

Preserving Heirlooms

Documenting History

Preserving the Past

A New Take on Wood

Have a Trunk? Let's Create a Treasure

Material Makeover: Repurpose & Upcycle

Family Keepsakes

Resources

Glossary

DOCUMENTING HISTORY



Success Indicator:

You will be able to document the history and make decisions on what to do with your item.

Life Skills Practiced:

Keeping records, wise use of resources, planning/organizing, decision making

Project Skills Practiced:

Researching and documenting the history of an item, deciding what to do with an item

“**Preserving Heirlooms**” is the most advanced Home Environment 4-H project. If you are interested in things that are “old” -- at least older than you are! -- you will find this guide both interesting and challenging!

Do you have an item in mind for this project? Or are you planning to purchase one? This resource is a guide to help you decide how to make sure your special item is something you will enjoy for a long time, without destroying its value.

Let's start by finding answers to several questions...

When you hear people talking about special things, especially ones that are old, you often hear these terms: heirloom, antique, collectible, and vintage. Let's define them so you understand how each one is just a little different from the other.

What is...

an Antique

an Heirloom

a Collectible

Vintage



heir · loom

Something of special value passed down in a family from one generation to the next. It could be almost anything, but it is often a piece of furniture, home accessories, jewelry, dishes or clothes.

An heirloom would have value in your family, even if it doesn't have monetary value, because of who gave it to you or because of the story that goes with it.

an · tique

An antique is generally thought to be something at least 80 - 100 years old. In addition, it has special value because of the craftsmanship, design, beauty or rarity of the item.

Antiques are sometimes purchased as an investment, with the thought that they will increase in value over the years. The value can be quickly destroyed if the item is not cared for or restored properly. Over restoring or repairing can decrease its value.



col · lect · i · ble

A collectible is simply defined as something of value that a person takes time to collect! It may be an antique, but it might be something much newer. Sometimes the term is used to describe items that are less than antique age of 80-100 years.

vin · tage

In the context of things you might collect, vintage items are high quality things from the past. Examples might be vintage furniture or accessories.

Why preserve it?

When you have a special item, think carefully about what it means to you as well as its potential value - either monetarily or as an heirloom/antique/collectible -- before you decide what you will do with it.



EXPERIENCE:
now it's YOUR turn

Activity 1: Documenting History

Materials Needed:
"Documenting History" Chart
Pencil

Documenting the history of an item is a good practice to get into. It's a great way to preserve the history of the past and present for generations to come!

Fill out this chart to begin documenting your history.



Documenting History <i>What do you know about your item? Find out and record as much information as you can.</i>	
Where did you get the item?	
*Do you know the age?	
Where was it made?	
**Who made it?	
How was it used? (furniture, tool, décor)	

*Below are some tips to find the age of your item.

- Can you find the history and age of the item from the previous owner?
- Try researching the age through websites, libraries or museums comparing what you have with similar items.

**When finding who made it, here are some questions to think about.

- Was it manufactured?
- Can you find a company name?
- Was it made by hand?

Activity 2: Preparing for the big decision

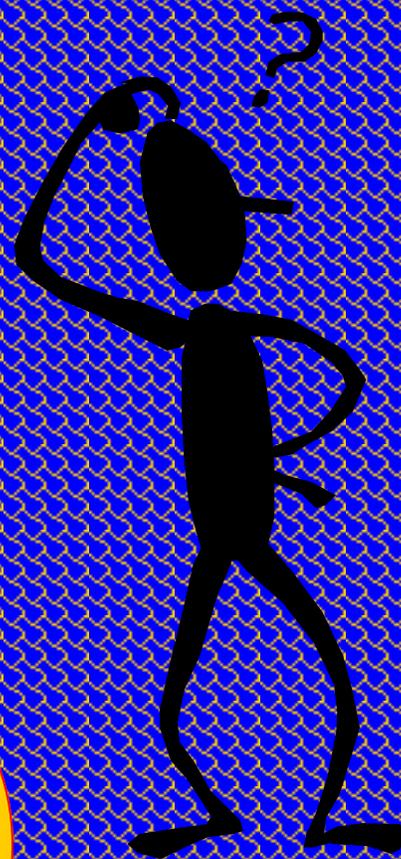
Materials Needed:
 "What to do" charts
 Pencil

Now that you have looked into the history of your item, you need to decide what to do with it. Below are several charts to help you with this process.

Would you consider the item a(n)... <i>Place a check mark ✓ by the one that applies</i>	
Antique	
Collectible	
Vintage Item	
Heirloom	

What needs to be done to make it useful? <i>Check ✓ all that apply</i>	
Clean it	
Display it	
Repair it	
Restore the finish	
Remove old finish, add new	
Repurpose it	

What do you want to do with it? <i>Place a check mark ✓ by the one that applies</i>	
Keep it for "looks"	
Restore it to use	
Restore all or part of it into something "new"	
Other...	



Activity 3: The big decision

Materials Needed:

Pencil

So, what is your decision?

Considering what you know about your item, how you plan to use it, and what restoration or changes would need to be made, what do you plan to do? Answer these questions before proceeding:

- Will you be damaging the original finish?
- Will it still be valued as an heirloom/collectible/antique?
- Do repairs need to be made or finish need to be restored before it is usable?
- Are you salvaging a useless item, or does “repurposing” destroy the value?

When you have decided the best plan for your item, use the following guidelines so your restored, refinished or repurposed item will be enjoyed for years to come.

- Keep repairs as inconspicuous as possible. Ask for help if needed.
- Choose a finish that is compatible with the style/age of the item.
- If you are not sure of a stain color, try it first in an inconspicuous place. If you are repairing paint, make a sample on another piece of wood.



If restoring, refinishing, or repurposing becomes a hobby, why not make it into a money maker! Go to auctions, thrift stores, or garage sales for your items. One person's junk is another's treasure!!

REFLECT: Here's What I Think

- If researching a family heirloom, how has looking into your past changed your view on your family's history?
- While documenting your item's history, did you find an appreciation for the item? If so, why?
- Was it challenging to find the history of your item? If so, how did you overcome this?
- When deciding what to do with your item, was the decision-making process easy or difficult? Why?

APPLY: The Next Step

- Are there other items around your home that need documenting? Ask your parent or guardian and start the process.
- Do you have a knack for repurposing items (upcycling)? Check out your local thrift store, garage sales, and/or auctions for items to repurpose.
- Find a place to sell your items whether via the Internet (ie: Facebook, Etsy), a consignment store, or other local outlets.

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Success Indicator:

You will be able to properly preserve an item from the past.

Life Skills Practiced:

Keeping records, planning/organization, critical thinking, problem solving, decision making

Project Skills Practiced:

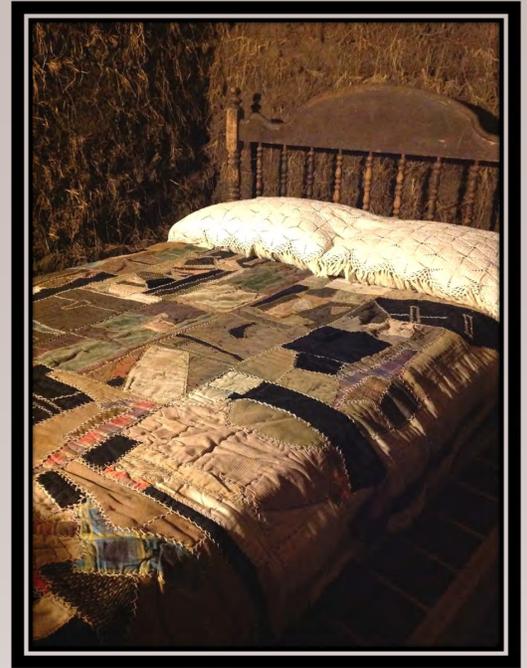
Researching, planning, and implementing preservation techniques

Once you have decided what family heirlooms you and your family want to keep and preserve, you need to learn how to properly handle, clean, repair, store, and/or display your treasures. A good policy to follow is "**don't touch**", until you have time to search for the proper care method.



Textiles

Heirloom treasures made of fabric such as quilts, wall hangings, home accessories, wedding dresses, embroidered pillowcases, and doilies should be kept in an area of the home where there is little fluctuation in temperature and humidity. Avoid storing these items in attics, kitchens, laundry rooms and unheated spaces. Recommended temperatures for storing are 62°F – 72°F and 45% – 55% relative humidity. Sunlight and fluorescent lights can cause irreversible damage to fabric due to the high levels of ultraviolet light. Textiles should be stored in a dark area, and if displayed, they should be kept out of direct sunlight.



Quilt - Circa 1900



Wedding dress – 1924



Exhibit Tip: Textiles are an important part of our past. In order to enter a textile in home environment the exhibit must be an item for the home. An example of this would be a shadow box showcasing your great-grandmother's wedding dress and accessories.

Textiles Continued

If possible, store textile items flat. If the item must be folded, use acid-free tissue paper or washed cotton muslin to cushion folds. Refold occasionally to minimize the chance of permanent creases or fold lines. Textile items may also be rolled around a cardboard tube, but first cover it with acid free paper or cotton muslin. Also keep textiles away from pests (bugs) by keeping storage areas clean with frequent vacuuming, and by making sure items are clean when placed in storage.

For more information and details on various kinds of damage visit the International Quilt Study Center's website – "[Quilts Under the Microscope](#)"



Photographs



Photographs are important to us as a visual contact to our past. Temperature and humidity are once again important considerations. High humidity can affect dyes in color photos, heat can affect the paper by turning it brown, and both can encourage the growth of mold. Food and beverages should be kept away from precious photos, as crumbs and sticky spots attract insects. Ultraviolet light from direct sunlight or fluorescent lights can cause fading as with textile items. Do not use tape on any photographs, as acid in the adhesive will cause yellowing.

Store photographs, slides and negatives in acid-free boxes. If you use sleeves, check to see that they are un-buffered, as paper often contains alkaline buffering, which can affect the dyes. If displaying photographs in albums choose ones made to open flat, with polyester display sleeves or acid-free pages. Do not use magnetic photo sleeves or albums with vinyl sleeves. When buying storage or display materials for photographs, be sure they have passed the Photograph Activity Test (PAT). Some manufacturers advertise that their product is "Photo Safe," this is not the same as PAT, as it has no standards applied to it. There are some "archival quality" (museum quality) tapes available that have passed the PAT, but even then use as little as possible only on the back of the photo.

Another display and storage option is matting and framing. When framing heirloom photographs, use acid-free mat board and acid-free backing. Humidity can cause emulsions to stick to glass, so leave space between the photograph and the glass by using a mat or double mat.

Labeling photographs is important, identifying people by their names and relationships, noting the date, place, event and photographer will help future generations. When labeling use a soft pencil on the edge of the back of the photograph or label the enclosure.

Glass, China, Ceramics

Although the biggest danger for this media is breakage from handling, we may enjoy using heirloom dishes for special occasions. To prevent breakage, be careful of temperature fluctuations, such as putting hot liquids into a cold dish.

Glass, china, and glazed ceramics can be washed carefully, using a mild detergent. Unglazed ceramics and dishes with hand painted designs should never be washed. Dust them with a magnetic cloth, but don't use sprays or polishes which can discolor their finishes. Dishwashers are a risk for all valuable ceramics and glassware.

Store or display glassware and ceramics in a safe place, protected from temperature extremes and direct sunlight, to prevent fading of painted designs. Plates may be stacked if they are protected by paper towels or flannel liners.



Paper

Works on paper generally refer to flat (as opposed to bound) paper materials, including documents, manuscripts, drawings, prints, posters, and maps. Taking care when handling any collection item is one of the more effective, cost-efficient, and easily achieved preservation measures.



As always take proper care by having clean hands and work area with no food or drinks that can spill on the paper. Use pencil, not ink, to make any necessary marks or inscriptions and then only make inscriptions when the paper is on a clean, hard surface, to avoid embossing the inscription into the paper, which will be visible from the other side. Do not use paper clips, other fasteners, "dog ear" folding to mark or organize paper. Do not leave rubber bands, self-adhesive tape, and/or glue on paper.

Store paper in a cool, relatively dry (about 35% relative humidity), clean, and stable environment with minimal exposure to all kinds of light and no exposure to direct or intense light. Keep paper at a safe distance from radiators and vents. Paper should be stored flat and unfolded in acid-free boxes that provide support, except for oversized papers which can be rolled. Acidic papers, such as newspapers which are made from wood pulp, should be stored separately to prevent acids from migrating onto other papers.

Metal



The age of metal may in part be indicated by the patina — the result of oxidation or interaction with air or its environment which causes the surface of metal to deteriorate slightly.

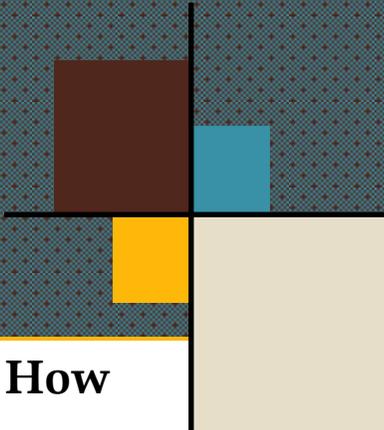
To preserve the value of metal items as heirlooms and keepsakes, careful cleaning, storage and display are necessary to preserve the patina and the original finish and characteristics of the metal. Always test cleaning and care procedures first before use on valued items. Follow safety precautions in using solvents and other chemicals. If in doubt, consult a conservator who specializes in metals.

When using commercial cleaners, read and follow the label directions and test first. Hardware stores and lumberyards, grocery stores, and specialty shops and department stores may carry metal cleaners. Remove all residue of the cleaner.

For information about specific types of metal click [here](#).



EXPERIENCE:
now it's YOUR turn



Activity 1: Preserving Know How

Materials Needed:
Pencil
Preserving the Past Form

Now it's your turn! Take what you have learned and put it into action! Fill out the form below with the details of your preservation techniques.

****For the PDF version of this form, visit the Resources PDF.****

Preserving the Past Form

What is the item you are preserving?

What media is your item made of? (glass, paper, wood, etc.) _____

What is its history? (family heirloom, who made it, age, etc.) _____

How were you able to acquire the history of your item?

What steps did you take to determine how to properly preserve it?

Give the steps of how you properly preserved your item. Please be detailed.

What was the most challenging aspect of preserving your item? How did you overcome this?

How do you plan to store your item?

If you used resources other than *Preserving Heirlooms* to help you properly preserve your item, what were they? (Internet sites, books)

REFLECT: Here's What I Think

- As you learned to properly preserve your heirlooms, was it challenging to implement the process? How so?
- With the information and resources provided, do you feel confident your item will stand the test of time? Why or Why not?

APPLY: The Next Step

- Along with the completed form, make a poster, PowerPoint, or video showing/telling your experience of preserving your item.
- Ask you parent or guardian if there are additional heirlooms or antique items in your home that need to be properly preserved. Take the initiative to help preserve the past!



Needlework – 1853

*****Textile photographs courtesy of
Plainsman Museum—Aurora, NE*****

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Success Indicator:

You will be able to successfully restore a piece of wooden furniture.

Life Skills Practiced:

Wise use of resources, planning/organizing, goal setting, critical thinking, problem solving, decision making, personal safety

Project Skills Practiced:

Cleaning, stripping, repairing, sanding, staining, and finishing wooden furniture.

When you have a piece of furniture that you want to restore, you still have a few more decisions to make! The first question is: What will be needed to make your furniture usable? Does it need a simple deep clean or does it need the works (stripping, sanding, staining, varnish, etc)?

Another thing to think about is the value. Sometimes refinishing an antique will greatly diminish the value. Check for markings or tags on your piece and do some research. You can also take your item to an antique dealer or appraiser for more information.

When restoring a wooden piece, the process goes as follows: cleaning, sometimes stripping, repairing, sanding, staining, clear finish, hardware. The activities in this section will be progressive, meaning if you do Activity 3 the next step is Activity 4. The only exception would be Activity 1 which is cleaning your item. You may not need to proceed to the other activities if your item just needed a good deep clean. This is the preferred action for preservation of the value with an antique or heirloom – “do no harm” is the motto.

Let's Get Started!



EXPERIENCE:
now it's YOUR turn

Activity 1: The Deep Clean

Materials Needed:

Commercial furniture cleaner (ex. Murphy® Oil Soap)

Paste wax such as Briwax®, Carnauba or specialty waxes for antiques

Soft cloth

Q-tips®

If you think the finish is good enough to keep, all you need to do is clean it. Removing old wax, dirt and grease will make a big improvement in the appearance. To do this, you will want to use a commercial furniture cleaner. One that is easy to find is Murphy® Oil Soap. Follow the directions on the package, being careful not to use too much water as you clean since water can damage the wood. A mild hand soap and water can be used if needed. Water on shellac finishes may turn finish white.

Look over your piece carefully. Are you finding a few scratches or nicks? These can easily be touched up with several items you can buy for touch ups, such as a touch up marker, pen, powdered pumice, or rottenstone. BUT, there are several items around your home that will work just as well too! Here a few:

- Rub a walnut or pecan across the scratch. The oils in the nut will help seal the scratch.
- Look through your make-up supplies. Eye brow pencils are soft and oil based making hiding a scratch easy. Fill the crack and buff with a soft cloth. Just make sure you use a color that will match your furniture!
- Spread mayonnaise over the scratch and wipe away the extra with a soft cloth.
- Have a stubborn water spot or ring? Toothpaste can help hide it! Rub the affected area, then wipe clean.
- There are special wood crayons for scratches or nicks, but why pay more for something you already have in your crayon box at home! Find a color that matches the wood and fill in, then buff with a soft cloth.
- Shoe polish in a matching color can be applied with a cotton ball or Q-tip® and buffed dry.
- Rottenstone and oil can be an effective fix too. Put a few drops of salad oil (ex: olive, vegetable, canola, mineral oil etc.) on the blemish and shake on enough rottenstone to make a paste. Rub briskly with the grain of the wood, using a clean, soft cloth.

****Mention of brand and trade names are used only as product examples and is not intended as an endorsement of any product or item by the University of Nebraska nor is any omission of a product intended as a criticism.****

An option when done, protect the surface with a clear quality paste wax such as Briwax®, Carnauba, or specialty waxes used for antiques such as Renaissance Wax. These may be found in some stores and antique shops or ordered online. They are removable, do no harm, and protect the surface from damage and some liquids. Do not wax too often or put on too thick as excess wax build up collects dust and grime. Apply a thin coating with a soft lintless rag working the wax in a circular motion, and focusing on working with the grain of wood. Then buff with a soft cloth. Paste waxes make it difficult to apply another finish on top such as lacquer or varnish unless the wax is completely removed, which is difficult to do.

Good as new? No need to move on! But, if your piece doesn't look quite like you envisioned move on to Activity 2.



A great way to recycle or reuse socks and cotton t-shirts is to use them as dusting/cleaning cloths. The t-shirt is soft enough for delicate items and is lint free. Socks are great for picking up dust, just turn them inside out and start cleaning!



When using finish strippers or refinishing product, read and follow label directions. Work in a well-ventilated area. Better yet, work outside whenever possible. Wear protective clothes, heavy rubber or neoprene gloves, goggles and a quality air filter mask. Use water-based products or safer, less toxic products. Look for a nontoxic paint/finish remover, such as one that is soy based or have the paint or finish removed by a professional. Some painted or clear finished furniture made prior to 1978 may have lead in the finish or paint and should be removed with extreme caution. Make sure to use heavy rubber gloves, goggles, and an air filter mask. Ask an adult for help or this can be done by a professional also. Lead in old painted surfaces and paint dust is poisonous – especially to young children. If ingested, it could possibly result in learning disabilities or other health problems.



Activity 2: Refinishing

Materials Needed:

- Commercial stripping product (look for a soy or citrus based product which is safer)
- Old brush and bowl or metal can for stripper
- Another old container to scrape finish into
- Plastic to protect floor or work bench
- Putty knife
- Water, soap, pail, rags
- Gloves made with neoprene (so remover will not eat through the gloves)
- Well fitted, quality air filter mask or half or full face respirator with vapor cartridge filters.
- Steel wool, brass wire brush or tooth brush, tooth picks (for crevices)
- Mineral spirits (hazardous – use with ventilation and caution)

If the finish still does not look good enough after cleaning, the next step will be refinishing the furniture. You will need to purchase a commercial stripping product to take off the old finish. The kind you select will depend on the finish that is on your furniture. If your furniture is painted, you will need to select a product especially designed for that purpose. If the finish is varnish, you could either select a varnish stripper or a product that is referred to as a furniture refinisher. *Read labels carefully* before purchasing. If this is your first time to strip furniture, you may want to choose one that can be cleaned up with soap and water. Some require a special neutralizer or mineral spirits which is hazardous.

Note on furniture refinishers:

Furniture refinisher products are different from a varnish or paint stripper. It softens the finish so it can be removed with steel wool. This is a good choice if the old finish is not extremely heavy. However, this product is highly volatile, so use it **ONLY** if you can do it in the garage or outside with plenty of ventilation. If this is not possible, *only* work inside if you have a large room with cross-ventilation using fans to pull in fresh air through one window and removing fumes through another. In addition, wear a half or full face respirator with vapor cartridge filters and neoprene gloves for your protection. The advantage of this method is that it is easy to use and does not strip off all the original stain. Often, once the finish is off, it only takes a light sanding or no sanding and you are ready to apply the new finish. Heavy sanding may take off the stain or make it look splotchy in spots.

PRO TIP: If you have detailed areas, joints, crevasses, etc. you may need to use other tools to assist in removing the finish. You might use a tooth brush, tooth picks or Q-tips®. For turnings on legs, cotton string can be used to remove the finish. Dip the string in stripper; wrap it around the turning and pull back and forth. For carvings, an orange stick works well with a little steel wool wrapped on the end.



If you don't have an open place to work when using furniture refinishing products, this may be a time to hire stripping done by a professional.

Preparing to refinish:

Step 1: Before you begin your project, you will want to remove all handles or other hardware. Be sure to put each piece, including screws, etc. in a baggy or covered plastic container. You don't want to lose any pieces! If there was something unusual in how it came off, be sure to write that on a note so you will remember when you put it back together again!

Step 2: Cover the floor or work bench with plastic to protect from leaving stains and to make clean-up go much easier! Place your furniture on the plastic, with one side easily accessible.

Commercial Stripper

Furniture Refinisher

Step 3: Pour a small amount of stripper into a smaller container. (Close the original container between uses to prevent spills.) Using an old brush, generously "paint" the stripper onto a small section of the furniture (start with about a 1-2 foot area). Brush in one direction, applying enough stripper to cover the area, but without "painting" over it again. Brushing back and forth will stop the action of the stripper and won't work as well. Allow it to work. See the suggested wait time on the label.

Step 4: Once the finish is bubbled, use a putty knife to gently scrape off the stripper along with the old finish. Be careful not to gouge the wood. Steel wool can also help get finish off after using the putty knife. If there are several layers of paint or a very heavy varnish, you may need to repeat this step.

Step 5: Complete stripping one area, then clean up any residue with water and soap or mineral spirits. (See package for clean-up recommendations.) When one area is clean, move to the next until the whole piece has been stripped.

