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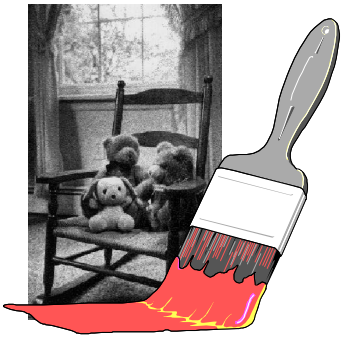

Wood Finishing & Refinishing

Fact Sheet #2

Selection, Use, and Care of Brushes

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1995 HI 22

Good results in wood refinishing depend to a large extent on the type and condition of the brush. A quality brush in good condition can make your refinishing job easier and give an attractive finished product. To get good results in refinishing, the refinisher should: (1) Select a good quality brush; (2) Use the brush appropriately; and (3) Clean the brush immediately after use.

✷Selection

When selecting a brush for refinishing, there are several things to consider. The first is the selection of the appropriate type of brush for the finishing product being used. Synthetic bristles are made of nylon, polyester, sponge or a blend of polyester and nylon.

Nylon brushes can be used for oil-based paints, but they are also recommended for latex or water soluble paints. Nylon bristle brushes, however, should never be used with shellac, lacquer, contact cement, or paint remover. These materials may soften or dissolve the nylon bristles.

Polyester brushes are recommended for use with latex and oil base paints, shellac, and varnish. Polyester brushes keep their shape and stiffness in any type of paint and will deliver paint smoothly and evenly. The polyester brush is a good all-around brush and will hold up quite well in paint remover. However, when applying contact cement or paint remover, an inexpensive polyester brush should be used.

A good natural bristle brush is a excellent choice when applying a clear finish to a wood surface. It is recommended for applying oil base paints, varnishes, and other finishes. Never use a natural bristle brush with latex or water-thinned paint because the bristles will absorb water and become limp.

Sponge brushes can be used with oil-based and latex finishes and paints. They are inexpensive, and can be thrown away after use, therefore, saving the cost of a cleaning solvent.

When looking for a good quality brush for refinishing wood furniture, here are some things to consider. The ferrule, or the metal band that holds the bristle to the brush should be firmly fastened to the brush in at least two places (See Figure 1, Brush Anatomy). Good quality brushes have aluminum or stainless steel ferrules to resist corrosion.

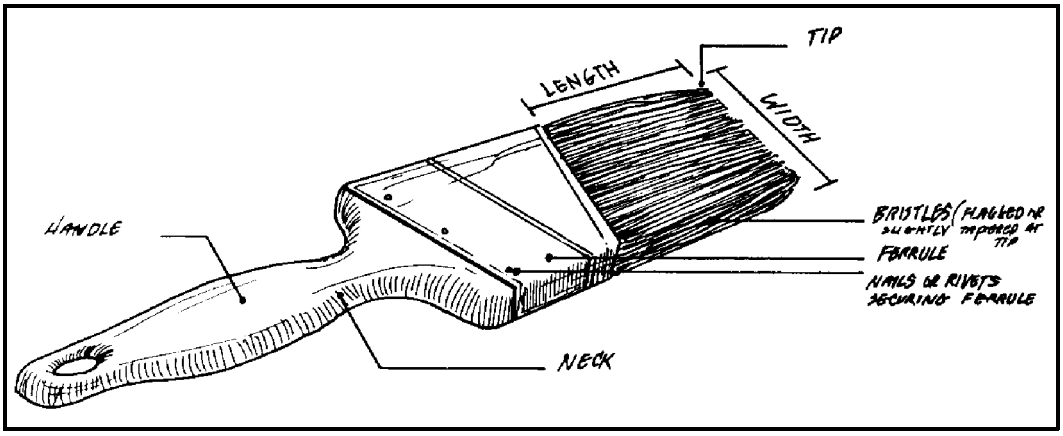

Figure 1. Brush Anatomy.

You can purchase different types of brushes for different uses. A very useful brush for refinishing is one that has a tapered end for painting in corners. Of course you will also need a brush that is straight across the end.

The filler block, just under the metal band and beneath the bristles, should be small. Many inexpensive brushes have a large filler block that leaves little room to include enough bristles. Quality brushes have small filler blocks with lots of bristles set close together. (See Figure 2, Filler Block.)

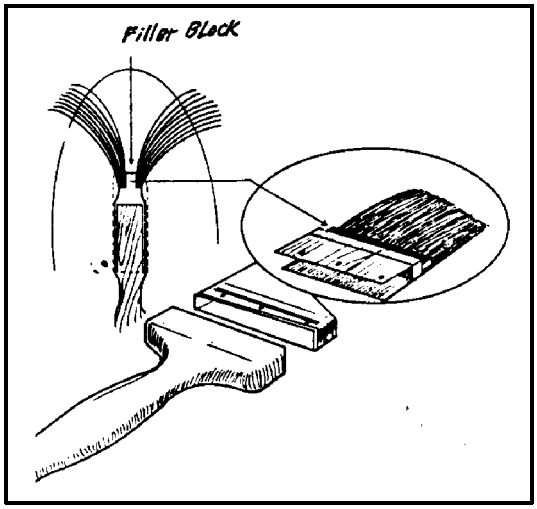

Figure 2. Filler Block.

