Veterans Bldg.
Rutherford, NJ 07070
(201) 935-2900

Talas
213 W. 35th Street
New York, NY 10001
(212) 736-7744

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- Horowitz, Estelle, *Textile Preservation, A Handbook for Today's Stitches and Textiles.*
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Note: Trade names used in this publication are for information only and do not imply endorsement of products named nor criticism of similar products not mentioned.

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