Step 6: Wash entire piece with denatured alcohol solvent until wood does not appear light, powdery, or smoky or feel slimy. Wipe with burlap or other coarse cloth dipped in fresh alcohol. All remover must be cleaned off or the new finish will be sticky and will not dry.

Step 3: Pour small amount of refinisher in glass jar or metal can. With gloves on, dip steel wool in refinisher. Starting on the underside of the furniture, wipe a small area with refinisher until it softens.

Step 4: Once softened, wipe off old finish with a rag or steel wool.

Step 5: Keep repeating this process until all the finish has been removed. Be patient! Depending on the finish you are removing, you may need to repeat this step several times, or it may come off quite quickly! You may need to use Q-tips® or a small tool covered with a rag to get excess finish from corners, grooves, etc.

Step 6: Wipe entire surface clean with mineral spirits.

Step 7: Allow to dry. *Lightly* sand the surface with 400 grit sandpaper or 0000 steel wool. Use tack cloth to remove all dust particles.

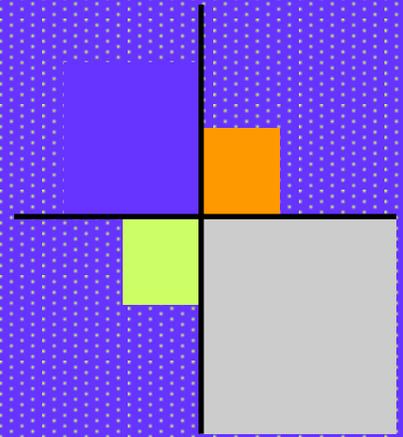
Step 8: At this point, decide if the furniture needs to be stained or if it is ready for a finish to be applied.

NOTE: this should only be done with LOTS of ventilation – as in an open garage or outdoors. For best protection, wear an air purifying half-mask or full-mask respirator, neoprene gloves, and use a fan to blow fumes away if working in a garage.


Denatured alcohol is very hazardous and may ignite with any spark or flame. Also, the vapors are harmful. Use with extreme caution!

Examining wood after removing finish:

- Is surface sticky? Old finish remains – apply remover again to entire section.
- Is surface smoky? Wash section again with alcohol.
- Is piece dented, bruised, or stained?
- If old glue remains in crevices and joints, apply hot vinegar to glue.
- Do joints need re-gluing? For sealer finish, apply two coats before gluing.



Activity 3: Doctor up with Repairs

Materials Needed:

Wood glue

Clamps

Old rubber inner tube from tire

Sand paper or putty knife

Paper towels

After all the finish has been removed and you have allowed the piece to dry, carefully inspect your furniture to see that joints are all tightly glued. If repairs are needed, do them at this time. (If the furniture is in need of a lot of re-gluing, it might be easier to take apart before stripping.) If re-gluing joints is needed, it is important to clamp the joint as the glue dries. Be sure to protect the wood so no indentions are made with the clamps. An old rubber inner tube from a tire, cut into strips, make a good “clamp” in many places. Stretch the rubber strips around what needs to be clamped and leave tightly tied until the joint is dry. The rubber exerts a steady amount of pressure on the joint. A wide variety of commercial clamps are available, but may be expensive to purchase for an occasional project. You might be able to borrow clamps from someone who does woodworking.



To glue:

Carefully clean off the old glue by scraping or sanding before applying new. Use a good quality wood glue. Watch carefully to see if excess glue squeezes out of the joint, especially when the clamps are applied. Use a damp paper towel to remove all excess glue. Check back after a few minutes to see if glue has run. Sometimes it doesn't show up at first. This is an extremely important step, as any glue that remains on the surface will NOT accept stain, and will show through a final finish.

Activity 4: Make It Smooth with Sanding

Materials Needed:

Sandpaper (various grits)
Sanding block (optional)
Shop-vacuum
Clean brush
Tack cloth

Now you are ready to sand!

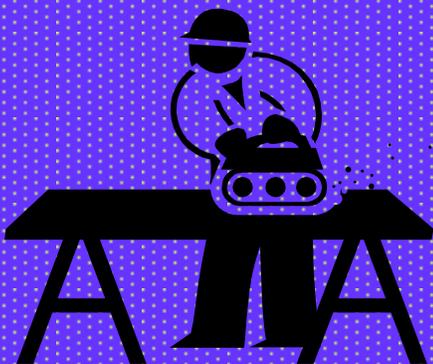
Sanding is the difference between an average refinishing job and a professional job. However, remember that sanding may affect the antique value when removing finishes and the “patina” or aged look of the item. Most people don’t sand enough. Start with a medium grit and gradually move to finer grits. Harder woods benefit from going all the way to 400 – 600 grits. Softer woods will be OK with 240 or 320. Keep sanding, moving to finer grits, until the piece feels VERY SMOOTH to the touch.

****Reminder: Always sand WITH the grain of the wood.**

Final cleaning:

After furniture is sanded thoroughly, it is important to remove all the saw dust. You might start by using a Shop-vacuum with soft bristles to clean your furniture and your work area, so dust does not accidentally get back on your finish. In addition, use a clean brush and tack cloth to remove any remaining dust. Clean up your work space as well so that little or no dust is disturbed while applying finishes.

PRO TIP: Sanding is just as important before painting as before clear finishes!



PRO TIP: Sandpaper “grit” is identified by numbers. The larger the number, the finer the sandpaper. Very coarse sandpaper is 80 or 100. Very fine sandpaper is 400 – 800.

Activity 5: Staining

Materials Needed:

Stain (oil or water based)

Rag, soft sponge, or brush

Half or full face respirator with vapor cartridge filters

At this time you will need to decide if your furniture needs to be stained or not. Sometimes you might prefer to leave the wood in its natural color. Other times, the beauty of the wood is enhanced or the color is changed by applying a stain. Most stains are oil based, but some are water based. Carefully read and follow label directions.

Using a rag, soft sponge, or brush apply the stain evenly with the grain of the wood. Start with the underside of the wood. Make sure to work in a well ventilated area as they produce fumes. Use a half or full face respirator with vapor cartridge filters. For a lighter stain, wipe immediately with a rag. For a darker stain, wait 5 - 10 minutes, then wipe. When you are wiping the stain, make sure to wipe in the direction of the grain. It is important to get the extra stain off of the furniture or it will not dry properly. Water base will dry faster than oil base. If the furniture is not dark enough you can put stain back on it again and leave on for another few minutes. Always check to make sure it is not drying out in spots.

Allow at least 8 hours to dry or look for the dry time on the label. You may need to reapply the stain if you want a darker look. When dry, use a tack rag to remove dust before applying the finish.



Rags or sponges used for staining can spontaneously combust if left sitting. Make sure to either put them in a closed metal container, a pail of water, or outside.



PRO TIP: One product to AVOID is stain varnish. You may be tempted to use it since two steps are done at once, but you will not like the results. It does *not* give a professional finish.

PRO TIP: Use a Q-tip® to wipe excess stain from corners and crevasses.

Activity 6: Add the Finishing Touch

Materials Needed:

Clear finish (varnish, shellac, lacquer, or oil)

Foam brush (for varnish)

Rags (for oil)

There are four types of clear finishes: varnish, shellac, lacquer and oil. Waxing is also sometimes used as a final step instead of a finish but typically does not add as much protection. However, it can add a luster and depth in thin layers that looks nice. Shellac was often used on antique furniture, and is considered the most luxurious finish and is easily repaired if damaged. The disadvantage of shellac is that it is easily damaged by scratches or water spots. Lacquer is used if the finish is sprayed on, as it dries quickly. However, it does not work well with oil-based stains. Use a water-based stain if you are using a lacquer finish.

The two finishes that we recommend are varnish or oil.

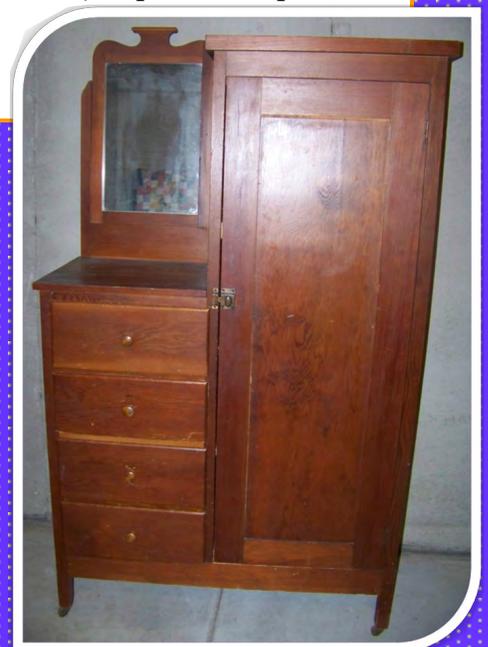
Varnish is usually labeled as polyurethane and urethane. They are the most durable finishes, but are harder to repair if damaged. Compatibility with the stain can also be an issue. Make sure the stain and varnish selected are meant to be used together or are the same brand.

To apply varnish, use a foam brush or a synthetic brush that is for varnishing. A foam brush may produce more air bubbles, but is easier to use. Apply across the grain and then immediately brush with the grain. Apply thin coats so the finish does not run. Work in small sections at a time, checking frequently for runs. Allow to dry thoroughly. You will need no less than three coats, but you must sand between each one. Use a fine grit (400-600) sandpaper or 0000 steel wool to sand the “nubbies” from the varnish. Remove all residue with a tack cloth before applying the next coat.

Clear finishes need a final smoothing. This can be steel wool or wet sandpaper or use one of the following methods:

Rubbing with a mixture of mineral oil and either rottenstone (for a glossier finish) or powdered pumice (if you want a duller finish) will give a professional final smoothing. Rottenstone can also be used after polishing with pumice. Pumice cuts faster, so don't rub too hard.

PRO TIP: Generally, the most desirable finish for antiques is a satin finish rather than high gloss. High gloss is desirable on pianos, musical instruments, and occasionally used for a special effect. Satin finishes appear more “mellow” while high gloss tends to make a loud statement.



Another clear finish can be achieved by using an oil such as linseed oil or tung oil. Other commercial oil products are also available. Apply an oil finish using a rag to rub the oil into the wood. Wipe with a dry rag to remove excess. Allow to dry, then repeat application of oil up to 6-8 times. If you use pure tung oil (as opposed to tung oil varnish), it can be applied with your hands. The heat of your hands helps the oil penetrate the wood. Or if you prefer, use a lint free rag.

Finish the whole piece of furniture! When you are applying the clear finish, be sure to also finish all sides of drawers, insides and backs of dressers/desks/etc, and undersides of tables. If you only apply a finish to the outside surfaces, the wood will dry from the inside out and warp over time. Inside finishes don't need to be as smooth, but still need to be applied to seal all sides of the wood. Finishing the inside of drawers is also important so bare wood or a rough finish won't snag clothes.

Check the quality. Is your finish even throughout your piece? Does it have a smooth surface? Is the finish dry and hard? Is it free of runs and drips? Does it have good color? If you answered yes to all of these questions, then you have a good quality finish to your piece!

For more instructions on rubbing out the finish, you might go to one of these sites:

<http://www.homesteadfinishingproducts.com/htdocs/rubbingpolish.htm>

<http://antiquerestorers.com/Articles/SAL/rub.htm>

<http://www.woodworkingtips.com/etips/etip21.html>

PRO TIP: Plan the order in which you will be applying the finish. Start with the under parts first. If the item is large with open areas (ex: bookcases, china cabinets, etc.) apply finish to interior areas first. On dressers or chests, first remove drawers. Apply finish to the interior first, then finish the fronts.



Activity 7: Restoring Hardware

Materials Needed:

Hardware

Sandwich bags or covered container

The hardware used on an antique piece of furniture can either make or break the total look! There are a few do's and don't's to follow:

DO

...take a good look at the hardware that came on the furniture to decide if it is the original or if it has been replaced. You will want to make sure the hardware you use on your finished piece complements the furniture - not detracts from it and fits into the same holes.

...carefully remove the hardware that came on the furniture. Put all the pieces in a baggie or covered container so you don't lose anything!

...clean or restore the hardware that you have, or replace with something that looks appropriate for your furniture.

DON'T

...replace old hardware with a modern look.

...use hardware that has a bright, brassy look.

...scratch or damage hardware when removing.



Technique for removing old paint on hardware:

Put water and a little dish detergent in an old cooking pot or crock pot (one you will not use for food in the future). Add painted hardware/screws. Bring to a simmer (not boiling) and let it cook for 6-8 hours. When you see that the paint is loosening, use tongs to remove from hot water and put in a container of ice water. Remove paint by working it loose with your hands, a sponge or old toothbrush. Be careful not to use a metal tool that may leave scratches.

Once the paint is gone, you may not need to do anything else if you like how it looks. To protect the finish, spray with a clear matte varnish to seal.

According to Daniel Kanter "If your hardware is on the newer side, it may be nice to give it a final scrub with a product such as Bar Keeper's Friend®. This stuff is mega-powerful, though, so it's a good idea to start with the back of a backplate or another area that won't be exposed, just to make sure you actually like the restored finish." (www.designsponge.com)

Check out these websites for some other "How To's" in restoring hardware:

<http://www.doityourself.com/stry/how-to-clean-brass-antique-furniture#.UrCuNyf4vIU>

http://www.ehow.com/how_5645437_restore-antique-hardware.html

Activity 8: The Clean Up

Materials Needed:
Items will vary

Your piece of furniture is beautifully refinished! Congratulations!! Now it's time to clean up the mess. Check labels on the strippers, refinishers, stains, finishes, etc. for proper storage. Most need to be stored at certain temperatures and well sealed, out of reach of children. Put all supplies back in their proper locations and throw away all trash (paper towels, Q-tips®, etc.).

Brushes needed to be taken care of immediately after use. If you clean the brush after each use it can be used again rather than buying a new one. There are different solvents available to help clean brushes. Check the list below to help you when cleaning.

Oil Stain - paint thinner or turpentine

Filler - paint thinner or turpentine

Linseed oil, Penetrating Sealer, Wax, Varnish, Enamels, Coating Type Sealer - Paint thinner or turpentine

Shellac - denatured alcohol

Lacquer - lacquer thinner

Read the product label for advice on what to use.

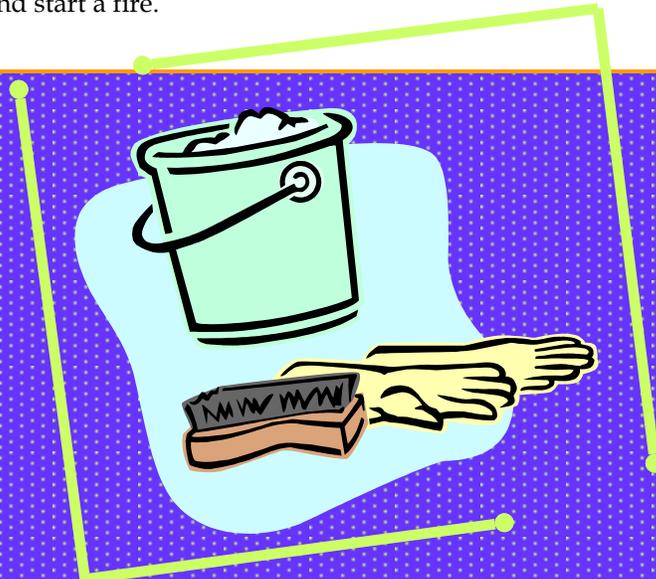
Use neoprene rubber gloves. Pour some solvent in a small or medium-size wide mouth jar or can. Press brush into solvent to allow it to penetrate the bristles. Remove brush from solvent. Let the pigment or residue settle to the bottom and put brush in solvent again. Pour solvent in large screw cap bottle for storage and pour fresh solvent in jar or can. Repeat first two steps at least twice more.

If solid particles remain, use an old stiff brush to comb out the particles. Once free of residue, hand wash the brush with laundry detergent and water. Rinse with clean water. Allow to dry in a flat position making sure all of the bristles are in the same position. Store by laying flat or hanging. Folding wrapping paper around the bristles can help keep the ends from curling.

If brush is cracked with dried paint, varnish, filler, etc. on the bristles, soak in a solvent type brush cleaner.

Some may need to soak for several hours.

Be sure to safely dispose of any rags, paper and other items that could catch fire. Even in a trash can, solvent soaked items can self combust and start a fire.



REFLECT: Here's What I Think

- Was the restoration process challenging? Which part was the most difficult for you and how did you overcome the challenge?
- As you worked through each activity did things seem to get easier or more difficult? Why?
- Has restoring an heirloom or antique given you a sense of accomplishment? How so?
- Did you need your problem solving skills to accomplish certain tasks? How did you work through those problems?

APPLY: The Next Step

- If your first restoration project was small, move up the scale a bit and try something more challenging.
- Analyze your work. Are there some areas that need improvement? Buy an inexpensive piece of furniture from a thrift store, garage sale, or auction and work on the areas that need improvement. The more you practice, the better you will become!



Preserving Heirlooms

Documenting History

Preserving the Past

A New Take on Wood

**Have a Trunk? Let's Create a
Treasure**

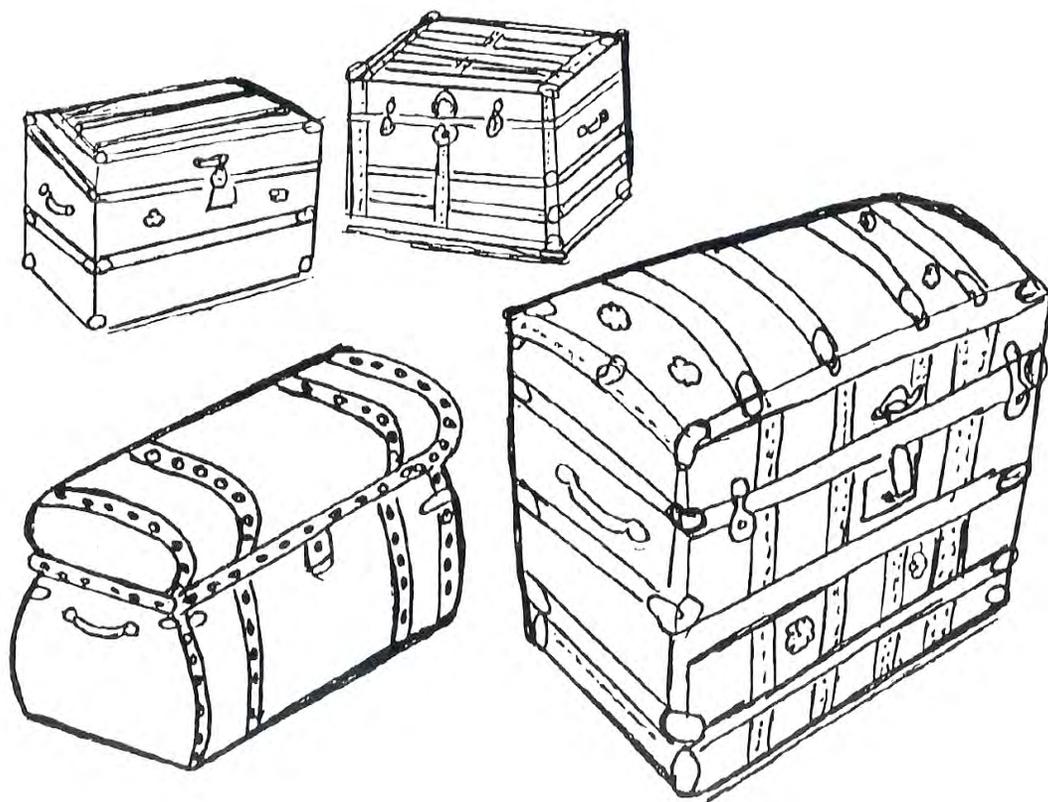
Material Makeover: Repurpose & Upcycle

Family Keepsakes

Resources

Glossary

HAVE A TRUNK? LET'S CREATE A TREASURE



By Gerald and Alice Kroft



Gerald and Alice Kroft of David City became interested in trunk restoration after Gerald retired from farming and sheep raising. Their interest in trunks was spurred when their children brought home trunks to be restored. They also found some trunks at antique stores. They have been doing trunk restoration for over 20 years, and have assisted 4-H youth who used trunk restoration as a project.

Thank you to the Kroft family for allowing us to use this publication.

HAPPY TRUNKING!

This booklet has been put together with the hope, that those who read it, may find it easier to restore or redo an old trunk. We hope you refer to it often and find it useful! Many of the suggestions, methods and instructions which follow, were learned by doing — also some "short-cuts" were discovered. Every trunk is different and a new challenge!

GOOD LUCK!

April 1996

By Gerald and Alice Kroft

~~Route 1, Box 122 1491 33 Rd.~~

David City, Nebraska 68632

Telephone: (402) 367-4795

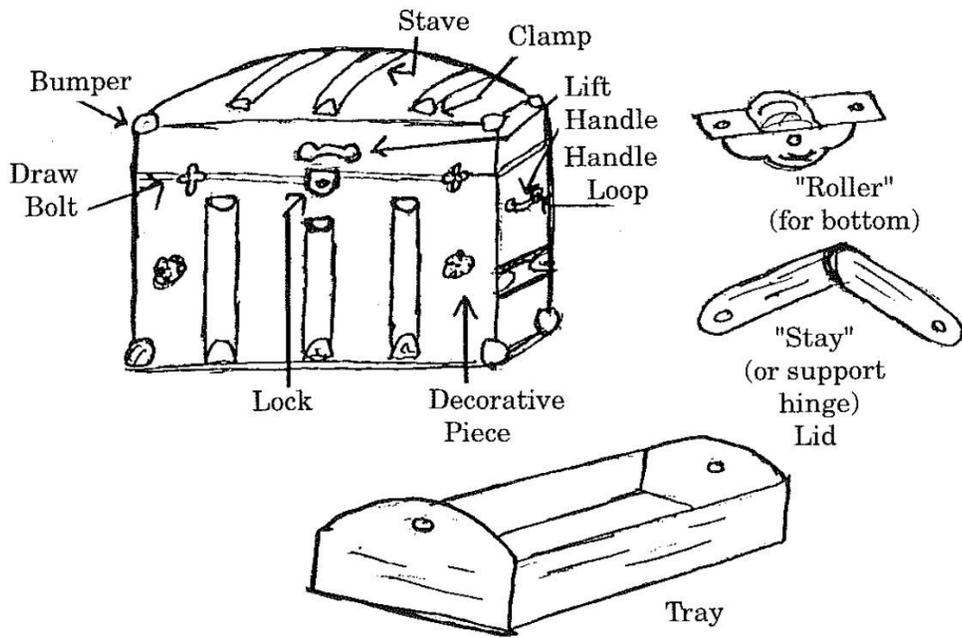
Deep appreciation goes to our daughter-in-law, Mrs. Donald (Viola) Kroft in 1980 and close friend Mrs. Gene (Jean) Phillips in 1984, who did the clerical work on this booklet. It was revised by the Krofts in 1996 for this printing.