The brush bristles should be soft. If the bristles are too stiff or coarse, don't buy the brush. It won't spread the finish smoothly. Press the brush bristles against the back of your hand. (See Figure 3,Brush Springs Back.) They should feel resilient and spring back into place without a great deal of stiffness. When pressed against a flat surface, the bristles should hold together and not fan out excessively.

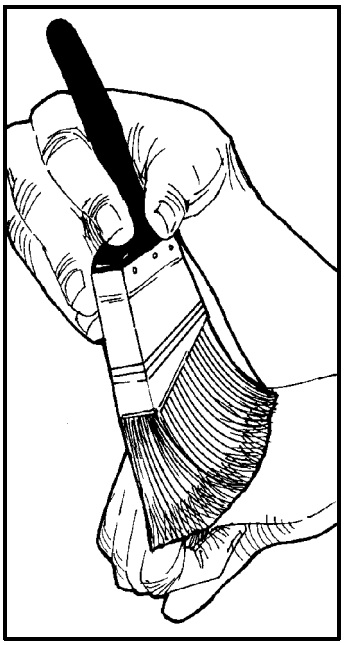

Figure 3. Brush Springs Back.

All bristles should be securely fastened to prevent any from falling out while the brush is in use. Work the bristles back and forth in the palm of the hand to make sure they are secure. Low-quality brushes have a lot of loosely set bristles which can fall out and ruin a good finish job.

In general, the bristles of the brush should be half again as long as the width of the brush. In other words, a brush 2 inches wide should have bristles about 3 inches long. This rule does not apply to very small brushes or brushes wider than 3 inches. The length of the bristles is what determines the resilience of the brush (its ability to spring back).

When you look at a brush sideways, the bristles should taper to a blunt chisel edge. (See Figure 4, Chisel Edge.) This is accomplished by variance in the bristle length, which permits a larger brush load of refinishing material than when bristle length is all the same. This also gives the brush tip a fine painting edge for

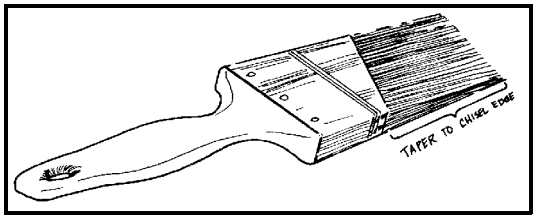

Figure 4. Chisel Edge.

more even and accurate work. Run your hand over the bristles. Some shorter ones should pop up first indicating a variety of bristle lengths for larger paint loading and smoother release. An inexpensive brush always looks sawed off when viewed from the side.

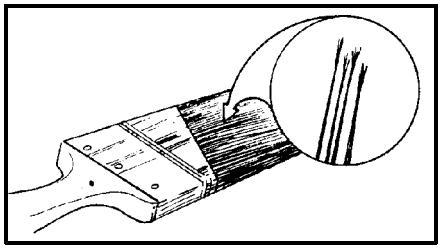

Figure 5. Flagging.

Each bristle end should be split several ways. These splits are called flagging. (See Figure 5, Flagging.) Flagging of the bristle ends is an indication of a quality brush. This feature determines how well the brush will hold the finish and spread it smoothly onto the wood surface. Cheaper brushes have less flagging or none at all.

✷Use

In order to get good results in refinishing wood, you should know how to use your brush properly. Few brushes are ever worn out. Most of them are ruined because of improper use and care. The following practical suggestions will help you get a good finish and extend the life of your paintbrush.

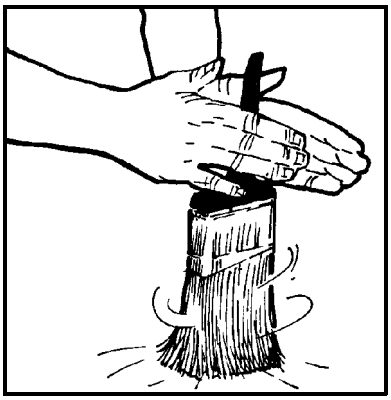

Figure 6. Removing Loose Bristles.

Break in the brush before using. This can be done by working the brush back and forth in the palm of the hand. This will limber up the bristles.

Spin the brush between the palms of the hands to get rid of loose bristles. Hold the brush up to the light and remove any loose bristles that are not attached to the brush. (See Figure 6, Removing Loose Bristles.)

Always use the proper size and type of brush. Never use a 3-inch brush when a 2-inch brush will do.

Never dip a brush into the refinishing material more than ⅓ to ½ the length of the bristles. Any more than that on the bristles will work up to the ferrule and dry, making the brush very difficult to clean.

When removing the brush from the finish container, never drag the bristles over the container's edge to wipe off excess finish. This practice will add air bubbles to the finishing material. Instead, push the ends of the bristles against the inside of the finish container. Do this just above the level of the remaining finish. (See Figure 7, Pushing Brush Against Inside of Container.)