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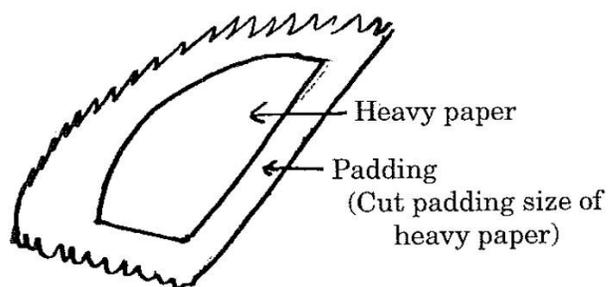
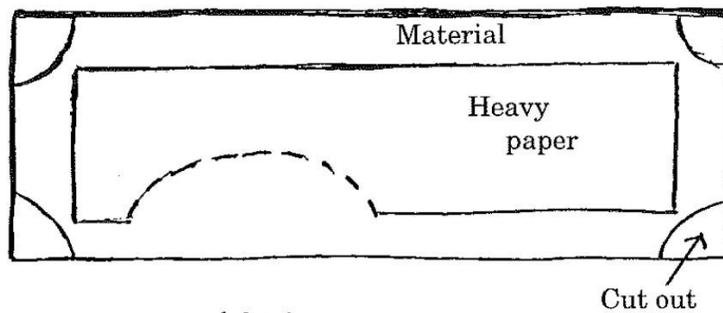
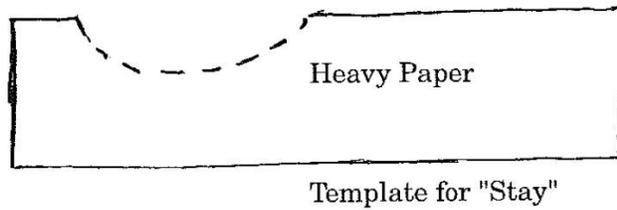
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TO HELP KNOW THE TRUNK

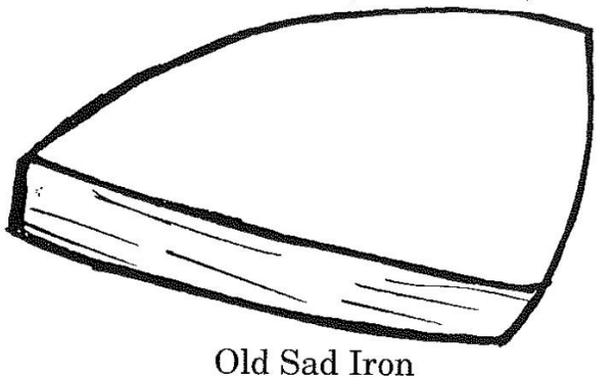
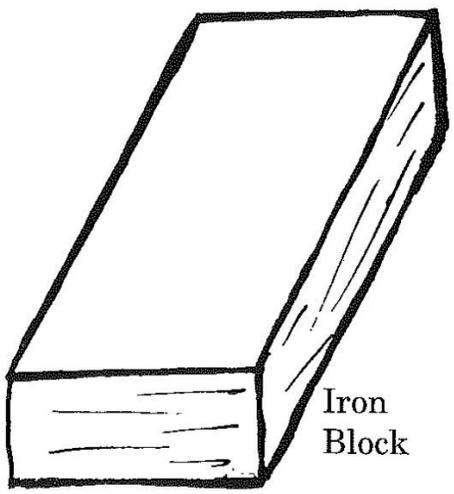
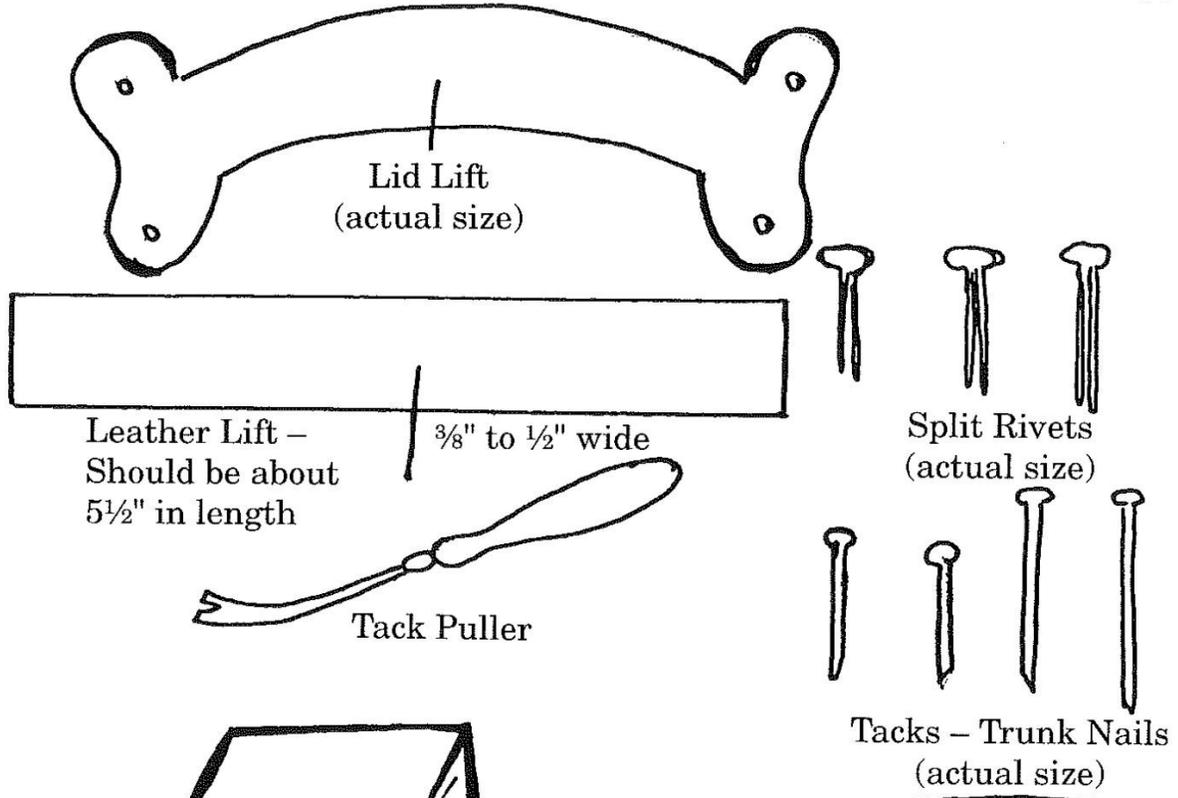
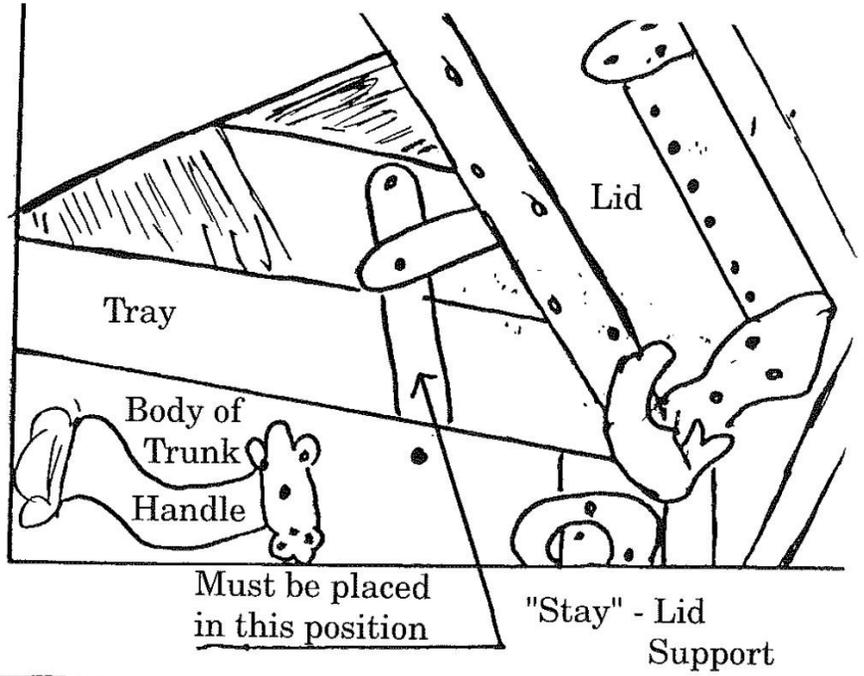


A FEW ILLUSTRATIONS FOR FABRIC LINING

TEMPLATE METHOD



MORE
ILLUSTRATIONS ---





Wardrobe Trunk



Wardrobe Trunk



Barrel or Round Top



Barrel or Round Top



Jenny Lind



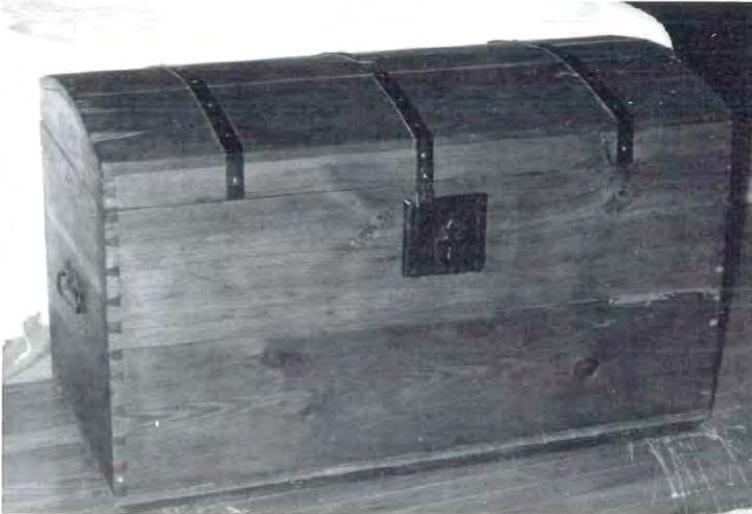
Jenny Lind



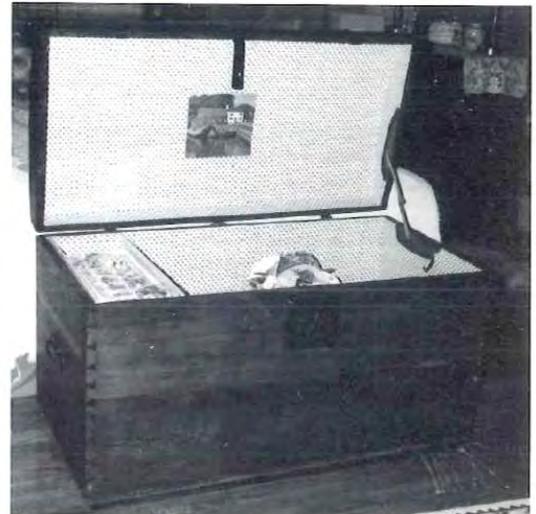
"Southwest" Camel Back



"Southwest" Camel Back



Immigrant



Immigrant



Flat Top



Flat Top



Theatrical or Dresser Trunk



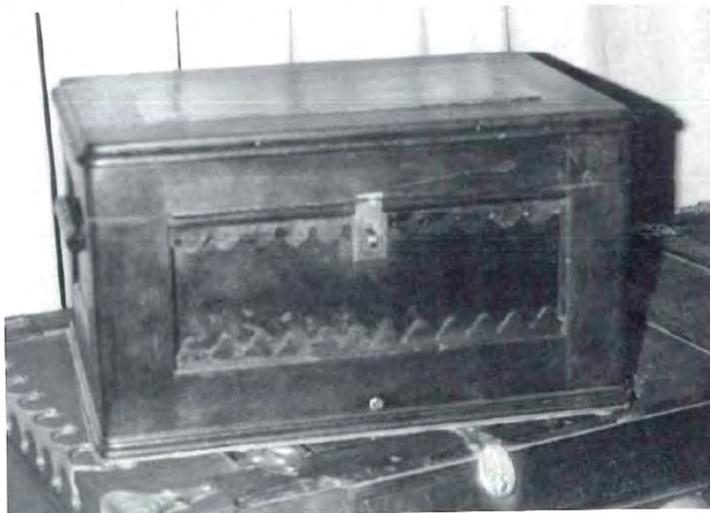
Theatrical or Dresser Trunk



"Old Time Sewing Machine Cover" converted to small trunk.



"Old Time Sewing Machine Cover" converted to small trunk.



"Old Time Sewing Machine Cover" converted to small trunk.



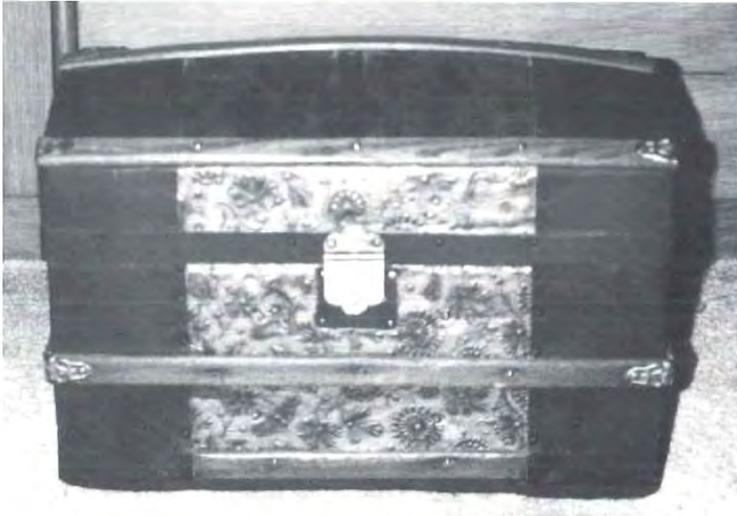
"Old Time Sewing Machine Cover" converted to small trunk.



Camel Back



Camel Back



Camel Back Miniature



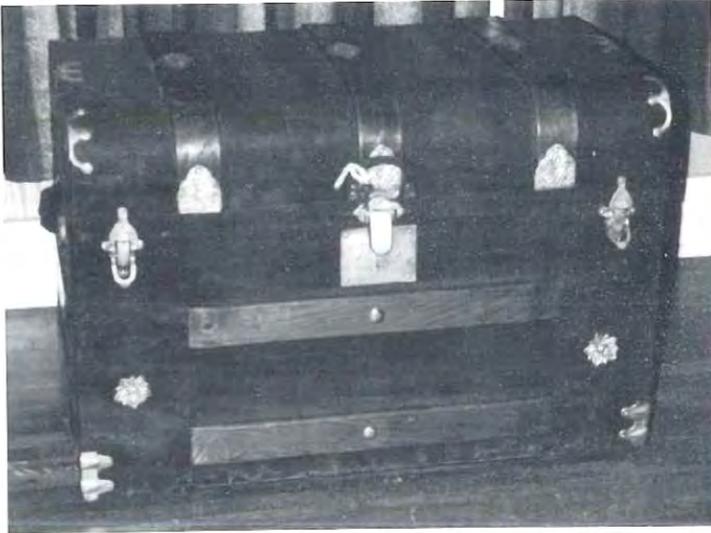
Camel Back Miniature



Round Top Miniature



Round Top Miniature



Monitor



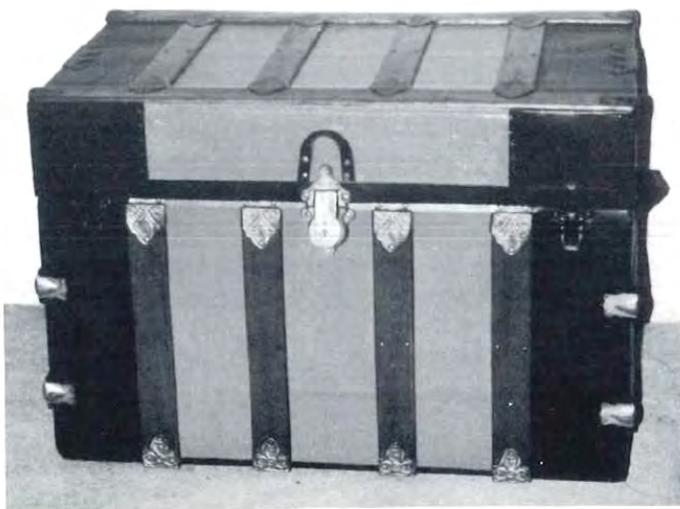
Monitor



"Duck" Covered Camel Back



"Duck" Covered Camel Back



Wall Trunk



Wall Trunk



Miniature Immigrant Trunk



Miniature Immigrant Trunk

REPAIR AND PARTS LISTS:

Martin Labuda, 3706 West 169 Street, Cleveland, OH 44111 (25¢ and self addressed stamped envelope).
 Charlotte Ford Trunks Ltd., Box 536, Spearman, TX 79081 (\$1.00).
 W.S.I. Distributors, PO Box 1235, St. Charles, MO 63301.
 Van Dyke's, PO Box 278, Woonsocket, SD 57385-0278.

"BRAND NAME" PRODUCTS WE HAVE USED FOR WORK ON TRUNKS FOR WOOD:

Hope's Tung Oil
 Varathane Tung Oil
 Danish Finish by Flecto - natural and colors
 Watco Danish Oil by Watco Dennis Corp. - natural and colors
 Minwax Antique Oil Finish by Minwax Co., Inc. - clear and walnut tone
 Satin finish varnish
 Murethane
 Clear Urethane wood finish
 Satin "Zar" finish by United Gilsonite Lab
 Polyurethane

"WAXES"

Rub 'N Buff – works more easily on embossed metals. Works well on hardware also. Several colors available.

Treasure Gold – Preferred for work on hardware - Brass, Pewter and Classic Gold very popular. If combinations are desired, this one blends more readily - several colors available.

"CRYSTALLINE LOOK"

Crystl'Craze (this is a product not easily found. We do have our supply for custom work only) It is a beautiful finish when done correctly. It mixes easily; if a "grayed" look is desired, add black to the color being used. Burgundy - use brown and add red to attain color desired. Lighter colors may be attained by using the clear and add green or other color. Orange used on old metal takes on a bronze look. Many colors available. It

is reasonable in cost in that it goes a long way. One application only. Colors vary when applied to different metals (MUST BE USED IN A WELL VENTILATED AREA)

Great Glass may be available but needs to be used with the same precautions; however, it results in a smooth transparent finish and does not form the crystals. We have seen it used on a 4-H project at the State Fair.

WALLPAPER ADHESIVE

We have used some packaged products which are mixed with water. Some we liked, but others we did not. If one has had success with a certain brand, this is fine. At this time the few we do with paper, we are using "Bondex" which comes already mixed and have had excellent results.

GLUE

Elmer's Glue is good when using the template method in the application of fabric linings. MD-Macklenburg-Duncan is equally good. Sobo and others are available and may be more expensive. When redoing a Wardrobe trunk, it may be necessary to use the Spray Adhesive with the fabric.

WOOD SATIN

Brands in paints and stains come and go, as we have learned through the years. There are many on the market and it is a good idea to keep several colors at your disposal. Woods "take" differently. It is good to try the stain on the back to see if it is the desired color. Colony stains are good and there are many others. You may have used one that you have had success with.

PAINT AND FINISH REMOVERS

Zip Strip, Red Devil, Zing by Colony, Co-op, Glid Strip by Glidden, So Fast by Southland Paint Co., Stripeeze, Bix and others.

DO FOLLOW INSTRUCTIONS CAREFULLY.

There are some mixtures that may be made up at home. Here again, USE WITH CAUTION.

TRUNKS

- HOW THEY CAME TO BE -

The mere use of trees, various kinds, to build storage cases, to carry articles, food, rugs, garments, jewelry and other things, in the very early days, is the origin of the word "TRUNK" which is used today!

First, let's talk about the types of trunks, which are part of the past and now have become collector's items. Some of you have trunks, which belonged to your fathers, mothers, grandparents, aunts, uncles and others. They are truly precious heirlooms to the trunk lover, because of the sentimental value! These are the trunks that one can learn much about, how the relative acquired them, how much they had moved around and many interesting stories about them. Trunks can still be found at auctions, antique shops, garage sales, flea markets, some quite expensive and occasionally rather reasonable. To learn of the history of a purchased trunk, it may have a name, date, address, may have been lined with newspapers with dates, there may be a manufacturer's label, including name, date and city or the former owner may be able to tell you some interesting history. We have learned some, about some we bought locally. Reproduction Sears Roebuck, 1900 and 1908 catalogs or Montgomery Ward Reproduction catalogs also can help you get some ideas of the kind of trunk you have. It is interesting to learn what these trunks were sold for back then!!

There are many kinds of trunks, of which there are many different styles, sizes and finishes and coverings:

1. **JENNY LIND**, probably one of the most rare, named for the Swedish Nightingale, Johanna Maria Lind; covered with leather, gracefully curved in the center, large "stud" trim and usually smaller in size. They are shaped like a "loaf of bread" is another way to describe them!
2. **THEATRICAL OR DRESSER**, is not easily found, has many compartments and drawers. The lid opens from the lower front to the top, usually has a mirror in the lid with a compartment in back for storage. There may be three drawers of different sizes with a storage space un-

der the lower drawer and sometimes narrow compartments at bottom front.

3. **WARDROBE**, also has several drawers and a deep pull-out compartment on one side, with wooden hangers to hold garments on the other side. This trunk stands "tall" – opens somewhat like a book. Some have small ironing boards and irons.
4. **WALL**, is another of the less common trunks, as the name indicates, may be opened without pulling it away from the wall. Smooth or embossed metal, some were canvas covered.
5. **WESTERN** – The true western trunk from the southwest United States is large, many Camel Back in style, have a definite Spanish influence, in that they are sometimes covered with oxhide, with highly decorated geometric designs, strips of colored leather, colored metal with heavy decorative nail trim – metal over the heavy slats and staves. The hardware is heavy and quite pretty on most that we have seen.
6. **PIRATE** – This trunk is not seen often, usually smaller in size, rounded top, flare on front and back.
7. **STEAMER** – Flat on top, duck or canvas covered. Some may be covered with heavy sole leather. Some are low, like a foot locker.
8. **FLAT TOP** – Probably one of the most common trunks found today. Some were covered with canvas, smooth metal and embossed metal - many sizes. Some had straps over the top that fastened in the front. Some of these trunks had two trays, the lower one rather plain with a cloth bottom which was used to store skirts or trousers to keep them from wrinkling.
9. **BARREL TOP** – Rounded top but no tapering in the sides like the Camel Back. Usually covered with embossed or smooth metal and imitation leather (designed paper to look like leather).
10. **CAMEL BACK (or "Hump Back"**, as it is

sometimes called; smooth or embossed metal, leather covered, duck or sturdy burlap-like material. Many smooth - metal Camel Backs had a "Crystalline" finish, usually pale green, gold or other color.

11. **MONITOR** - Rounded front and back flat top center lid with staves curved to fit were usually in a smooth metal, black or imitation wood painted metal to resemble ash, oak, sycamore and other woods.
12. **IMMIGRANT OR SEA CHEST** usually came from Europe. Some have German, Italian, Swedish, Czech (and probably other languages), lettering carved in the wood; are usually "dove-tailed", heavy wood throughout, heavy hand wrought iron handles, bands over the lid and down front, handmade locks and keys. These trunks or chests were painted with a "milk base" paint black, green or dull red.
13. **STAGE COACH** - Usually made of rawhide, black leather or hairy leather covering; often have nail head design on top including owner's initials, metal handles and locks. This kind of trunk is rarely seen in the middle west area; may be more readily found in the southwest.
14. **DOLL TRUNK** - Various small sizes, styles, shapes; most similar to some of the larger ones and have different coverings.
15. **WELLS FARGO - STRONG BOX - DEED BOX** - Quite rare! Heavy hinges, locks, steel bands, leather covered, some heavily studded; we have seen very few and only on display, as part of a collection.
16. **WICKER TRUNK** - Heavy wicker construction, with heavy pole corners and pole frame, a flat top lid, usually medium in size, lined with heavy padded canvas. We have seen only two.
17. **DRUMMER'S TRUNK** - Small - square. When open, both bottom and top usually same size in depth. Usually has a divider in each side, but not in center - "off set" usually. Called "Drummer's" trunk, as salesmen used them to carry items such as laces, trims, sewing notions or other small items.

❖ DESCRIPTION OF METALS

The embossed metal covering that has been

referred to, in description of trunks above was available from about 1879 until around 1910. It is a raised design in the metal and there are different patterns. Some of the patterns are Daffodil, Raspberry, Rose, Polka Dot, Wheel, Acorn, Star and Crescent, Butterfly, Fish Scale, Silk, Poppy, Scroll, Grecian, Canvas, Alligator, Diamond, French Stripe, Basket Weave and many others which we have not identified. Unfortunately, none of the patterns are reproduced. There are a few patterns that may be purchased from trunk repair suppliers, but are a bit expensive. Some of the smooth metals were Crystalline tin, a few "wood" patterns to look like Rosewood, Sycamore, Oak, Ash and others; Japanned black or other colors.

❖ DECISIONS TO BE MADE

It is a good idea to make a decision about how the trunk is to be used, room color decor, perhaps, the person who will use it. If the trunk is in fairly good condition or nearly perfect, you may not want or need to change colors. If the trunk is in need of a lot of work, you may want to use a color or finish entirely different than it might have been originally. We have worked on some that we had no idea what the color had been originally! Many canvas or leather covered trunks are in such bad condition that the remaining deteriorated coverings have to be removed and thoroughly cleaned free of dirt. With this kind of trunk you will need to decide how to do the outside. Perhaps the wood is nice enough, after sanding, to finish in the natural, or if not, you may want to cover it with a vinyl or some other material. This type of covering will be discussed later.

❖ SUPPLIES AND TOOLS YOU MAY NEED BEFORE STARTING ON A TRUNK

- Newspapers
- Band Aids
- Hammer
- Awl
- Tin Snips
- Rivets
- Screws
- Tack Puller
- File
- Screw Driver
- Chisel
- Nippers

Stapler
 Steel Brush
 Vinegar
 Ammonia
 Wood Stains
 Tung Oil
 Saddle Soap
 Rustoleum, Naval Jelly, Kerosene for rust
 areas
 Old Toothbrush
 Acetone
 "Bounce" or other fabric softener sheets
 Paints
 Tack cloth - to clean wood after sanding, etc.
 before proceeding with next application of
 finish. A MUST!
 Electric Sander
 Electric Drill (steel brush attachment)
 "Strap" Metal, for repairs (maybe)
 Steel Wool 0000, 000 and 00
 Sandpaper (medium and fine)
 Soft Rags, Sponge
 Glue
 Liquid Aluminum, Solder Steel or Red Putty
 Wood Putty or Spackling Paste
 Trunk Nails and Tacks
 Tacks (upholstery)
 Sheet Aluminum (from print shop or lumber
 yard)
 Utility knife, single edge razor blade
 Iron block or old "Sad Iron"
 Masking Tape
 Bleach
 Wood Finishes
 Shoe Dressing
 Neatsfoot Oil
 Denatured Alcohol
 Paints
 Posterboard (to be used in templates in fabric
 linings)
 Lacquer Thinner
 Shellac

Use vacuum cleaner to help clean thoroughly and free the wood of dust particles, etc. Also it is helpful to clean the inside of the trunk to remove bits of paper, dirt, etc.

Use cleaner, such as 409, Fantastik or like product for removing paper on the inside of the trunk. Warm water and vinegar are also good to help remove paper. Also, as a final cleaner after using finish remover.

Padding (quilt batting)
 Tape measure, yard stick, foot ruler
 Crating wood (for slat repair)
 Good grade wall paper adhesive
 Camera, film to take before and after pictures
 Corrugated cardboard to build up inside fronts
 for fabric linings.
 Brushes of various widths
 Scissors for cutting fabric, another for paper
 Necessary repairs such as stay, locks, lifts,
 rollers, handles, hinges and others.

A trunk about 36 inches wide requires at least 5½ yards of 45" material. If material has nap, pattern which needs to be matched, more may be needed. It is most frustrating not to have enough material, better to have more than be sorry! If you are using wall paper covering in a medium to large trunk, you will need almost a double roll, especially if there is a tray, compartment and tray cover. In some trunks we have used more than a double roll and as much as seven to eight yards of material.

Now that styles, shapes and finishes have been discussed, you have pointers on how to identify your trunk or one that you may acquire, we can think about getting ready to restore or redo it. We have also listed many things you may or may not need to do your work.

❖ CLEANING THE TRUNK

An old trunk, especially one purchased, because you might not always know where it has been stored, should be sprayed with an insecticide to make sure silverfish, moths and other pests are not brought in. Thoroughly spray and close trunk tightly for 24 hours. Later, if you find it has a musty, disagreeable odor, as many do, there are some things that may do the trick. First of all, if there are pictures in the lid or on the try cover, you may want to save them by covering them with clear plastic secured with masking tape. Sometimes the pictures may be soaked loose with warm water and vinegar solution, but requires lots of patience. They are usually very fragile. The odor is often in the paper lining – a warm solution of vinegar and water with a sponge helps in the removal of the paper. We have success by using Fantastik in the removal of paper and both the vinegar solution and Fantastik helps some, to remove the odor. Another method is to wad up newspapers and put in the trunk with it closed – you can repeat this as the papers absorb the odor.

Activated briquettes may help. Household bleach or ammonia also help to eliminate odors. USE THESE SEPARATELY – THEY SHOULD NEVER BE MIXED! Placing the trunk in the sunshine helps too. Cat litter may help. Bounce fabric softener sheets or other brands are helpful. You should avoid getting the inside too wet; it may warp the wood, so thoroughly dry it. When dry, close the trunk for a while. If the odor remains, a coat of varnish or paint sealer works wonders! If you have left over varnish, paint or the like, this is a way to make use of it and rid the trunk of odor. Shellac is another product which helps. The paint needs to be an oil base paint. Latex paints are water base and will not seal up the unpleasant odor. Clean the outside with mild detergent or warm solution of vinegar and water.

❖ REPAIRS

Needed repairs should be checked on the trunk. If rollers on the bottom are missing or damaged, they should be replaced. Bottom ball bearing rollers may be used. A set of four small bottom "studs" or "skidders" may be used on small trunks. Castors are available, but we feel they raise the trunk too much, although it will not show that much on thick carpeting. On a bare floor, we think they are a poor choice. If nothing is available, castors are better than no rollers at all. (The use of castors on trunks is one area at the State Fair which judges grade down on) Runners and slats should be replaced on the bottom, sides and top if missing. Paint the bottom of the trunk. Black is a good choice. The handles are often rotten and deteriorated and should be replaced. Leather should be treated with Neatsfoot Oil to mellow. Also burnishing with a wax helps take away the new look. Shoe leather dye will cover stitching. Brown and black is available. However, if you are fortunate to have good leather handles, do use Neatsfoot oil on them to soften and restore them. This should be done from time to time to keep them pliable. The latches, drawbolts, clamps, locks and hinges should be checked. Sometimes one or two are missing and you may need to replace both latches, locks and/or hinges, etc. But save the good parts for another project. At junk shops, flea markets and garage sales one can sometimes buy old trunk parts. You may find mates to some that you thought you would never find. This very thing happened to us several years ago when we bought a trunk with a rather unusual latch and one was

missing. A few months later we found one at a junk yard exactly like it! Old suit cases sometimes have hardware - locks, latches and bumpers that can be cleaned, sanded and used on small trunks. Often, such old, battered luggage sells very cheap. We have gotten such hardware for small trunks, which were made from scratch for our grandchildren and others.

Keys may also be bought at such sales and sometimes be made to fit a trunk lock. Occasionally, a trunk is locked when bought (usually reasonable) and can be opened with a lot of care and patience with tools, etc., and not damage the trunk. Then you will need a key. Tie the key to a heavy cord or thong and fasten it on the lift, a handle on the outside of the trunk. A key locked inside the trunk is a near disaster! There are some hardware departments where locks, hinges, corners and other items are sold, as well as the trunk supply companies. Sometimes these stores are more reasonable by the time you pay the shipping charges. However, there are many items that have to be ordered from the trunk supply companies. Slats may need to be replaced. Try to stain them to be like the ones on the trunk before finishing the wood. Some of the metal may be torn or missing. Small tears and holes can be mended with liquid solder, steel or aluminum. When thoroughly dry, sand to smooth. If a corner or other section needs to be replaced, aluminum sheeting purchased from some print shops, or bought at lumber companies, is excellent for this repair. It molds around corners much more easily than the stove pipe or valley tin. When using the aluminum sheeting, it is a good idea to use steel wool on it to smooth the edges. Also, the paint or finish used later will cover much better if all the surface is steel woolled. It also helps to spray paint with black the cut edges of the replaced aluminum. This should be done any color that has been chosen to use on the outside of the trunk because it is difficult and time consuming to paint those edges once it is nailed to the trunk.

Trunk nails and tacks are a must in all trunk repair work, as they curl into the wood when hammered, by placing a piece of iron or old sad iron on the inside of the trunk as the nail is hammered. When using these nails, be sure to check the entire inside to see that they are all treated this way. As you prepare to line the inside, hands and fingers can really be injured on sharp nail points that have been missed. That is a time you may

need a bandaid or two. If the leather handles need to be replaced and the handle loops are not damaged, they should be removed with the tack puller, as all other tacks or nails may be removed more easily with this tool. Remove all the old leather from the loops. Occasionally a trunk may have one good handle. You might like to put on new ones, but save it; you may have another trunk with the same problem, then these two "used" handles can be used on still another trunk. Do not forget to use the Neatsfoot oil on the old or new leather. Treat the leather from time to time like polishing shoes and purses. Often straps of various widths may be purchased at leather goods shops. Also, other weights of leather for repairing a leather covered trunk are available at these shops. We have gotten leftovers at reduced prices at these shops. The stays which hold the lid from falling back should be checked. If it is not missing, often times they are loose and need to be put in with new nails. If the wood is damaged, use some wood putty or strong glue to patch holes. Allow to dry thoroughly, then replace the stay or put on a new one, if it is missing. Be sure to place it correctly. This is a mistake that we see at the State Fair; also the omission of any kind of support to hold the lid. It is very important to have a lid support. Without it, hinges are damaged. Chain may be used. Be sure it is attached at the correct angle. We have used chain in one Camel Back; also retained the chain in an old tool box which was finished, to be used as a storage chest. We prefer the stay or "storm window stay" for safety reasons. The hinges on the lid sometimes are loose and should be redone. If this needs to be done, do it before resetting the stay or replacing a new one. Occasionally, the heavy edge or lip on the lid is bent or broken. Sometimes it can be straightened but it is difficult to work with. It can be replaced with strap metal. This is not easy to come by; it is used around crated articles. It can usually be picked up free at shops that receive crated articles. It is not often what this kind of repair needs to be done. If you ever do, be sure to give it a good sanding to enable you to paint it more easily.

Sometimes the metal covering along the top edge of the body of the trunk is battered, torn or even missing. This should be smoothed out as much as possible; perhaps patched with liquid aluminum or solder, steel or red putty and sanded when dry. There may be dents that can be removed. This is difficult to do completely and may

be impossible, so this gives character marks to your old heirloom! Often there is rust on the metal parts of the trunk. This may be sanded with an electric sander and is a messy, dirty job. Naval jelly and kerosene work well but does need to be sanded with steel wool or fine sand paper after use. Sometimes wood slats and staves need to have finish remover used if there has been paint, etc. applied. We have had some that were very difficult to clean and occasionally it is cheaper in the long run, to make new pieces. Some removers work well on paint and not as well on other finishes. We try to keep several brands on hand for that reason. An old tooth brush helps to remove paint, etc. A strand of old burlap helps remove paint and remover in decorative lines that are cut on slats and staves. After removal of unwanted paint, etc., use 409, Fantastik or like product to remove all the remover and old finish. It is surprising how much residue will come off on an old wipe cloth. This is important to remove all that old finish, etc. Do this quickly and try not to get the wood too wet. Follow the instructions on the container. Thoroughly clean after sanding. Perhaps you may have needed to strip paint and old varnish from the metal parts, slats and staves by using a commercial remover, and follow instructions with care. If there has been considerable rust on the metal, it may be wise to use a rust inhibitive paint before proceeding with other paint. However, this cannot be used before applying Crystl Craze or Great Glass.

❖ WOOD FINISH

Use tack-cloth and vacuum cleaner to remove dust and any other particles before proceeding with wood finish or painting. Before any finish is applied, be sure slats and staves are dry and clean. We cannot say this too often! An otherwise beautiful trunk is often spoiled because the wood parts have not been finished with care or were not steel woolled enough between applications of finish. The wood should always be finished first. A paint will penetrate the wood and is very difficult to remove. With the wood already finished, any spill can be wiped off without it soaking in. Sand the wood. Scars, bruises and discolored areas cannot be completely sanded out. This is next to impossible, and again, these add character and authenticity to your trunk. A good way to test after sanding the wood is to lightly rub an old nylon stocking or the like. If it catches, you should sand more. You may

want to stain the wood, as often it is nearly impossible to have the wood come out light colored, evenly, because of stains from prolonged dirt or in the previous storage of the trunk. Only the well-cared-for trunk has nice looking wood we have found. You may want to stain the wood dark for contrast. We have seen it done and we have done this. If we finish a trunk white, ivory or other light color, it is a way to give contrast. Tung oil is a favorite finish for wood. It is easy to apply, is reasonable in price, very little waste and no brush is needed. It is applied with the fingers, rubbed in the wood and the warmth of the fingers helps the oil to penetrate the wood. The excess should be carefully wiped off with a soft cloth. You may do this type of wood finish twice in one day, so this is a quick way to finish the wood. Be sure to sand with 0000 steel wool between applications. We usually do five or six applications of oil with steel wool treatments between the first four or five, not after the last application.

At any time after, you may want to add another application of oil if you feel it needs it. There are some oils on the market, one is pure tung oil which we like the best. Another may be purchased with a coloring that comes in a number of different wood colors. Still another has a varnish-like ingredient that makes it hard to use. Another finish we have used and like is the Murethane satin finish; also satin Polyurethane. Both make a hard, serviceable finish and are not too glossy - about three coats required, depends on the wood and whether a wood sealer has been used before beginning the finishing job - steel wooling between the first two. Some old woods may need more applications if you find that the wood does not have enough finish. This was mentioned before.

If a slat or two needed to be replaced, remember to stain it to match the wood on the trunk. There are satin varnishes that may be used or a gloss varnish may be used if you have it on hand and want to use it up. The gloss may be toned down by the use of pumice or rottenstone and linseed oil. If you have used two or more coats of the varnish and sanded between the first or second, then use a small soft cloth dipped in linseed oil, then the powdered pumice or rottenstone and rub the wood until the glossiness leaves. Use another clean, soft cloth to remove the mixture. This makes a very nice finish; however, the varnish needs to be thoroughly dry. We used this process years ago on other articles. Generally speaking, a

soft satin finish is preferred, but there are individuals who like gloss and do use it. (Our suggestion is that a 4-H'er include her reason for using the gloss finish, all the information that the judge has, helps in the placing.)

ZAR is another clear finish that comes in the satin which we have used with good results. Usually trunks or chests done in the natural can be done with the finishes that have been mentioned. To go back to missing or damaged slats which need to be replaced - it is possible to pick up crating wood at some businesses. Some of this wood is very nice after sanding. It is usually hauled to a dump yard and we try to pick it up. Also, pallet wood can be used. Pallets are constructed with wood suitable for slats and staves and may need to be planed to the desired thickness needed. This is another way to save on projects with the prices on lumber! Wood may be painted or antiqued if desired. This is something the individual needs to decide, but we prefer to finish wood to show the grain.

Another finish can be prepared by combining equal parts of Satin Varnish (not a Urethane brand), boiled linseed oil and turpentine. The mixture is brushed on liberally, then allowed to soak in for 10 to 15 minutes. Use a soft lint free cloth to wipe off the excess. Advantages: Oil soaks into the wood preserving and beautifying it; the varnish remains near the surface to protect it and the turpentine makes the two compatible to work with.

Beeswax and Lemon Oil is another finish. This was used by a 4-H'er with nice results.

❖ WOOD RESTORER

To clean old antique wood, mix a solution as follows: Equal parts white vinegar, turpentine and boiled linseed oil. Store in a jar and use as needed. When using, shake well to mix; dip a soft rag or piece of 0000 steel wool into the mixture. Rub sparingly on the article and wipe off excess. This cleans, reconditions old finish and often makes it look new again. We have not had trunk slats or staves good enough to try it on, but have tried it on an old piece of furniture and does make the old finish look better. It may be worth a try! It is a good cleaner on old dirty wood and it is surprising how much soil can be removed with repeated treatments with this solution.

To clean furniture, this perhaps could be used on trunk slats and staves that have been well

taken care of. May be done with mild soap and water, but not to excess.

Also good, is one teaspoon olive oil in one quart water; one teaspoon turpentine. Wet clean cloth in above mixture, wring out thoroughly. Rub down the furniture, following with clean, dry cloth. Now it is ready to wax with this mixture: one-third cup each boiled linseed oil, turpentine and vinegar. Shake well before each use.

Use to clean wood that has good finish and only needs to be cleaned: one quart hot water; one tablespoon gum turpentine; three tablespoons boiled linseed oil (be sure it says boiled on the label). Keep the mixture hot in double boiler while using it. Dip a soft cloth in this mixture, picking up mostly the oil-turpentine mixture which will be floating on top. Do not use more water than necessary. Very fine steel wool (0000) can be used with the grain of the wood. Work on a small area at a time. Wipe immediately with a dry cloth and polish. Add more linseed oil and turpentine as the mixture is used off the top of the water. USE WITH CARE! Use equal parts of lemon oil and denatured alcohol to clean wood and use after using finish remover.

❖ HARDWARE

Depending on procedure used, sometimes hardware may be done after the wood is finished. We like to do it after the wood is finished and may be touched up later, if necessary. This may be done by brushing with brass, silver, a variety of golds (many choices). Some that we have seen restored have been done in black. This is nice if there is a nice wood finish to make a pleasing contrast, but an entire exterior in all black except for the wood may not be to your liking. This is a decision for the individual to make. Another method is to use one of the waxes such as Rub N'Buff or Treasure Gold that are available in several suitable colors such as brass, a variety of golds, silver, pewter or combination color mixtures. When using the waxes on the hardware, an old toothbrush is handy to apply wax in order that all indentations are nicely colored. Some may prefer to use just a little and allow the indentations to remain old looking. The waxes are easy to use. Both highlight beautifully with other colors to give burnished and pleasing combinations. Do some experimenting on some other like metal to come up with the combination that you like best for the trunk. We have done some customers' trunks with

just a small amount of brass, pewter, etc. to give a highlighted effect. (A "tad" or "smidgen" as one friend called this procedure) If the trunk has a stud nail trim, large or small, it is rather difficult to color wax them. We learned a shortcut to do this quickly without getting wax on slats, staves, painted surfaces, canvas or other such coverings. Use a piece of heavy paper cut in a circle so that it fits over the stud nail. The head is exposed and wax can be applied without spoiling areas around the head. Much time can be saved with this method and surely avoids frustrations. The wax may also be applied with the eye makeup applicators.

❖ METAL PARTS

Next, you will do the metal parts of the trunk if, it is that kind. Occasionally an embossed metal is nice enough that only cleaning is necessary. This is rare! You are lucky if you own such a trunk. The first one we did belonged to Alice's father and was well cared for. It was stored in an upstairs room; one of the few that we restored that the embossed area was nice enough to not have to refinish. We put a coat of satin varnish on these areas after cleaning it to brighten it up a bit and not make it look over done. Put masking tape on the wood areas, while doing the embossed areas or any areas to be redone. Embossed metal which needs to be redone may be done different ways (that we have done) and will look nearly as it was originally.

1) Paint it with gloss oil base enamel, the color desired for the raised design. A hint with colors: you may want to add a little black to a medium blue to grey it to make it more like the color used originally. Experiment a little before you put it on your trunk. Red is difficult to tone down to a pleasing color and the trunks we have done in red were medium red as it came from the can. (That was a customer's desire, as it was to go with her decor.) A navy blue is achieved by adding black to medium blue.

Flat paint or metallic paints, such as gold, silver or copper, will not work with this procedure – don't try it! after the paint is thoroughly dry, which takes at least 10 days or two weeks, depending on the weather and the place in which the work is being done, you may proceed with the next step. The paint is dry to the touch, but we have learned that this process should not be rushed. Use a wax in the color desired for the background. These

waxes (Rub N' Buff and Treasure Gold) come in many colors. Here again, it is a good idea to put masking tape on the wood and remove it as soon as a section is finished. (This will prevent the tape from harming the finish on the wood) Use the wax by using an old toothbrush, rubbing in on a small area of the embossed design. Use a soft cloth to rub it off the raised part of the design. If you put wax on too large an area, it dries before it can be rubbed off the raised areas. (We suggest a spot the size of a baseball) Some of the combinations with this method are navy blue with light blue, red with metallic gold, black with silver, blue with silver or gold, ivory with gold and many others.

2) Paint the embossed metal the color desired for the background and let it dry thoroughly. Using a very small brush, paint the raised design the desired color. One could use semigloss paint for this method. This method is very time consuming and not always successful.

3) Another method which may be used on the embossed metal and much easier and more quickly done – one we use the most, on customers' trunks as well as our own. Use one of the waxes in the color desired for the background. It may be applied with the old toothbrush, and again, be sure to mask the wood before the job is begun and remove it as a panel is completed. With the eye makeup applicator, use the color desired of Rub N' Buff or Treasure Gold and apply to the raised design of the embossed metal. Some beautiful combinations can be achieved. If the color is not dark enough, it can be repeated. Any of the Liquid Leaf paints may be used on the background and is a bit shinier than you might like. Sometimes the craft shops do not carry all the colors and products that we need, but may order what you wish to use on your trunk. A satin oil base paint of a color of your choosing may be used on the background. Then use either Rub N' Buff or Treasure Gold on the raised design with the eye makeup applicator. Satin latex paint can also be used as the base application if desired.

If the trunk has a smooth metal, it may be painted in a color of your choice. Satin oil base paint is a good choice. We have done some in satin oil base in white, ivory, celery, pale blue. After thoroughly dry, very lightly scatter brush with metallic gold to give an antiqued look. This finish has been popular for us and we have done some in different colors for others. To make celery (very pale green), mix a little avocado green paint in

the white satin oil base paint. Use a brush that still has some use, cut the bristles off about in half, as the shorter brush works better and do not have too much paint on it.

An antiquing kit may be used on the smooth metal. There are several colors available. We have seen the antiquing procedure used on the embossed metals also. It needs to be done well or is rather unattractive in our estimation. It is very difficult to remove, if you are not happy with it.