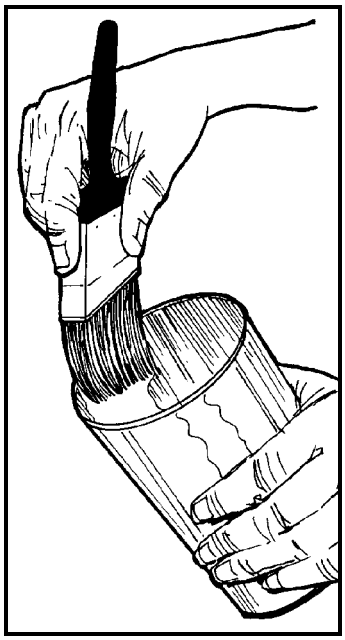

Figure 7. Pushing Brush Against Inside of Container.

Don't use excessive pressure on the brush bristles, you'll release too much finish. Each movement of your hand should be smooth and even as you stroke across the wood.

ALWAYS lift the brush gently from the surface at the end of

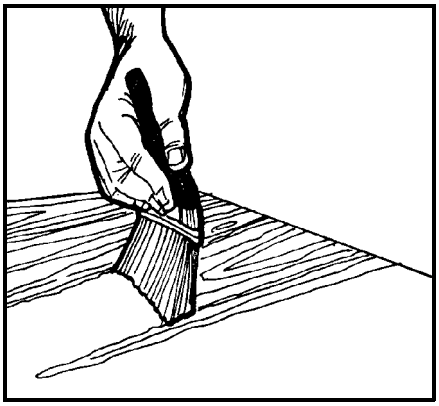

Figure 8. Even Coating Using a Brush.

each stroke to insure even coating. (See Figure 8, Even Coating Using a Brush.)

Brush all large surface areas both across and with the grain of the wood to avoid skipping any areas. After you have covered the surface, finish all brush strokes moving with the grain of the wood.

Never use a brush edgewise or draw a brush edgewise across the finish to remove excess paint. This practice will separate the ends of the bristles to separate permanently into clumps.

Always brush to the edge of the horizontal surface and from the bottom to the top of a vertical surface.

Never poke or jab a brush into corners, holes, or cracks. Instead, use the right kind and size of brush.

Brush all rounded shapes such as table legs around the circumference of the surface.

Never keep a natural bristle brush in water. The bristles will absorb the water, flare out, and become bushy.

Never leave a nylon brush in paint remover, acetone, or lacquer thinner. The chemical will soften or dissolve the bristles.

Never leave a brush standing on its bristle ends in a paint can. Instead, lay it across the paint can or suspend it with a thumb tack or rod through the hole in the handle.

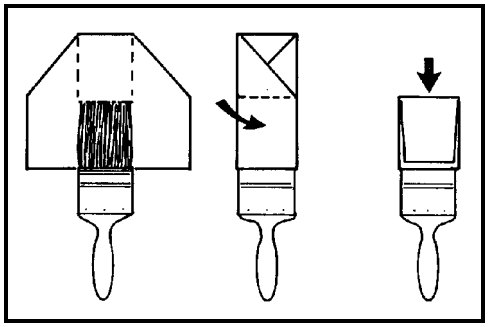

Figure 9. Brush Storage.

Clean the brush and keep it wrapped in heavy paper and laying on a flat surface when not in use. (See Figure 9, Brush Storage.)

✷Care

Brushes are expensive and should be given proper care. Always clean your brush immediately after using and before the finishing material has had a chance to harden in the bristles. Before cleaning your brush, check the label of the refinishing material you are using to determine what kind of thinner to use. Be sure and clean your brush using the appropriate thinner for the material. The following is a general guide of appropriate thinners for materials.

The Right Thinner for the Right Use

Material	Thinner (Solvent)
Wood Filler	Paint thinner, naphtha, or turpentine
Oil Stain	Paint thinner, naphtha, or turpentine
Varnish	Turpentine, naphtha, or paint thinner
Shellac	Denatured alcohol
Enamel	Turpentine, naphtha, or paint thinner
Oil Paint	Turpentine, naphtha, or paint thinner
Lacquer	Lacquer thinner
Latex Paint	Water

✷Care Steps

1. Rinse brush in appropriate solvent.
2. Repeat cleaning in solvent three times.
3. Wash brush with warm water and soap; work suds into the bristles. Rinse with clear water. Repeat until all thinner and finish are removed.
4. Wrap bristles in paper towel and fold in such a way that bristles are held in original shape.
5 Store in area that will allow brush to dry. Natural bristle brushes may mold if drying cannot take place.

If brushes have not been cleaned properly and are stiff and still contain paint, try and remember which painting material you used with the brush and then use the appropriate solvent. If you cannot remember, try a few of the solvents to see which will work. If the brush has paint dried in it, soak for a few minutes, then use a fork or metal comb to separate hardened bristles and remove paint. Be sure to work on inner bristles as well as outer ones. Resoak the brush if necessary.

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