We have done many trunks with the crystalline look in blue, green, brown, bronze, burgundy and mauve. (One application is sufficient) This is a product which, in the past was used in crafts. The clear is sometimes used on windows to give privacy and not shut off light completely. We toned down the green and blue with black. In doing this, there is a need to experiment to make the color desired. Orange Crystlcraze gives a bronze on the old metal. We mix the colors to coordinate with the lining material. This is the product that is not easily found in craft shops. As was stated earlier in the book, we have a supply on hand for custom work.

ORIGINAL CRYSTALLINE LOOK which is in good condition and nice enough, may be cleaned with mild detergent and water and a spray finish used to give it a fresh look. Using a satin clear finish that is brushed on is another way to give a fresh look.

More pointers on the use of Crystlcraze: There is a tendency for this finish to fade if it is in direct sunlight. This procedure must be done in a well ventilated area away from heat, pilot lights. Also, it is not advisable to do it outside because of insects, dust or any particles in the air. We have a room in the basement that can be closed off and has windows to give extra necessary ventilation. Once this painting is begun, it should be completed, as it shows in the places where there are "stops and starts" again. If Crystlcraze is being used, it is very important to have the metal free from oil, rust, old paint remover residue, etc. After the metal has been steel brushed and sanded, additional cleaning should be done with turpentine, acetone and glass cleaner. Acetone is good to remove the Crystlcraze if you find it is not making a satisfactory finish. Some metal have dark, ugly, discolored areas which sometimes cause reactions of some sort. It is urged that the Crystlcraze is tried on a small spot on such discolored metal. If not satisfactory, remove it and

clean more thoroughly. After all these tests, it may be wise to choose a different finish on the trunk.

GREAT GLASS, which is available in the craft shops, can be used on the smooth metal and has similar ingredients to Crystlcraze, and needs to be used with the same instructions as the Crystlcraze. There are many colors and results in a glossy, transparent finish. This method was used by a 4-H'er several years ago with a beautiful result.

GOLDEN CRYSTALLINE is another way to restore the original golden look, which is in fair to good condition. One such trunk was worn off on the top sections and a few other places. All of the metal was carefully cleaned with mild detergent and water. A feather should be one taken from the wing and fairly large. Dip the feather in the silver paint, wipe off the excess and using short strokes to give the sunburst look. Use light oak (wood finish by Miniwax #210B Golden Oak), put on three coats to match the good Crystalline on the trunk. Different colors of the stain may be necessary to match your old Crystalline; however, one needs to be careful not to use a darker stain, as the crystalline look will not show through. Twenty-four hours drying time is required between applications. After this process, use one coat of polyurethane clear satin finish by Miniwax to protect the finish. (It might be a good idea to do some experimenting on the back, as metals take differently) Also, with the above method, it may be necessary to finish one side at a time. This idea was used by a 4-H'er several years ago with beautiful results and earned her a Purple ribbon at the State Fair.

RUB N' BUFF AND TREASURE GOLD may be thinned with turpentine a little or just enough to enable brushing it on the smooth metal. We have used Olive Bronze for one customer. Pearl Blue, Sapphire Blue, Pewter and Silver have also been used and we feel it is a good choice for the smooth metal. Sometimes more than one application is needed. It gives a soft, delicate looking finish. We have used Spanish Copper for many trunks, as it is a neutral and fits in with most decors.

OLD GUN METAL LOOK—The smooth metal trunk may be restored in the old look. We are seeing this some. In the process, one needs to clean it thoroughly, mend holes for safety sake and sand those spots smoothly with 0000 steel wool. The small dents add character and authenticity. This

metal should have a protective clear spray or clear finish brushed on to prevent rust. However, the wood slats and staves should be smoothly finished. Rough wood is not desirable. The hardware may possibly be done in pewter and highlighted with black or visa-versa, and new handles, leather lift, if needed treat with Neatsfoot Oil to carry out the old restored look. If the stay or lid hinge is missing or broken, they should be replaced. We also suggest that the rollers on the bottom, if missing, be replaced to protect floors, etc. Satin black paint is suggested for the ends and trim or the old gun metal look could be used. For the inside, we suggest a very old fashioned looking wallpaper covering be used or use a varnish clear finish might be appropriate. Sometimes the odor of such a finish could be offensive.

❖ **LEATHER COVERED TRUNKS**

Those that can be restored are a real challenge! If the trunk has been well cared for, naturally it is much easier. The leather should be cleaned with saddle soap and the use of warm water and oil may help to soften old brittle leather. Another way to clean leather is to mix baking soda and toothpaste; then rub on the stains on the leather. Clean with mineral spirits or 0000 steel wool very carefully. Then use a darker shoe leather dye to make the leather look all the same. We have cleaned leather this way, but have not tried the leather dye. We suggest that it be tried on a small spot at the bottom on the back of the trunk. If you do not like it, it will not show very much. There may be torn places, rips or worn spots. These may be mended by gluing in like-leather. Try to make these spots as smooth as possible. Be careful in using Neatsfoot Oil. Try it on the back. Sometimes it makes the leather quite dark and undesirable. Many applications of neutral shoe or purse cream will not discolor old leather, as much, and will soften it. This needs to be repeated occasionally. There are leather dressing products at leather shops which are good for this purpose. Try them on the back before the entire trunk is done.

❖ **TRUNK STRIPPED OF BAD LEATHER OR CANVAS**

You may like to cover such a trunk with a heavy vinyl with a cloth back, canvas or upholstery material. Generally, canvas is an unbleached color, occasionally in colors. Upholstery material and canvas should have a protective application

with a commercial spray to resist soil after it is applied to the trunk. NOTE: If the slats, hardware, end metal can be removed, finished separately, it is much easier to fasten the vinyl, canvas or other material. This is a good way to do a very poor trunk which needs a lot of repair work. The slats and hardware can be done quickly and there is no problem with either soiling the material. If staples are used to hold the covering being used, they must be used so they do not show. Glue should be used to fasten the covering on edges and other scattered spots. When using canvas or other material to cover the trunk, we have found that it is more satisfactory to glue more than a few scattered spots. Some canvas and thinner materials need more adhesive. It is a good idea to mark on the wrong side of the slats in some way. It will help you remember where they were originally on the trunk. The end trim metal, after it has been painted, is nailed on the trunk and the slats are replaced, having already been refinished, and the hardware that also has been redone is returned to the correct places. The nails could be painted, if desired. With this method, the covering can be fastened tightly. This works much better than cutting strips to fit between the slats. It is very difficult to do a neat job and push the material under the slats in order that it will stay there. If the fabric has a pattern, care must be used in matching.

❖ CANVAS OR LEATHER TRUNK THAT HAS BEEN STRIPPED

Such a trunk may be of nice wood and can be finished in the natural with a satin finish after it has been sanded. It is nice then to make the slats and staves darker, or vice versa, for a beautiful contrast. That would be a choice for the individual to make. The wood should be well sanded, as mentioned above, and holes of any kind filled before the finish is applied.

❖ CANVAS COVERED TRUNKS

Many canvas covered trunks had straps fastened on the back which slipped through leather loops on the top and buckled below the lid in front. Often the straps need to be replaced. This leather should be treated as other new leather. They are rather expensive and the individual may decide not to have them replaced or really do not want the long straps. In that case, the holes left from the strap loops should be filled. The canvas may

be done by using the base coat of the antiquing process or a satin latex paint. If there are rips or snags in the canvas, these places may be mended with a fabric of similar weave. Attach the little patches with glue which dries clear. Allow it to dry completely before applying the base coat or latex paint. We do not use the glaze with the base coat (antiquing kit), although we have seen some trunks that were well done with this method. When it is not well done, the result is often displeasing and have seen some like that. As stated before, it is very difficult to remove once it is on the object. We use the satin latex, two applications, allow to dry, then use a satin clear finish on the latex for a protective coating and have good results. A friend used the base coat, liked it so much she did nothing more to the canvas, but we feel it needs a protective coating for better wear.

The edges of the lid next to the metal rim should be painted in a suitable color. Also the top edge of the body of the trunk one inch down from the edge of the body of the trunk. Be sure to paint a half circle for the arch where the stay is in the lid and also the body of the trunk.

❖ METAL TOOLING COVERED TRUNK

Copper or aluminum tooling metal are other choices for smaller trunks. Copper is more expensive but does oxidize beautifully. Aluminum is cheaper but does not oxidize well; therefore, a tan stain varnish coating gives it a nice finished look. Intricate detailed tooling designs require considerable time to complete. They are very attractive when completed. It is easier to put the tooled metal on a flat top trunk - each section is done before nailing it on the trunk with very small nails.

❖ EMBOSSED WALLPAPER COVERED TRUNK

The paper covering on a small trunk is a method used by a 4-H'er some years ago. We are sharing this unique idea with you with the 4-H'er's permission:

The embossed paper is imported and may be ordered from The Renovators, PO Box 2515, Conway, NH 03818-2515 - 1-800-659-2211 Mon.-Fri. 9:00 a.m.-5:00 p.m. EST. Several patterns are available. We have used "Fancy Victorian" as it is a small pattern. Some patterns are larger and are suitable for use on walls. We used "Morocco" on a wall, painted it with stain latex to complete the project. The paper is available in double rolls 33'

long x 20½" wide (57 square feet per roll \$9.99 per roll plus shipping charges). We have been told that a paper similar is available at the Penney Stores, but we have not checked that out.

INSTRUCTIONS TO REDO A SMALL TRUNK: remove all old covering, slats, staves, hardware, hinges, etc. from the trunk (box and lid are now separated). Sand the wood, edges and the bottom. If the inside needs cleaning, it needs to be done at this time. Cut the paper to fit sides, ends, top and top of lid. It is a good idea to overlap the paper in order to cover all. If it is a round or camel back top, the paper may need to be cut in at least two parts for the lid. Try to plan this in order that a slat or stave will cover the seam. Use a good coating of wallpaper paste and proceed as doing a wall. Allow to dry. Spray evenly with acrylic or varnish. Allow to dry. Use a color of your choice of the acrylic paints - there are many. It is wise to select a color that will be suitable for the colors of the inside lining which you will be using later. Apply paint to a small area, two or three inches in size and rub off quickly to leave a two-toned effect. Paint the edges of the lid, box and the arches at the position that the lid support will be applied. Allow the acrylic paint to dry. Use a satin Varethane to apply a final finish on the paper covered trunk. This serves as a protection and gives an antique look. The staves, slats, hardware, handles, hinges, lid support, etc. are reattached at this time. While some of the drying time takes place, you could redo the wood and hardware so they are ready to return to the trunk. The lining may be done with wallpaper or fabric. **NOTE:** We have used rose, blue and tan on small trunks.

❖ IMMIGRANT TRUNKS, TOOL BOXES

Immigrant trunks and tool boxes, as stated before, were usually finished with stain-like paint, black, green or dull red. Many are made of pine wood. (Refractory paint and its stain) Pine covered with penetrating red paint made by mixing red pigment (iron oxide) with skim milk or buttermilk. This paint was considered desirable, as it covered all knots and imperfections and gave an effect somewhat like mahogany and cherry. Other pigments used were lamp black (black trunks), brown sienna and green. It is difficult to remove from the wood, as it is a refractory paint that penetrates deeply into the pores of the wood. It leaves a stain that is even more difficult to remove. The commercial removers do not penetrate

this finish to enable one to remove it. The only way, we have found, is to remove all the iron hardware and banding. This can be painted while off the trunk, and satin black oil base is a nice choice. Then, using an electric sander, take off the stain paint. This usually takes at least three or four hours, depending on the size of the trunk and the amount of old finish remaining. Finer sanding paper is needed to complete the sanding process before a finish should be applied. It should be well sanded, as all wood. Zar or Tung Oil are nice choices on this beautiful wood that we have found under the drab paint. The other finishes listed for slats and staves are also recommended. Another way to finish these trunks or tool boxes is to use the antiquing method, or a satin oil base paint may be used. With these finishes, hardware may be brassed or some other choice may be used. Our preference is to finish them in the natural after the wood is sanded. It is more work, but the result is worth it.

❖ TRIM – ENDS AND BOTTOM PANELS

The next parts to do would be the ends, front and back, and bottom panels. This would be for the embossed metal (or the smooth metals) to paint these areas satin oil base black. Some like gloss enamel. If you have used another color on the metal, perhaps these areas should be the same. We have done some customers' trunks that way. For example, navy blue was used on the embossed metal highlighted with a gold and we did the trim navy blue. There might be many other choices and the individual must make the decision. We have had a few problems during past years with satin oil base and have seen the problem with the high gloss showing brush marks. Ebony (black) Run N' Buff can be used, and works quite well. A help in regard to the brush marks: here is a way to hide the marks. After using satin oil base paint, surface has been allowed to dry several days. We go ahead with the lining, if it is a rush job, and do the following later. Use a small soft cloth dipped in boiled linseed oil (cooking oil will work, we were told by a friend who does furniture refinishing), then dip into pumice or rottenstone and rub well on the painted surface. Polish with a clean soft cloth to achieve a soft matte look. It may not take all the brush marks away completely, but does help some. We have used different brands of satin in black oil base paint: Red Devil, Colony, Valspar Rustex, Ace Rust

Stop, True Test and others. If you have a favorite, that is fine. Flat black is one we used in the past. It tends to finger mark easily and does not clean with a damp cloth very well, and after a time it takes on a dull, almost gray, look. Gloss enamel is very shiny and some folks like it. A 4-H'er should include in her supportive statement the reason she chose the glossy look.

❖ LININGS

LINING THE TRUNK WITH PAPER – Many old trunks have cracks, chipped areas or a knot in the wood has been lost. This is not too great a problem with the template method in the application of a fabric lining. However, we do like to use masking tape on such cracks and cover the holes. You may fill the holes with cotton balls, anything which will easily fill the holes, then put medium heavy paper over these places, secure with masking tape. We keep on hand different widths of the tape for trunk work. Masking these areas makes for a smoother result in the paper lining. Also, it will help prevent the lining from breaking or tearing later. We suggest that the heavy paper, Laura Ashley, which also has companion fabrics, not be used for trunk linings. The patterns are beautiful, but it is very difficult to handle and one has problems putting it around corners. It does not adhere to the old wood of a trunk. Therefore, we advise our students to try to select something else. Also it is quite expensive. We suggest that you not select a wallpaper covering that has the cloth backing.

It is becoming more and more a good idea to select inside lining, fabric or paper, then coordinate to the outside. Paint, or whatever is to be used on the outside, can be mixed, toned down, etc. to blend with the lining. This is another thing we are suggesting to students – plan ahead to achieve a pleasing coordination. Remember, we finish the outside first, lay the lining aside and refer to it as colors are chosen.

Wallpaper covering is very nice for linings. There are many small prints available now of old fashioned designs. Some people frown on wallpaper. They feel that it is not sturdy enough, tears and other reasons. We do not agree with those reasons unless a very cheap paper or old left over paper is used. We have done trunks for others who preferred to have their trunks done with wallpaper rather than fabric. An average size trunk with a tray requires over one single roll. A large trunk with several compartments and trays covers re-

quires one double roll. Pattern match should be considered, but with many small prints there is not such a difference. Using a good grade wallpaper is easier to line a trunk, requires less time and we have found it is very serviceable. We have done many that have been in use for several years. A paper should be chosen to coordinate with the exterior, as we suggested before. When using pre-pasted paper, which is most of the time, we use the best grade of wallpaper adhesive or paste and do not dip it in water. This works very well on walls, but certainly does not, lining a trunk. Once was enough for us! Back to the paste – avoid the use of flour paste, as bugs may get into it and spoil your lining.

It is easier to line the ends first. On the end with the stay or lid support, be sure to cut out for the arch (where the half circle is painted), otherwise the paper will wrinkle and tear. It is best to cut this out as you are placing the paper in the trunk, as it is difficult to know exactly where it should be. Be sure to allow enough length to go around the tray holders. If the trunk has no tray, remove the tray holders, as they are not needed and there is no need of that extra problem in the papering job. We usually make a tray, if it is missing, and many are gone.

Occasionally a customer does not want a tray because of the nature of things she or he plans to store in it. Allow enough paper to go around the corners and the bottom. It is frustrating to find that the corners are not covered with paper. Trunks are not true, longer, wider, here and there, so do measure both ends and sides. We have done some trunks that were really "off." They are not perfect, probably because they are old and out of shape or were not true when built. Next, do the back and bottom. It is difficult to do it all in one piece to the top edge of the front because of difference in the measurements. Do the front with another piece. If the paper has a definite pattern which needs matching, be sure to watch this. When papering the lid, do the ends first. Clip it here and there, as again, it is best to make each section long and wide enough to go around the corners. With the Camel Back, it is necessary to clip several places to do a smooth job, and you do need extra length and width to cover ends, etc. When preparing the inside of the lid, it helps to position the trunk open on an old blanket to be able to work on the lid with more ease. In the lid of the Camel Back, the paper has to be cut to avoid wrinkles (a small print pattern surely helps). Also,

if you have retained a picture, it takes some thinking ahead to paper around it. If the lid has extra compartments or covers, there is more study to be done. Generally we paper the tray covers, any compartment covers separately, and use small brass or pewter hinges to attach them. It is easier and there is no problem of wrinkling, tearing and becoming worn looking. Remember to cut out for the arch around the lid support in the lid. By closing the lid down part way and watching, one can tell about how far the support goes and you will know about how much to cut out. If the trunk has a tray, it is covered last. With paper it should not be too tight and is wise to try it before it is papered. Sand it down a bit if necessary. A few layers of paper make a difference. Better to make any adjustments before it is covered than to find it fits too tight later. If you should have this problem, one end can be shortened and repapered. Usually, there is more space from front to back, but do check it. The ends should be done first, covering the bottom, back and front one inch or so. Also, covering the top edge and inside of the ends one inch or so. If the tray has curved ends, be sure to allow enough paper to cover all areas as suggested above. Before doing the divider, paste 1½ strip or wider if need be, on the front over the top edge of the divider and down the back of the tray. This way the divider will be covered with the paper you are using. Clip at the ends of the divider on the inside of the tray. Remember that the width of the strip of paper will vary with the thickness of the wood in the tray. Cover both sides of the divider, allowing some to go around the corners, also the bottom of the tray. Do the inside of each end, cut out the finger holes with a sharp knife after the paper is dry. To make the finger holes look neat, glue braid of an appropriate color in the holes. You may use the correct width of each side of the divider to finish the inside of the tray with the paper. We have found that it is best to use a length of the paper in two pieces; one from the back to the front bottom, the other the length from the inside bottom over the front of the tray and be sure it is long enough to reach under the tray. The bottom should also be covered to finish it nicely. If the tray is not quite true, it may be necessary to make a few slits to make the paper cover nicely. If you have no picture in the trunk, old trade cards, greeting card pictures or photographs of a relative may be used. Braid could be glued around it to give it a "frame."

❖ OTHER PAPER COVERINGS FOR TRUNK LININGS

- Sheet music
- Road maps
- Sheets from old catalogs
- Wrapping paper
- Gift wrap paper
- Sheets from old fashioned pattern books

Generally speaking, the above papers are not sturdy enough to use with wallpaper adhesive. Mod Podge should be used and with this method preserves these fragile papers nicely. We have seen some trunks done by this method and are quite attractive. Some have been done by combining a very small pattern wallpaper covering on the ends, bottom and the lid with wallpaper adhesive using the Mod Podge method to apply pages of old fashioned shoes, clothing or other items from a very old catalog. There are reproduction catalogs from which pages could be used. If you are doing this sort of combination, you would need to decide which to do first and plan out how the corners are to be covered.

❖ BRAIDS AND TRIMS

It adds to the trunk to use a harmonizing braid or trim on the tray and trunk edges, or on the inside edge of the trunk body. If desired, trim may be used in the lid around the picture, as mentioned above. Around the picture it is easier to glue strips in place. Also, it is nice to glue braid around the arches and use upholstery nails to fasten it. On the edges of the tray and trunk edges, the braid can be glued or fastened with upholstery nails. The Scroll and French braids are available in many colors. We suggest that the edges of the trunk be painted in a color that will harmonize with the lining. Some of the edges are not good; the paint and the braid covers the bad edges. Another purpose for the braid and upholstery nails is to cover seams and little mistakes we have made. We all make them! Many people like the metallic braids and we have done a few. Sometimes these braids tend to over power the lining or clash with the interior. Others may need such trim to add some spark. It is really a personal thing, we feel, and is certainly the privilege of the individual. You may measure the edges of the tray, trunk edge and allow more for turning under to determine the amount needed. White is not practical and lace is rather fragile, and suggest if it is used, to select the Cluny lace, as it is a bit heavier.

It is best to fasten it under the braid with the upholstery nails. We have done some for customers and fastened the lace so it is toward the inside of the tray and not on the trunk edge. That way it is not so apt to be snagged or torn. In regard to the braid, one of our 4-H'ers was unable to find the braid in any store to coordinate with the lining and the outside of the trunk. We did some experimenting in this case, using green and blue Rit to achieve the grayed turquoise. Some trims may not take the color evenly, depending on the content of yarn or fibers; therefore, one needs to try it on a small piece. We used ivory colored braid and it worked fine.

❖ FABRICS RECOMMENDED FOR LININGS

- Percalé
- Gingham
- Provincial Prints
- Chintz
- Old Fashioned Calico
- Broadcloth Prints
- Velvet
- Velveteen
- Crush Velvet
- Corduroy
- Quilted Prints
- Lightweight Upholstery Fabric*
- Taffeta (moire or plain)

*Many of the upholstery fabrics have a soil resistant treatment on the wrong side. It resists the glue to some extent and is difficult to hold the glued edges on the template. You may need to use masking tape to hold it in place.

The following fabrics we have seen used and do not feel they are suitable. Some are difficult to handle, some are not sturdy enough and some fade readily:

- Terry Cloth
- Stretch Materials
- Very Sheer Materials
- Felt
- Fur Fabrics
- Burlap

❖ OTHER LINING MATERIALS FOR TRUNKS

Cedar is very nice, as the cedar has a nice fragrance.

Cork is suggested, but we have not used it.

Both are suitable if the trunk is in bad shape, although the thickness cuts down on the inside

space, but on the other hand no other covering is needed. It does make the trunk heavier. We have put cedar (tongue and grooved closet lining) in the bottoms of many trunks for customers. Also, the sides and ends up to the level of the tray bottom. This, especially, makes the trunk heavier.

Contact or adhesive vinyl is not recommended, as it does not adhere or remain in place in trunks very well.

❖ APPLYING FABRICS TO THE INSIDE OF TRUNKS

Be sure to press fabric as you go. This would not apply to the velvets, velveteens or like fabric. Often there are wrinkles from being folded or when placed on the bolt. You may need to use a spray starch to help eliminate the wrinkles.

Fabric may be applied in different ways: 1) Fabric may be applied with a spray adhesive and needs to be used in a well ventilated area because of odor and fire danger. Do read the labels on these products! Fabric needs to be cut to fit each section. The spray adhesive is applied to the section being worked on. The fabric is carefully pressed in place. Try to avoid wrinkling of the fabric. We use the spray adhesive in the Wardrobe trunks; the drawer fronts and the sides where the hangers are positioned. The Scroll or French Braids can be glued on the edges of the drawer fronts to conceal the raw edges as well as the other side where the hangers are placed. With the Wardrobe trunk it is usually necessary to paint the outside of the drawers (sides, bottoms, backs). The inside of the drawers may be done template method, padding and fabric. The area behind the drawers should be painted to give that area a finished look.

2) The best grade wallpaper adhesive is suggested for the application of fabric to the inside of the trunk. We think this method may work better with gingham or material of similar weight. We did it with a suede cloth with a woven back which is heavier and it did a fairly good job. We suggest trying it on a board first to see if you like it. The lining wood needs to be sanded to have a smooth surface for this method. Glue, thinned, is also suggested as an adhesive to apply fabric to the inside of the trunk. We have not tried this method, but a friend did and liked the result.

3) Fabric may be applied with a homemade old fashioned wallpaper paste. We have seen a trunk which was very well done inside and out and earned the 4-H girl a Purple ribbon at the

State Fair several years ago. She used her grandmother's recipe for the paste and a light-weight print fabric to line her trunk. This recipe takes about one box of cornstarch, heavier material, or the size of the trunk could make some difference. We recommend this method for application directly to the wood, which should be painted to be sure all nail heads are covered. If this is not done, the nail heads will rust and also cause rust spots on the lining.

CORNSTARCH PASTE – Mix cornstarch in cold water until well mixed. Cook it for a little while until it is the right consistency and clear (not too thin, but just right to spread and to work with). You may need to add water to thin it, as it thickens later as it stands or cools - add **HOT WATER**. When it thins, stir well and keep free of lumps. Use a wallpaper brush to apply the paste to the fabric. **NOTE:** This paste should not be made by adding boiling water to the cornstarch and cold water. It needs to be cooked to make a good adhesive.

4) The template method for fabric linings – read following before beginning the lining – This is our favorite method to apply fabric to the inside of the trunks. We do more fabric linings with this method than any other kind of lining and have learned a few short cuts through our experiences with different fabrics. Many fabrics with all over patterns may be used either way (be sure that you use the fabric throughout, the way you have chosen to use the fabric). Also, by using the selvege as a top or bottom there is not as much waste, and if the fabric is off grain it will not be as noticeable. With some fabrics with an "up and down," this is not possible. For the template in lining trunks you will need padding (quilt batting such as Mountain Mist, 100% polyester), heavy paper about the weight that is used for posters. Anything heavier, such as corrugated cardboard is awkward and bunglesome. Also does not give a neat job because it is so thick. Many trunks have extra reinforcement for the hinges, drawbolts and locks back and front by the use of, perhaps, a one-fourth inch or so board or the corrugated cardboard on the inside front and back. (if needed both places as the trunks are not all the same), helps in doing the lining. It may be fastened with glue and staples (staples needed for this should be the longer type). After that is done, the templates fit much better. The glues, which dry clear and fairly quickly, work well. We do not use the hot glue. If you can handle it, you may want to use it. If there

is a problem it cannot be adjusted because of the fast drying of the hot glue. We have had to take some out and cut more off an end or side, so we use Elmers glue or similar brand. Remove the tray holders, cover them with a single thickness of the fabric, gluing securely, and nail them in after the inside walls are completed. When doing a trunk with the quilted fabric, you do not need the batting. It will help to carefully trim out the filler along the edges to avoid bulkiness around corners, etc. when attaching to posterboard. You will want some padding with velvets, velveteens, crushed velvets, print broadcloths, calicos and any suitable material not quilted. When using velvet, velveteen or crushed velvet, be very careful to not allow glue to spill or smear on the right side. Velvet is very fragile to work with, but makes a very elegant lining.

Corners at the bottom, upright corners and all such corners in the tray and in the lid can be covered by gluing narrow strips of materials in all these places to be sure the wood does not show after you put the sections in place. When using the quilted material, take the stitching out to use in the corners. Also, if you think you may run short of fabric, use a plain color which goes with the fabric lining for the corners. One 4-H'er used the paint that she had used on the embossed metal as her base application. The reason that you need to place material in the corners is that most trunks are not true. While the posterboard may be cut exact there will be places that are not completely covered. After you have gone to this much expense, it is frustrating to have bare wood showing. We use one layer of batting, unless someone wants more. In the bottom, it is nice to use two layers. In the lid, perhaps, as many as three or four. The tray bottom might have two layers. That would be up to you on how much batting you might like to use. If the trunk has a tray, it is advisable to not use padding on the ends, front, bottom and back of the tray. If you should desire the padding on these places, be sure to check to see if it will not interfere with the body of the trunk when the tray is placed in the trunk or removed.

We have seen trays that did not fit nicely in trunks. Sometimes they are so tight that they are nearly impossible to remove. Also, when the tray is so tight, the fabric is harmed. If more padding is desired throughout the trunk walls, be sure to try the tray before proceeding with the covering and lining, especially if the tray is padded on the outside. You will be surprised how much differ-

ence this will make. If you are using a heavier fabric such as corduroy, there will be still more difference. The posterboard may be cut and made to fit to some extent for covering with padding and fabric, but do the ends first. Each time a section is glued in place the other spaces become smaller. The need to fit the back and front again if you have cut them is very important. This applies to the lid, tray inside walls. After the template is fitted, mark it on the back with arrows to indicate top and bottom, right or left, etc., because the trunks are not true or are out of shape. The padding which is cut to the shape of the template may be stapled at the corners. Tap the wrong side on the staple, then it will not be noticed when someone touches the inside of the trunk. With the quilted fabric, you probably do not need the batting for padding. Please watch the nap when using corduroy or any fabric that has the "up and down." Most of the velvets, velveteens can be used either way, but check them before proceeding with the lining. After the template is padded, cover with the fabric, allowing enough to be turned under. Be sure to trim some to reduce bulk on the corners. The heavier the fabric the more this is necessary. Before you have glued all but one side and the bottom, try it in the section in which it is to be glued to see if it will fit. It may need to be cut down or it may reach up above the edge of the body of the trunk or the edge of the lid. This is the time to cut it down in the places that are not right. If it is too tight, it will buckle and it will not cling fast to the wall of the trunk or wherever it is to be placed. Again, remember how much difference the material makes.

Back to the problem of buckling which can happen with any of the sections. One cannot have a smooth job. I have had to take a few out, take it apart on one side and the corners to cut away enough to make it fit better and then reglue. The edges of the template should be glued carefully and several places on the back. To hold the template to the edges, the use of spring clothes pins will help until the glue sets. If the edge is too thick, the clothes pin could be reversed. If that does not do the job, put in upholstery nails just enough to hold it and remove when the glue is set. Remember to cut the arch for the lid support in the body of the trunk and in the lid. If you have cut the posterboard templates for the back and front, you will need to fit them in the trunk before proceeding with those sections. The templates for the end where the lid support in the body of the trunk

and in the lid need to be cut out to fit for the arch, you will need to cut this carefully, open and partially close the trunk in order that there is clearance for the stay or lid support to open and close correctly. If it does not, the lid will not close as it should. When you are sure that the arch is cut enough, the fabric may be put on the posterboard. It will need to be clipped in several places to make it fit nice and smooth. If necessary, cut it down when it is fitted in. Do that on the bottom because if you have a neat fit at the top for the lid support, it is simpler to cut the bottom off a bit and glue that edge to back of the template. The reason that the arch needs to be just right is to protect the fabric and, importantly, to have the lid close correctly. When you place the bottom section in the trunk, which, as we said before, may be padded more heavily or lightly padded, as desired, and also the tray bottoms, also the top big area in the lid, be sure to glue those trunk areas well, instead of applying the glue to the prepared templates on which the fabric is already applied. By doing it this way you, are able to prevent glue from smearing on the sides or other places that are already completed. Some fabrics, the glue can be sponged off, but others, such as velvet, are very "touchy." It is better to try to keep it off. When doing the lid, naturally a flat top trunk is much easier and would be done like the other parts. Double stick carpet tape is a help in a Camel Back. Use decorative upholstery nails in the lid to give the tufted look. A pattern can be worked out in the placement of the nails.

A Camel Back trunk can be heavily padded and it is easier to use a lighter weight paper for the template. It needs to be cut bigger, as when it is fitted, cut, to make the shape you will need. Tape the cut place when you think it is right and trim the sides wherever needed until it is right. The fabric you are using will make a difference, heavy or light weight. It usually requires several fittings to have the shape you will need. Be sure you use enough fabric to go around the template. You may think it is too much, but when the decorative upholstery nails are placed, the fullness disappears. It is a good idea to allow the glue to set several hours before the nails are applied. Remember to insert the nails so that they are in line with the staves or slats. If the wood in the trunk is thin, the nails may go through, and spoil the metal or the outside covering, and they may snag articles of clothing, etc., besides being injurious to hands.

If the lid has compartments with covers, it is easier to put the fabric on the covers which have been taken out. Perhaps they may have been replaced or repaired so they are already out, then use small pewter or brass hinges to reattach them to their places. Often these covers need to be made smaller to allow for the thickness of the fabric. We usually cut the batting to fit the covers. Cut the fabric and allow enough to tuck in, when they are stitched by hand on the sides. It does take considerable time, but it is a neater job. This method applies to the tray cover if there is one to be done. When it is time to place the tray holders, you will need to do some measuring in the lid, the depth of the tray, etc., and they may not be in the places they were originally because of the padding or the kind of fabric. Care should be taken in the placement of pictures in the lids of the trunks. Some customers choose pictures, photos, old postcards and we put them in after the lining is completed. Some of the prints really do not need a picture. It is something that the individual needs to decide. We have glued the braid that has been used on the trunk and tray edges, around the picture. Some have used the mirror craft procedure and framed with narrow padded of like fabric that has been used as the lining, we have seen at fairs. This has been popular, we have noticed, and would work very well in trunks.

EXTRA POINTERS FOR THE TRAY LINING – which, as we said before, you may finish last. We have also said before that you may need to make it smaller. It is a bit difficult to estimate just how much has to be taken off. If some of the material can be put around the tray without fastening it, you may get some idea. A tray that is too tight is difficult to use. It is very hard on the fabric and it is next to impossible to take out of the trunk. This was mentioned before and hope you do not make that mistake. Do not pad the ends of the tray. Cut the part for the ends allowing enough to go around the bottom, the sides and over the top edge and glue each of these areas well. If using the quilted fabric, you will need to cut out the filler to make a neat job and avoid the bulk. On the top edge of the divider top, glue a strip that laps over an inch or more and extends down two or three inches on the front and back of the tray. Here again, with the quilted fabric, you may separate padding from the material to avoid bulk. If this edge is curved you will need to snip a few places to make it fit as smoothly as possible. Another way to cover the edge of the divider edge

is to use a narrow strip of the lining fabric turned under once on each edge and machine stitched. It should be the width of the divider edge. Glue securely, especially at the ends. We hope you have not forgotten to apply narrow strips to all the corners, up and down or wherever there is an angle of any kind. You can still do it now before you go on with the next step. The finger holes in the ends where you have applied fabric need to cut several times, at least eight slits with a sharp scissor into the finger hole. Do not cut fabric beyond the edge of the hole. Glue these slits inward on each end and place a round object which fits in the hole. You may need to push with a knife blade the small points of the fabric around it to the inside on each end. Allow to dry thoroughly. Small plastic prescription containers work well.

When gluing the fabric to the ends of the tray, glue on the bottom and side edges. Be careful that the glue is placed away from the edges. These will be the edges, to which the covering around the tray will be stitched by hand a little later. If the glue is on the edges to be sewed by hand, it will be difficult to insert the needle. While lining with a moire taffeta the fabric itself was difficult to sew. I then used glue on the tray covering, carefully, and it did not show. With some fabrics this may work, but try it on something else before proceeding.

Next, it is best to cover the outside of the tray front, bottom and back. The easiest way I have found to do this is to cut a piece of the fabric, two inches wider and two inches longer than the measurement from the top edge of the tray, around the bottom and up the back side of the tray. With the quilted material, you may want more than two inches extra length because of the bulkiness. Better to have a little more than needed than not enough. Here again, you may want to remove some of the filler (quilted fabric) at the end that is to be glued to the inside of the front edge of the tray to have a good secure gluing job in these edges. Quilted fabric is difficult to hold in place and "likes" to shift. Be sure to glue this fabric to the front inside of the tray. Clip a little at the divider edges, have even allowance of fabric at each end of the tray. It is necessary to have the fabric glued straight, as you can imagine, you may have trouble when you go on with the next step. Be sure, if there is a design in the fabric that has an up and down that the fabric is cut correctly. Fold under and sew by hand, fastening to the fabric applied to the ends and the bottom. I use heavy

duty thread, if color is available, also beeswax the thread. Start at the front side of the tray and perhaps do about half, then do the other end by starting on the front again, to help keep it straight and tight. After this is completed on both ends, to the back of the tray, stitch the top edge as neatly as possible. The divider needs to be stitched neatly, then glue the extra lap on the inside of the back side of the tray. Another hint on applying this piece after it is glued on the front, is to allow it to "set" before sewing by hand. It is not likely to pull out of place. After this part is completed, the inside of the tray will be done with the template method with padding as the trunk body was done. You will do the ends with the finger holes after the piece for each end is covered with padding and fabric. Cut the batting for the finger hole before the fabric is applied, then make the eight slits and glue the points to the inside or on the back of the posterboard template.

The braid that is being used on the trunk and tray edges will be glued in the finger holes to give a finished look.

By using a braid or trim on the inside of the body of the trunk at the top edges, it helps to hold it all in place. Also adds a finished look. You may want to do this on the top edges of the tray to give it a finished look too. It may be put around the curved areas for the lid support but be careful with the nails so that they do not interfere with the closing of the trunk. Now that the tray is finished, the tray holders may be put in the correct places. You need to measure the depth of the tray and watch that the padded lid does not interfere with the placement. If desired the small nail heads may be painted, although the heads do not show that much. The nails need to be long enough to reach into the trunk wall and not go through on the outside of the trunk.

Another method we have learned and makes a very attractive inside covering in the trunk is to use a thin template with the lining fabric around the top of the body of the trunk to below tray holders, they may be covered separately to eliminate bulk and perhaps avoid the need to make the tray smaller. Then, proceed to pad as much as desired below the tray area and bottom. When using corduroy it may need to be turned under once and stitched, glued to the top edges and around the tray holders without removing the tray holders. This requires careful planning, one piece for each side, but does look very nice. Still another method that is attractive when all colors

are coordinated, is to paint the outside and bottom of the tray, also the inside edges and tray holders to eliminate making the tray smaller. We have seen this done when the 4-H'er ran short of fabric and she solved her problem.

If the tray does not have finger holes, small decorative hangers may be fastened to the inside ends of the tray. They should be the suitable size for the tray. Rug tape may be used if you can find a color that will harmonize with the lining. Loops may be made of the fabric stitched to give them more sturdiness is another choice for the ends of the tray.

Your trunk should now be ready to use and enjoy!!

❖ CONCLUSION

We hope that you do not stop with one trunk! If you do a few more, new ideas come along; perhaps from magazine articles, antique shows, flea markets, fairs and other sources. We have gotten oodles of ideas at fairs, then someone else will come up with an imaginative idea that is worth trying. New and different fabrics are shown that give more ideas. There are so many ways to redo trunks. We feel, too, that no trunk is so poor that it cannot be turned into a useful, beautiful treasure. You will make discoveries, as we did, and you may make mistakes, as we did, but that is part of creating.

We started this hobby several years ago. Alice started in her spare time many years ago and restored some for the children and continued doing one now and then. We began collecting different kinds and the bug really bit. About that time, Gerald, who had repaired trunks when he got around to it only, sold the sheep to the oldest son, Don, and family. He had always been so busy with the sheep operation and farming duties that he did not have much spare time to think about hobbies. At this time he decided to really "get into the act," during the winter months, as he still had the farming duties part of the year. He has been retired several years from fulltime farming.

We have done many, many custom jobs and do "Trunk How To" programs and find it is very interesting. A hobby, never dull, with new and different challenges. What pride there can be in accomplishment and especially to an "ugly old thing" that you have beautified and given a new life.

HAVE FUN AND ENJOY YOUR TRUNK!

Preserving Heirlooms

Documenting History

Preserving the Past

A New Take on Wood

Have a Trunk? Let's Create a Treasure

**Material Makeover: Repurpose &
Upcycle**

Family Keepsakes

Resources

Glossary

Material Makeover: Repurpose & Upcycle



A Nebraska 4-Hers Heirloom Treasures project

Success Indicator:

You will be able to successfully repurpose or upcycle an article.

Life Skills Practiced:

Wise use of resources, planning/organizing, goal setting, critical thinking, problem solving, decision making

Project Skills Practiced:

Brainstorming ideas to repurpose or upcycle an heirloom, antique, or other article.

Recently, “Do It Yourself” or DIY projects have become very popular! This is a great way to save money and it’s environmentally friendly as well. In this section of **Preserving Heirlooms**, the doors will be wide-open for creativity. You will have an opportunity to repurpose or upcycle different items. When you repurpose something, you are finding a new use for the object. Upcycling is taking an item that is useless with no purpose and finding a new use for it. If you have an antique that has seen better days and doesn’t have a purpose any more, start brainstorming!



EXPERIENCE:
now it's YOUR turn

Activity 1: Repurpose/Upcycle

Materials Needed:
Varies with each project

In this activity, the steps provided are limited. This is your time to get creative and explore ideas. There are many resources available to you for repurposing and upcycling ideas. Try your local extension office, the library, magazines, or explore the Web.

Below are a few websites to help get your creative juices flowing!

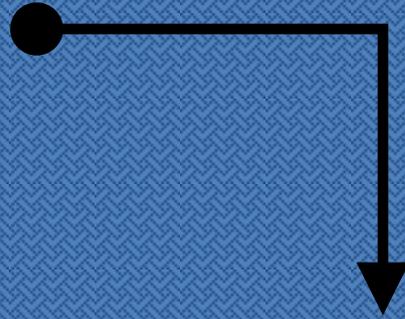
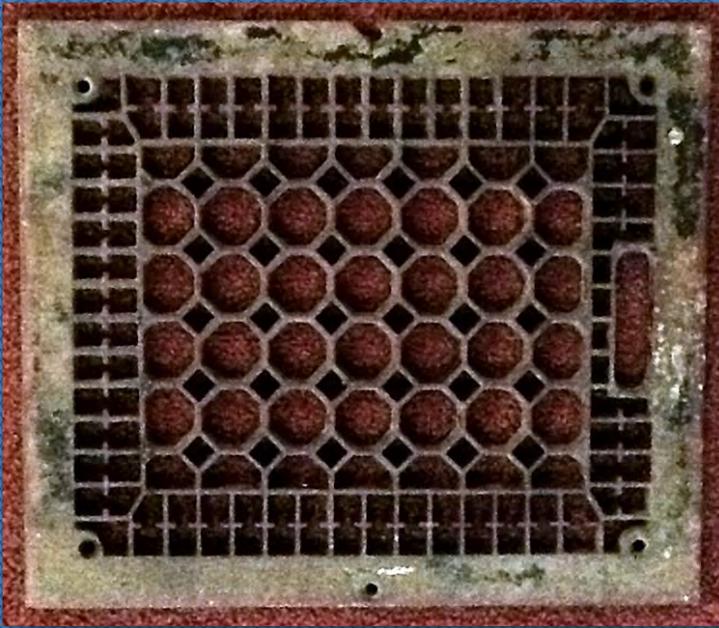
www.diynetwork.com

www.hgtv.com

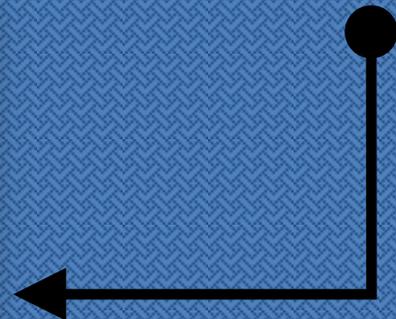
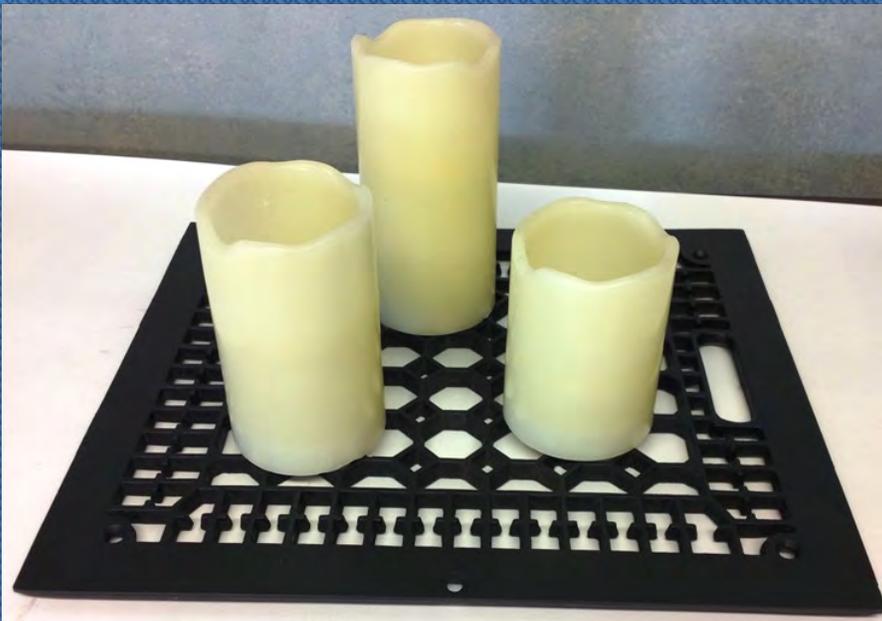
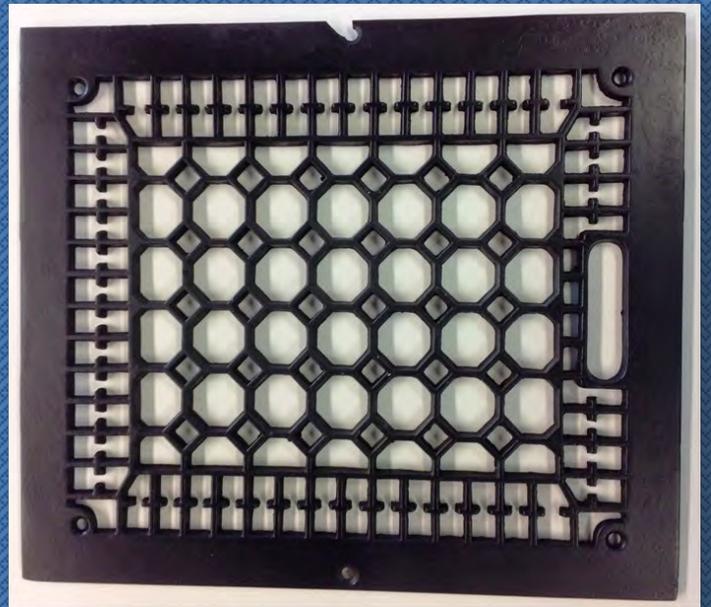
www.pinterest.com



Every item you repurpose
or upcycle is one less item
that will go to the landfill.
Help keep our earth
looking beautiful!



The above antique heat register vent was upcycled by giving it a fresh coat of paint and adding candles for a table centerpiece.



REFLECT: Here's What I Think

- One of the most challenging parts to Activity 1 is brainstorming an idea for your project. How did you overcome this obstacle?
- Did you develop a plan/goal with your project? If so, how did it help/hinder the time spent completing it?
- Besides brainstorming ideas, what was the most challenge part of this project for you and how did you overcome it?

APPLY: The Next Step

- You can repurpose and upcycle just about anything! Go to garage sales, thrift stores, auctions, or raid the attic. You never know what you might find!
- Help the environment and upcycle. For example: need a new entertainment center? Rather than spend a large amount of money buying a new one, make your own! Using an old dresser, take out a couple of drawers to hold the cable box and DVD player, paint the entire piece, change the hardware and voilà, your new entertainment center!! The ideas are out there, you just need to start looking!



Pictures courtesy of Jenna Huttenmaier.

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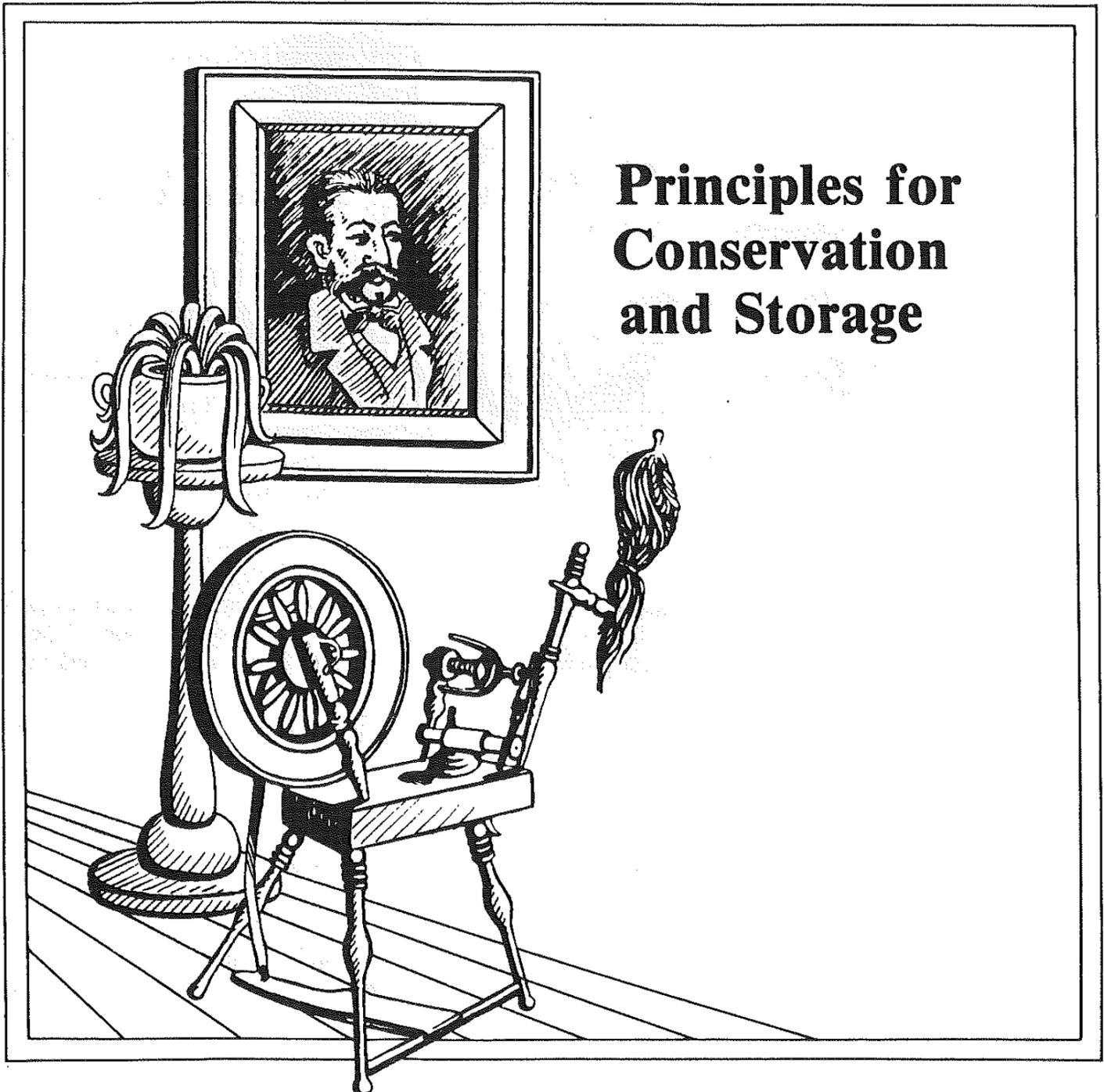
Family Keepsakes

Resources

Glossary



FAMILY KEEPSAKES:





North Central Regional Extension Publications are subject to peer review and prepared as a part of the Cooperative Extension activities of the thirteen land-grant universities of the 12 North Central States, in cooperation with the Extension Service - U.S. Department of Agriculture, Washington, D.C. The following states cooperated in making this publication available.

Purdue University
201 S. Second St.
Lafayette, IN 47905
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Iowa State University
112 Printing & Publ. Bldg.
Ames, IA 50011
515-294-5247

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Family Keepsakes: Principles for Conservation and Storage

Shirley Niemeyer
Extension Specialist-Interior Design/Home Furnishings



Some of the objects we possess are significant to us. These objects are cared for, cherished, and passed on to future generations with the hope that they will continue to be treasured. These objects are our "Family Keepsakes."

The Meaning of Things

Why are some possessions more meaningful to us than others? Keepsakes may reinforce and help to stabilize our sense of who we are. Scrapbooks, photos, and other memorabilia serve as visual evidence of our past. Keepsakes help us retain memories of people or experiences that have meaning, and they provide emotional support.¹

Possessions and memories can serve as anchors to self in changing conditions. Taking along keepsakes when

moving to a new residential setting can ease the transition. They can link our self-concept or self-identity to the new environment.¹

People find some types of items more meaningful than others. One study involving children and the elderly indicates that these groups cherish objects which may be classified as either *action* objects or *contemplative* objects. The objects children cherish are more often those representing action, such as a stereo, TV, or musical instrument. The elderly cherish objects that represent more contemplative action, such as photos, furniture, or books. The elderly also express more attachment to items that provide a connection to their past and the activities of their daily existence.²

Thus family keepsakes serve as a basis for self-identity, are reminders of people and experiences, and help to ease transitions. Caring for these possessions acknowledges their importance to us.

¹Boschetti, M. *The Older Person's Emotional Attachment to the Physical Environment of the Residential Setting*. Ph.D. dissertation, University of Michigan, 1984.

²Csikszentmihalyi, M. and Rochberg-Halton, E. *The Meaning of Things*. Cambridge: Cambridge University Press, 1981.



What is a Keepsake?

Heirlooms, collectibles, and antiques—each have identifiable characteristics, but can also be classified as keepsakes, as shown by the following definitions.

Keepsake—Something kept as a memento or reminder, or for sentimental value. A keepsake may also be an heirloom, collectible, antique, reproduction, or other object.

Heirloom—A piece of personal property owned by a family for several generations. It may have special monetary or sentimental value.

Collectible—Any object that is collected other than traditionally collectible items, such as art, coins, stamps, and antiques. Collectibles are usually products of the Machine Age and curiosities of the past. Normally, the object can no longer be purchased new. These are the more recent “old things” and may be “future antiques.”

Antique—Generally, something at least 100 years old, made prior to the Industrial Revolution (1830) and mass production, that has a handmade quality, with one-of-a-kind characteristics, and/or with some historical or cultural value. However, even the experts disagree on the “true” definition of an antique. The commonly accepted definition is anything more than 100 years old. Purists, however, use the year 1830 in defining antiques as this was the year determined by the government for taxation of imported antiques.

Safeguarding Your Keepsakes

Protecting family keepsakes involves (1) understanding the value of the items; (2) safeguarding them against natural disasters or theft; (3) keeping adequate records and inventories of the items in the event of insurance claims and legal actions; and (4) using appropriate storage, display and cleaning techniques.

Assessing the Value

Indiscriminate collecting of keepsakes having little sentimental, artistic, historic, or economic value can result in an accumulation of meaningless objects. Before deciding to keep an object, ask yourself these questions:

1. Does this object have sentimental value to me, or to anyone close to me?
2. Is this something I will wish to pass on to others as a memento or family heirloom?
3. Does this item have artistic value? Is it well-designed? Is the design or material unusual?
4. Is it of importance to my history or to the history of my family, community, etc.?
5. Does the object have economic value or potential for increasing in value?
6. Do I have a place to safely and adequately care for, store, and display the item?
7. Is it in a condition to be maintained, repaired, or displayed?

Know what you have, why it is important to you, and what it is worth. Keep records that prove the authenticity of items you have and those that are given to you.

Libraries and bookstores have many publications, catalogues, and price and identification guide books on almost every type of antique and collectible to assist you in identifying, determining values, and documenting items.

Appraisals

Before anything is sold, discarded, or given away, establish its value. You may want to have items you are keeping appraised in case you have to file an insurance claim and for other legal purposes.

To know specifically what your antiques and collectibles are worth and to document their value, you may need the services of a professional personal property appraiser. Appraisers of antique and collectible keepsakes should be specialists—people who have knowledge about current prices and who have expertise related to your specific items. They exchange an opinion about a keepsake’s monetary worth for a fee.

Spend as much time finding a qualified appraiser as you would looking for a professional in any field. Dealing with an appraiser who can provide references, or who is recommended by someone having had professional experience with that appraiser, is advisable. Avoid seeking appraisals from anyone who offers to buy your items or sell you theirs.

At this time, no states require testing or licensing to become an appraiser of personal property such as antiques. Ask the person being considered how long they have been in business, about their training, and what professional organizations they may belong to.

The Appraisers Association of American, Inc. (60 East 42nd Street, New York, NY 10017) provides a directory of its members for a small fee. Another source of information is the American Society of Appraisers



(Dulles International Airport, P.O. Box 17265, Washington, D.C. 20041). They provide a free pamphlet "Information on the Appraisal Profession".

Establish the cost of the appraisal **before** allowing it to be made. Clarify whether the fee is an hourly rate, a flat fee, etc. Always ask for an estimate in writing before the appraisal is made.

An appraisal should include a listing of the objects with the description, identification, condition, and value stated for each one. The appraisal should be dated, signed by the appraiser, and the purpose of the appraisal and the qualities and disinterest of the appraiser noted. Keep the appraisal in a safety-deposit box.

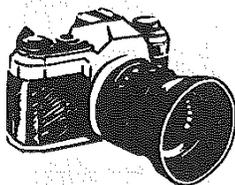
Estimating Value

Methods of estimating value include talking to dealers at auctions and antique fairs, and visiting secondhand and antique stores and flea markets. When talking to dealers, however, remember they are in the business of buying and selling.

Dealers you know that specialize in the items you are interested in may help you determine the value of an item. However, they may decline because they prefer to specialize in buying and selling.

Avoid indiscriminate discussions of your items in public places, with strangers, or with people you have not established as trustworthy. Avoid leaving items for appraisal. Use caution in revealing information about your family keepsakes, antiques and collectibles. If you must leave an object to be appraised, get a receipt for it.

Inventory Your Valuables



Keep a written inventory, description, and valuation of your keepsakes. If you can, photograph everything. An inventory, especially a photo inventory, serves as a memory jog, shows the existing condition of the items, and can provide evidence of their possession for insurance purposes.

If you decide to do an inventory yourself, ask for an inventory booklet from your insurance company or contact the Cooperative Extension Service office in your area for possible sources.

Photo inventories can be done by using a home video cassette recorder and video camera, or a 35mm camera.

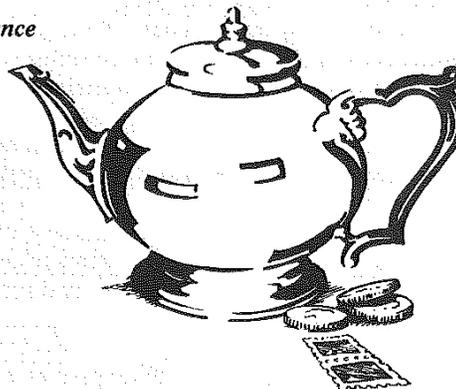
The camera should have a close-up lens to focus on small serial numbers, identification marks, or trademarks. Keep a list of your collection that includes a description of each item you photograph. You can also use a voice recorder to describe the objects as you photograph them.

Shoot each room at a wide angle. Then go around the room, photographing and listing each item. Take close-ups of particularly valuable objects.

Put the tape, photos, and inventory in a safe spot away from your home, such as a safety-deposit box. Keep two copies of the inventory, if possible. Keep descriptive brochures, sales receipts, professional appraisals, etc. with your written inventory. Update your inventory yearly.

An inventory will enable you and your insurance agent to determine if you have enough insurance coverage on your personal property, and whether you have items that are not currently covered. A household inventory can be a great help in a claims settlement. And, these records may help verify noncovered losses for income tax deductions.

Insurance



Homeowners and tenants insurance policies have built-in limits and exclusions in most package policies. **Read your policy carefully** or contact your insurance agent to check your policy limitations and exclusions regarding antiques, collectibles, etc.

Limitations *commonly* found in home package policies include: \$100 limit on coins and medals, \$500 to \$1,000 limit on stamps, \$500 to \$1,000 limit for loss by theft of jewelry, watches, precious and semi-precious stones, and \$1000 limit for loss by theft of silverware, goldware, pewter, and guns.

Under many homeowners policies you may only be reimbursed for your personal possessions at the value of the expected remaining life of the damaged item. This *actual cash value* is the replacement cost of the property minus a charge for depreciation.

Replacement cost is the cost of replacing or repairing property with materials of similar kind and quality,



without any deduction for depreciation. It is the full cost of replacing property at today's prices. It is not the same as *market value*, or what you could sell the property for.

If you think that your antiques and keepsakes are not adequately covered, evaluate the advantages and disadvantages of additional insurance.

Additional insurance protection for antiques and some keepsakes can be purchased under a "scheduled personal property floater" endorsement to your current policy. Normally, you will be required to list each item to be insured, with a description of the item and the amount of insurance you desire, along with evidence of ownership and verification of the item's value, such as appraisals, bills of sale, or photographs.

Some objects that have sentimental value to you may not be insurable under a scheduled personal property floater unless you can establish their monetary value.

Giving to Others

Safeguarding your keepsakes to pass on to others involves some additional steps. The giving of keepsakes to others is significant to many people. Passing on personal possessions may have a symbolic meaning such as representing the giving of a portion of ourselves to family or friends. Giving up control over possessions becomes important to some people. How they manage the process may be crucial to their sense of self-worth and well-being.¹

Deciding who is to receive specific items and writing down your intentions, or giving away items while you are alive, may serve to ease the transition and preparation for what the future holds.

The process may be handled through a "laundry list" or letter of last intentions — an attachment to a will. The "laundry list" outlines personal items to go to specifically named individuals, and is signed.

Preserving the Precious

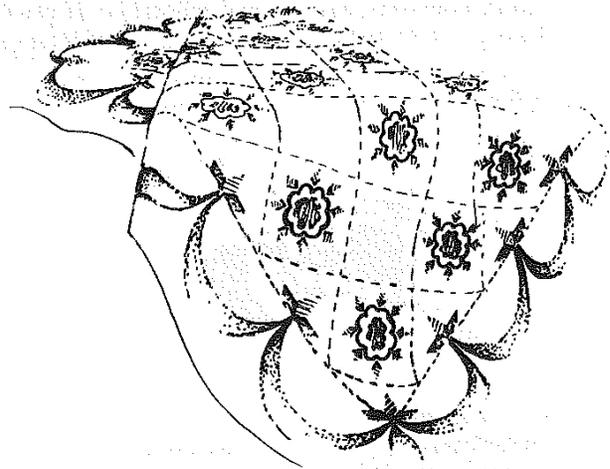
The keepsakes you collect add your individual personality to your home. However, the where-to-put-it problem may arise. Some people develop a "use all" policy. Their keepsakes are sat on, cooked in, served on, and displayed. Others attempt to preserve special keepsakes for the future. These keepsakes are displayed, stored, and cared for as carefully as possible. Most of us fall someplace in the middle in our care and use of keepsakes.

Before deciding how you want to display, store, and care for your keepsakes, review the seven questions in the "Assessing the Value" section. In addition ask yourself:

1. What is the item made of?
2. How long do I want to retain the item?
3. How long will the item last in its present condition?
4. Do I want to retain the item as closely as possible to its current condition?
5. What type of conditions are most damaging to the item?
6. If I attempt to clean, display, or store the item and it is damaged, how will I feel?

There are no hard, fast rules for storing, displaying and caring for your keepsakes. However, there are some guidelines. Storage, display, and care should be practical and within the means of you and your family in terms of cost, time, and energy. You will need to evaluate the following recommendations based on your decisions regarding the value of the keepsakes to you. Some of these may be easily adopted for particular keepsakes while others may be impractical or impossible. The decision is yours.

The first step in assuring proper care, storage, or display is to group the keepsakes which are similar in terms of care requirements. Items can be grouped according to similar needs for humidity levels, temperature, security, cleanliness, lighting, frequency of use, weight, and bulk.

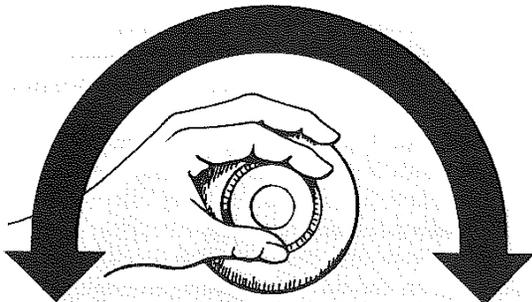


Now evaluate your available space for storage and display, using the same criteria used to analyze the requirements for the keepsakes. After selecting the areas you plan to use, check the conditions throughout the year.

Deterioration is often caused by a combination of environmental factors, such as heat, light, and humidity levels that are not suited to the item. Together, each may make the others more dangerous.



Environmental Control



Proper control of the environment is one of the most important conservation measures you can take to slow down the deterioration of keepsakes. Factors to be considered include **temperature, humidity, pollution, light, and vermin** (mice, insects, etc.)³.

You can't insure against some damage and deterioration happening to your keepsakes. However, you can extend their lives through 1) awareness of causes of damage, and 2) controlling the environment in which keepsakes are stored, used and displayed.

Rapid and frequent fluctuations in temperature and humidity are major factors that can cause severe damage to keepsakes. Even gradual changes can cause damage. Objects expand and contract. Ideally, temperature and relative humidity levels should vary as little as possible.

Fluctuations in relative humidity from as low as 15 percent in the winter to 80 percent in the summer lead to sweating on metal objects and hard surfaces. Paint and veneers peel and crack.

Air that is too dry and too hot causes paper, leather, and textile keepsakes to become brittle. Wooden objects shrink and crack. Objects kept too close to heat sources, such as incandescent light fixtures, radiators, and heat ducts, can also be damaged.

Warmth and high humidity, along with low light levels and stagnant air, create conditions for the growth of fungus, mold, mildew and dry rot. This is a problem especially with keepsakes made of organic materials. Paper objects show signs of foxing (brown spotty stains) or mold growth; starch paste and leather weakens.

A relative humidity of 55 percent is considered most suitable for woodenware, leather, parchment, and textiles, but it is difficult to maintain in a home environment. The acceptable range is 45 percent to 60 percent.

³*The Care of Antiques and Historical Collections*. MacLeish, A. B., editor. Nashville, Tennessee: American Association for State and Local History, 1985.

In air with less than 40 percent, static electricity increases, some fabrics and paper stick together, and organic materials dry out. In areas with over 60 percent humidity, wood objects swell, veneers may peel, metals oxidize, and mold may grow on organic materials.

Indoor air pollutants damage items. Smoke, soot, and gases such as hydrogen sulfide tarnish silver, rust iron, erode stone, bleach paper, or decay leather. Particles in the air can abrade items.

Home air filtering systems can help provide a cleaner environment. However, some of the systems, such as electronic precipitator filters, may give off ozone — a strong oxidizer.

Product pollutants can affect keepsakes. Contact with some plastics such as polyvinyl chloride, which can release gases, can result in damage to the item. Colored papers can stain keepsakes if they become damp. Inks used to mark outer wrappings can bleed through. Moth crystals can soften some plastics. Excelsior (fine wood shavings used in packing) can corrode metal objects.

Ordinary cardboard boxes, wood, pastes, tissue, and most papers contain acids that can cause chemical damage to the objects they touch.

Exposure of keepsakes to light can cause damage. Continued exposure to light in any form (sunlight, incandescent, or fluorescent) can cause permanent damage to keepsakes. The damage is caused by the ultraviolet (UV) rays and the concentrated heat produced. Daylight through window glass and fluorescent lights are strong UV sources.

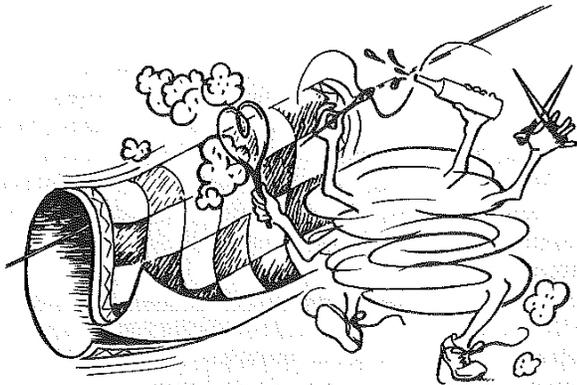
Heat and humidity, together with the UV light, cause increased oxidation and deterioration of organic items. UV light in large amounts fades and embrittles textiles, paper, dyes, and varnishes, and darkens or bleaches wood. The cellulose in wood, paper, and textiles is especially sensitive to light when inks and dyes are used in the materials. Leather, ivory, silk, wool and similar organic products are also damaged. All colors will fade with constant exposure to light.³

The effects of light cannot be reversed by storing keepsakes in darkness once the damage has occurred. The damage is cumulative.

Vermin can damage keepsakes. Consult publications that may be available through the Cooperative Extension Service office in your area for methods to control mice and insects.

Principles of Conservation and Care

Before attempting to clean, repair, store, or display a specific valuable item, consult references or specialists in the field related to the item. When in doubt don't touch! Valuable keepsakes have been damaged and destroyed by careless storage, displaying, cleaning, repairs, and "overrestoration." Avoid these "human termite" errors.



The financial and historic value of an antique or collectible is generally related to its original condition. Generally, it is best to retain original finishes, etc. The underlying principle is: *avoid any care, cleaning, or repair if it results in irreversible changes and damage.*

Pretest cleaning products, repairs, etc. Be aware, however, that even with pretests, damage may not become evident until months or years later. Even chemicals, materials, and methods recommended for use may damage some objects if certain materials or conditions are present.

The following guidelines will help prevent "human termite" error.

1. Maintain even temperature and humidity levels where valuable keepsakes are stored and displayed. Whatever the relative humidity level is, maintain as little daily or seasonal fluctuation as possible. If this is difficult, check the keepsakes often for signs of deterioration. At the first sign of problems, remove the item from the area, or work on controlling the humidity.

Humidity control can also be improved by using a humidifier or dehumidifier. However, failure to regulate portable humidifiers and dehumidifiers can cause extreme fluctuations in the humidity level when they shut down.

Avoid using the attic and basement for storing valuable keepsakes. An attic may appear to be a good place to store your keepsakes because it is dim. However, attics may have leaky roofs, and extreme temperature and humidity fluctuations. Attic temperatures can reach 150°F. Basements may have moisture problems, humidity fluctuations, and may flood. If these areas must be used, check the contents often for damage.

Hang valuable keepsakes on inner walls between rooms, and on walls that do not contain heating or

plumbing elements. Avoid hanging them near or over heating and cooling ducts, radiators, fireplaces, and on exterior walls.

2. Protect keepsakes from air and product pollutants. Wrap and box objects to be stored to protect them from dust and deterioration. Wrap fragile items individually. Label both the outside of each wrapped item and the box.

Use acid-free tissue or washed, unbleached cotton muslin to wrap items of value for long term storage. Blue tissue paper has no special ability to prevent aging, and is usually not acid-free. Acid-free tissue should be changed periodically. Some experts recommend that, ideally, muslin should be washed yearly and acid-free tissue changed on an annual basis.

It is best to avoid plastics in the storage of keepsakes because they may release harmful gases or generate static electricity which attracts dust. Moisture may condense inside of sealed plastic bags causing mold and mildew damage to the keepsake. If plastic sheets or bags are deemed essential for protection from attic leaks or water in basements, drape polyester plastic sheets over or place under rather than polyethylene, triacetate or polyvinyl chloride plastic. (As mentioned earlier, avoid storage of keepsakes in basements and attics if possible.) Do not allow plastics to touch keepsakes. Use a layer of washed, unbleached cotton muslin or acid-free tissue between the plastic and the item. Plastics should not be used with some materials, such as leather.

Storing keepsakes in (or on) acid-free tissue, boxes, and mat board or washed muslin slows down or prevents the effect of the acid from other materials, such as wood and ordinary cardboard boxes, from coming in contact with the keepsake.

Dusting and vacuuming often in the area will also help prolong the life of the keepsake.

3. Keep valuable objects in a low-lit area, away from direct sunlight and strong fluorescent lighting if possible. Consider blocking light sources with shades, or use lower light levels where items are stored and displayed. Shades, films, draperies, and blinds help control light. Use low UV fluorescent tubes, or special plastic shields that slip over fluorescent tubes, to reduce the UV light.

4. Use acid-free materials when mounting objects (newspaper and other paper items), including backing boards, tapes, etc. Pastes such as flour-and-water, wheat, or rice are less acidic, and therefore less damaging than most other pastes. However, flour, wheat and rice pastes are subject to mildew and household pest damage, and may bubble or ripple the item. Linen tape can be used for mounting. Check art supply stores for supplies. Before using on a valuable item, test each product for any initial staining or damage.

Photocopies of clippings can be mounted in scrapbooks and the originals placed in a dark, appropriate storage. Make new copies if the mounted ones fade.



Storage of Specific Materials

Common keepsakes include photographs, and wood, textile, glass, paper and metal items. Applying the previous principles of conservation and care may help to insure continued preservation of your specific keepsakes and extend their life expectancy.



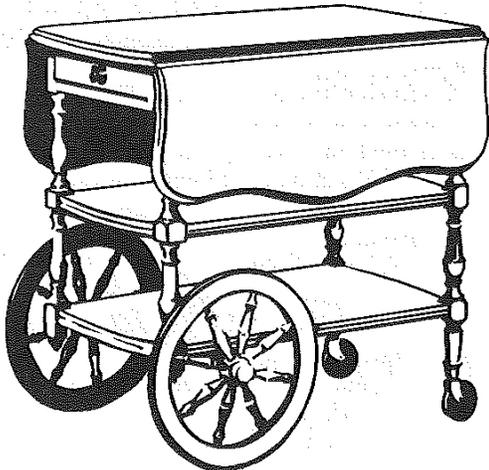
Photographs

Store valuable photos carefully in lower temperature, humidity, and light levels. For example, color prints are best stored below 75 °F and 50 percent humidity, and in the dark. Avoid using plastic storage containers that may contain polyvinyl chloride. Acid-neutral boxes and acid-free envelopes are available. Envelopes and sleeves for holding photos and slides may be made of acid-neutral paper, or polyester, archival polyethylene, or triacetate plastic film.

Use photo albums with acid-neutral pages. Avoid waxed pages. Paper or polyester mounting corners can be used. Adhesive tape, white glue, rubber cement, paper clips, and moth balls or crystals can damage your photos. To label photos on the backside before storing or displaying, use a soft #1 pencil and press lightly.

Copy old photos first and then store the negatives in a dark place. Black-and-white negatives are fairly stable if well cared for. However, color slides may only last 10 to 50 years, depending on care.

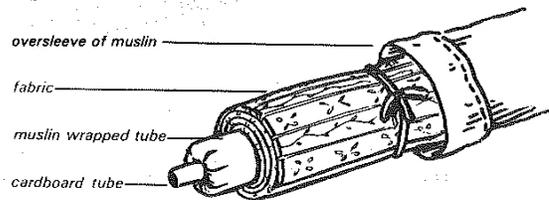
Wood



Wooden objects are protected by even temperatures, humidity control, cleanliness and protection from vermin. A relative humidity level of 50 to 55 percent is recommended. If possible, avoid placing valuable wooden items near heating or cooling vents or ducts; fireplaces; radiators; outside doors; vents or ducts; or in direct sunlight.

Wood stored in a damp basement with little air circulation is subject to attack by fungus, resulting in dry rot. Ventilation, cleaning, and regular inspection are the best ways to prevent dry rot and insect damage.

Textiles

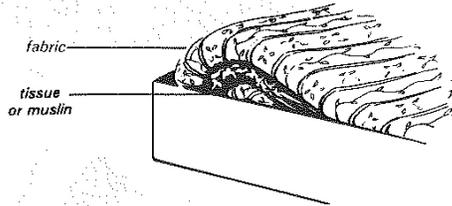
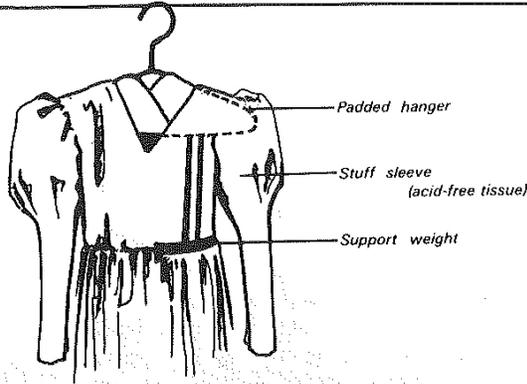


Protect stored textiles from moths, dust, light, and temperature and humidity extremes. Store textiles away from light. Temperatures of 60 to 65 °F and a relative humidity of around 50%-55% are suggested (living areas of home). Store away from an outside wall.

Effective insecticides can be toxic to humans and textiles, and must be used with care. Contact your local Cooperative Extension Service for information.

Textiles should not come into direct contact with wood, newspaper, or ordinary cardboard boxes. They become acidic which accelerates the chemical breakdown of the fiber. Protect the textile item with acid-free tissue or unbleached, cotton muslin that has been pre-washed to remove sizing. Replace regular white tissue yearly, or wash unbleached, cotton muslin or sheets yearly to return them to a neutral state. Acid-free tissue also needs to be replaced periodically. Remove plastic and metal buttons, pins, foam padding, and rubberized shields before storing as they may stain the item.

Store textile items flat and preferably unfolded. Avoid storing old textiles by hanging on metal hangers. Wire hangers put a strain on the shoulders of garments, and metal hangers can rust. If items must be hung, use sealed wooden hangers, padding the hangers and the shoulders of garments with polyester fiberfill and covering with unbleached cotton muslin to prevent damage and creasing. Flat textile items will not crease if hung over a round support or hung straight. Textiles can also be wrapped around a cardboard cylinder that has been covered with acid-free tissue, or washed cotton muslin.



If items must be folded, pad with muslin or acid-free tissue in the folds. Avoid continually refolding along creases as this will break the threads at the crease. Refold occasionally in different places to distribute wear at folds and creases. Do not roll a folded item.

When vacuuming a textile item, use the lowest suction of a hand held upholstery attachment. Place a pre-washed fiberglass screen or piece of nylon tulle over the textile item to protect it when vacuuming. Bind the screen edges with white cotton twill tape. Non-flat areas can be vacuumed by attaching net over the bare nozzle.

Glass



Store glass items in a stable environment, away from heating and air conditioning vents, radiators and strong light. Store valued glass keepsakes in areas with a relative humidity of 45 to 50 percent. Avoid areas of extreme temperature fluctuations.

Glass can be washed by hand in warm water with a deionized soap, such as Orvus®, or a mild detergent. A water conditioner (softener), found in grocery stores, can be added to the water in hard water areas. Irreversible silica filming or etching can result from washing some types of glass in a dishwasher. Heavily soiled glass bottles can be cleaned by *gently* swirling a handful of uncooked rice or fine sand in water in the bottle.

Dust glass often with a damp cloth as dust can scratch and abrade glass. Dusting with a dry cloth may scratch the glass. Feather dusters or soft brushes can be used.

Paper



Extremely high or low humidity levels, high temperatures, and light cause rapid oxidation and deterioration of paper, as well as brittleness and fading. Store paper items out of direct sunlight. Valuable papers can be kept in acid-free folders in low light areas. A steady relative humidity of 45 to 60 percent and a temperature of 60 to 70 °F is recommended.

Paradichlorobenzene moth crystals can be used with stored paper items to reduce small infestations of insect pests. But remember that moth crystals are toxic.

Some damaged paper items can be repaired. Test methods and materials before attempting repairs. Water-soaked paper can be dried between layers of clean, white blotter paper (don't weight it down), or air dried on top of blotters. Erasing powders, or artist's soft vinyl or kneaded erasers can be used carefully to remove smudged areas. Most commercial pastes and pressure sensitive tapes cause permanent stains when used to mend paper. Wheat or rice starch paste can be used, but the paper must be weighted.

Metal

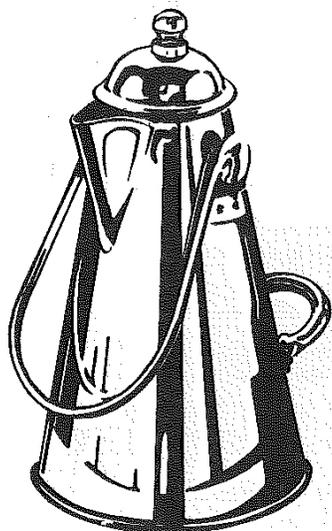
Metal keepsakes exposed to high levels of humidity or ozone will oxidize more rapidly, forming an outer layer of oxidized metal. Salts and acids can damage metals.

The metal most susceptible to corrosion is iron. Avoid trying to make iron objects look new. Over-treatment and oxidation are iron's most common enemies. Small, valuable iron objects can be cleaned by removing dust with soft brushes and very mild abrasives. If warm water is used for cleaning, be sure objects are dried thoroughly. If a clean environment and low humidity do not provide enough protection, warm the iron piece and apply microcrystalline wax or beeswax (not paraffin). This process is reversible.

Painting valuable iron antiques with black spray paint can affect their value. If the object originally had a brightly painted or shiny finish, and its condition is so bad the original finish cannot be saved, a variety of cleaning methods, such as fine bronze wool or very fine emery cloth, can be used. Avoid using harsh abrasives or wire wheels as they will permanently scratch the sur-



face. Chemical rust removers remove rust, but also etch the iron to some degree. If chemicals are used, be sure to rinse and dry the iron object thoroughly.



Examine the finish carefully before cleaning copper and its alloys including brass and bronze. Improper treatment can affect the historical or economic value of these metals. To clean *unlacquered* brass or copper, use a rottenstone and mineral oil paste, or a paste made of two parts denatured alcohol, two parts distilled water, and powdered whiting. Proportions are not crucial. Test first. Some household cleaning remedies, such as vinegar or lemon juice mixed with salt, can leave chlorides that cause re-oxidation and should be avoided on valuable pieces. Avoid using harsh abrasives, such as coarse steel wool, on copper, brass, and other soft metals.

Oil, grime, and the residue of skin oils can be removed from unlacquered brass and copper by cleaning with alcohol or mineral spirits, or a mild detergent solution. Alcohol applied with a cotton swab can be used for touch-ups. Use caution when working with any solvent. Also use caution with chemical cleaners, especially those with ammonia, on valued brass and copper items. Residues can start new corrosion.

The Wrap Up

In addition to preserving the keepsake, preserve information about the item. Who used it? Where did it come from? How old is it? Who are the people pictured in a photograph, and when was it taken? Who has owned it? Attach this information to the item in a way that will not damage it, or include it when storing the keepsake.

If you need more specific information about how to preserve or display a valuable keepsake, consult a pro-

fessional conservator. You might also contact a major professional organization such as the American Association for State and Local History (AASLH) or the American Institute for Conservation (AIC).

AASLH (708 Berry Road, Nashville, Tennessee 37204) publishes books and technical leaflets on the collection, care, and preservation of items, maintenance of historic sites, and other subjects.

The AIC (3545 Williamsburg Lane N.W., Washington, DC 20008) publishes a newsletter and the *Journal of the AIC*.

For additional resources, consult historical societies, libraries, museums, and private collectors.

Sources of Supplies

For supplies, such as acid-free paper, contact area paper or art supply businesses. Mail order sources include (but are not limited to) the following sources. Catalogues are available.

Conservation Resources International, Inc.
8000 H Forbes Place
Springfield, Virginia 22151

University Products, Inc.
P.O. Box 101, 517 Main Street
Holyoke, Massachusetts, 01041

Conservation Materials, Ltd.
Box 2884, #240 Freeport Boulevard
Sparks, Nevada 89431

Product and business names used in this publication are for information only and do not imply endorsement of products or businesses named nor criticism of similar products or businesses not mentioned.

Definitions

Acid-free — As used herein, acid-free refers to any paper having a pH of above 7, or an alkaline buffered paper.

Acid-neutral — In this publication, any paper having a pH of 7, or a neutral pH, is considered to be acid-neutral.

Deionized soap — Soap that has had ions removed from it.

Microcrystalline wax — A plastic material derived from petroleum refining. This wax results in a harder finish than other waxes, such as paraffin or beeswax.

Ozone — A form of oxygen with a strong odor; a strong oxidizing agent.



Acknowledgments

Appreciation is expressed to the following content specialists and reviewers:

Margaret Boschetti, Assoc. Prof., Textiles, Clothing and Design Department, University of Nebraska-Lincoln.
Richard Boucher, County Attorneys Association.
Donna Boudreau, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Patricia Crews, Asst. Prof. Textiles, Clothing and Design Department, University of Nebraska-Lincoln.
Ann Dodge, Paper Conservator, Nebraska State Historical Society.
Jeannette Friesen, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Anita Hall, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Jill Jank, Extension Program Specialist-Home Economics, Nebraska Cooperative Extension Service.
Sheila Johnson, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Kurby Kreiter, Nebraska State Department of Insurance.
Betty Maier, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Sharry Nielsen, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Karyl Newman, Lincoln Questers Club.
Kathleen Parrott, Extension Specialist-Housing and Interior Design, Nebraska Cooperative Extension Service.
Gail Potter, Curator of Museum Collections, Nebraska State Historical Society.
Kathy Prochaska-Cue, Extension Family Economics and Management Specialist, Nebraska Cooperative Extension Service.
Genevieve Remus, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Dick Spencer, Curator of Education, Nebraska State Historical Society.
Carolyn Straub, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Ed Sudderth, Archaeologist, National Park Service.
Krestie Tolstedt, Extension Agent-Home Economics, Nebraska Cooperative Extension Service.
Rose Marie Tondl, Extension Specialist-Clothing and Textiles, Nebraska Cooperative Extension Service.
Janet Wilson, Extension Consumer Education Specialist, Nebraska Cooperative Extension Service.

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In cooperation with NCR Educational Materials Project

Issued in furtherance of the Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and Cooperative Extension Services of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, North Dakota, Ohio, South Dakota, and Wisconsin.

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Preserving Heirlooms

Documenting History

Preserving the Past

A New Take on Wood

Have a Trunk? Let's Create a Treasure

Material Makeover: Repurpose & Upcycle

Family Keepsakes

Resources

Glossary

Resources

The following are available as additional resources to help preserve your heirlooms:

Nebraska State Historical Association

<http://www.nebraskahistory.org/conserv/index.shtml>

International Quilt Study Center: To Protect Preserve

<http://www.quiltstudy.org/discovery/resources/publications/downloads.html>

State Archives of Florida

<http://dlis.dos.state.fl.us/archives/preservation/Photographs/index.cfm>

Kansas Historical Society

<http://www.kshs.org/p/preserving-china-and-glassware/12263>

Library of Congress

<http://www.loc.gov/preservation/care/paper.html>

Smithsonian

http://www.si.edu/mci/english/learn_more/taking_care/appraisal.html

Saving Your Treasures

<http://www.netnebraska.org/basic-page/television/saving-your-treasures>

Care of Quilts: Cleaning

<http://www.ianrpubs.unl.edu/epublic/live/g1821/build/>

Care of Quilts: Storage & Display

<http://www.ianrpubs.unl.edu/epublic/live/g1820/build/>



Resources

Preservation of Metal Items

<http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1638&context=extensionhist>

Restoring Hardware

<http://www.doityourself.com/stry/how-to-clean-brass-antique-furniture#.Uw4cfs5mDIV>

http://www.ehow.com/how_5645437_restore-antique-hardware.html

Rubbing out the finish

<http://www.homesteadfinishingproducts.com/htdocs/rubbingpolish.htm>

<http://antiquerestorers.com/Articles/SAL/rub.htm>

<http://www.woodworkingtips.com/etips/etip21.html>

Removing Shellac and Lacquer

<http://tlc.howstuffworks.com/home/how-to-strip-wooden-furniture.htm>

Popular Woodworking: Finishing for First-Timers

<http://www.popularwoodworking.com/techniques/finishing/finishing-for-first-timers>

Refinish Wizard: How to Strip Wood Furniture

<http://www.refinishwizard.com/stripping.htm>

Cleaning, Repairing and Reconditioning Wood Furniture

<http://extension.usu.edu/files/publications/publication/fl-hi-500.pdf>



Resources

DIY Network:

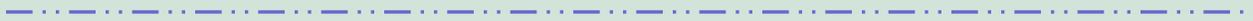
www.diynetwork.com

HGTV:

www.hgtv.com

Pinterest:

www.pinterest.com



For the “Preserving the Past” form continue on to the next page.



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GLOSSARY

Antique - An antique is generally thought to be something at least 80 – 100 years old. In addition, it has special value because of the craftsmanship, design, beauty or rarity of the item.

Acid-Free Tissue Paper - A tissue paper made without harmful chemicals that can destroy textiles. Can be found at some drycleaners or ordered on the Internet.

Collectible - A collectible is simply defined as something of value that a person takes time to collect! It may be an antique, but it might be something much newer. Sometimes the term is used to describe items that are less than antique age of 80-100 years.

Commercial Stripper - An alkaline or other solution used to strip finish from wood furniture. The chemical reacts with the finish making it soft and easier to remove.

Denatured Alcohol - Alcohol that has been treated with another chemical to remove certain properties. Often used in cleaning. (Labeled as a hazardous chemical and all safety precautions must be followed. Use at your own discretion.)

Enamel - Term used for paint that dries to a very durable, hard finish.

Grain - The orientation of wood-cell fibers. When sanding wood, go with the grain of the wood.

Hardware - Metal ware such as doorknobs, hinges, etc. used on furniture.

Heirloom - Something of special value passed down in a family from one generation to the next. It could be almost anything, but it is often a piece of furniture, home accessories, jewelry, dishes or clothes.

Lacquer - A finish or coating used on wood. Once hardened it acts as a protective coating. Originally, lacquer was made from a resin from trees or from an insect called lac. Today, many products labeled as lacquers are made from polymers dissolved in volatile organic compounds (VOCs) or from acrylic compounds dissolved in several solvents. Lacquer is more durable than shellac.



GLOSSARY

Lintless Cloth – One which does not shed lint or short fibers when used. Cheese cloth or old cotton handkerchiefs that have been laundered many times meet this requirement.

Muslin – A lightweight, loosely woven cotton fabric.

Pumice – A spongy, porous stone of volcanic origin. Available as a stone or in powdered form at paint and hardware stores. Comes in No. 1, 0, F, FF, FFF, FFFF grades of coarseness. No. 1 is coarsest. Use an FFFF or the finest you can obtain or it may scratch surfaces. A mixture of very fine pumice powder provides a very smooth hand-rubbed finish. Mix the pumice with mineral oil or water. Don't use water on Shellac.

Rottenstone – A soft stone, sometimes called Tripoli after the country of its origin. Powdered rottenstone is used for fine polishing.

Repurpose – To give a new purpose or use to an article.

Sandpaper – A type of paper coated with sand or any other abrasive material. Sandpaper comes in different grits (how coarse it is). The larger the number, the finer the sandpaper. Very coarse sandpaper is 80 or 100. Very fine sandpaper is 400 – 600. The lower the grit number, the coarser the paper. Grit numbers can range from a low of 12 – very coarse to a high of 800 – extremely fine grit. Test a sample to be sure the sandpaper is not too coarse as it can scratch the wood or finish.

Sealer – Any finish used to cover surface of furniture to protect it. Usually refers to the kind used on bare or filled wood surface.

Shellac – A substance exuded from the lac bug found on trees in India, processed and dissolved in denatured alcohol for use as a coating on wood. It hardens by evaporation of the solvent.

Steel Wool – A fine mesh of metal coils commonly used as a kitchen abrasive or cleaner. Excellent for removing paint finishes, smoothing finish surfaces and polishing. Its coarseness is measured numerically; 4 is the coarsest and 0000 is the finest. Coarse steel wool can scratch surfaces, metals and finishes. It may work for removing paint. Use the finest grade for finishing. Test first for any scratching.



GLOSSARY

Tack Cloth - A treated cloth used to remove the fine dust that a dry cloth can't remove. Can be found in most hardware, lumberyards, and home stores. Tack cloths are important to use between the sanding and between each coat of finish for a smooth finish.

Upcycle - To convert useless items into new materials or products.

Varnish - A transparent or translucent liquid that hardens by oxidation and polymerization upon exposure to air. Considered here as made from resins, drying oils, and solvents. Varnishes are classified as oil varnish, turpentine varnish, spirit varnish, or water varnish, according to the solvent used.

Vintage - In the context of things you might collect, vintage items are high quality things from the past. Examples might be vintage furniture or vintage clothes.

Acknowledgments

Writers:

Gail Brand, University of Nebraska-Lincoln Extension Educator

Jeanette Friesen, University of Nebraska-Lincoln Extension Educator

Shirley Niemeyer, Ph.D., University of Nebraska-Lincoln Professor Emeritus,
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