RESTORING FURNITURE

REPAIRING VENEERS

Veneers (pp.153-59 and pp.192-93) are thin decorative sheets of wood fixed onto a solid core. Any veneer covering of an antique will have been attached using animal glue (p.169), so a loose veneer can often be secured again by reactivating the old glue using heat. A technique called "hot blocking" can be successful. This involves heating a block of MDF or plywood and placing it on top of a sheet of brown paper over the loose veneer. Pressure is then applied to the block with a cramp or weights. The heat from the hot block should soften the glue and the cramp or weights on the block will hold the veneer in contact with the glue while it cools and sets again. If this is not successful, warm animal glue will need to be introduced under the veneer, using a syringe. Animal glue should also be used when replacing pieces of damaged veneer with new veneer.



Hot blocking

The hot-blocking technique is often used to repair the veneer of antique furniture. In some cases, this method can be used to repair loose veneer on modern furniture – as long as thermoplastic PVA glue has been used.

FRENCH POLISHING

French polish is the finish most associated with antique furniture, although it only came into common usage in the 19th century. Prior to this, various varnishes and waxes were used instead. French polish is made from a natural product called shellac – a secretion from the lac insect that is dissolved in alcohol. Shellac has many other uses beyond French polish; for example, it can be used to stiffen ballet shoes and as a shiny coating for sweets and pills.

The technique of French polishing involves applying numerous coats of shellac with a brush or a pad. Each successive coat slightly softens the previous one, resulting in a homogenous build-up of polish. These layers are again slightly softened and evenly distributed around the piece of furniture using a pad, alcohol, and applied pressure. This technique burnishes the polish, ultimately achieving the high, blemish-free, shine most commonly associated with a grand piano. Although the process is simple in principle, it takes time and practice to perfect, and to develop a "feel" for the polish. Old shellac surfaces can be softened and "pulled-over" to rejuvenate them, but this requires exceptional skill and should not be attempted by the novice.

A newly French-polished surface is usually dulled with very fine wire wool and wax. The wax will not only soften the bright shine of the burnish, but will also protect the shellac.

COLOURING REPLACEMENT PIECES

Blending new pieces of veneer (or wood) to their new surroundings might first require the application of a bleach or an acid to lighten the new piece (remember to always take great care when using chemicals). Having achieved a base colour, ideally a shade lighter than the surrounding veneer, the colour can be adjusted using a combination of water stains and/or artist's acrylic paints. Remember that the final colour of the repair will be its "wet" colour; to reveal this colour and to seal the stain, apply shellac (a natural resin) to the repair.



Painting the figure

Having achieved a good background colour, you can add grain, figure (natural pattern), and even fake scratches so that the repair blends in with the original piece. Apply water stains and/or acrylic paints with a fine artist's brush then seal with a coat or two of shellac.

MATCHING NEW AND OLD WOOD

When a component, such as a chair leg, is broken, a repair or replacement part might be required. When working on antique furniture, this should be achieved by replacing as little as possible of the original piece. With contemporary furniture, however, it might be more practical to replace the whole part. In either situation, the challenge for the woodworker is to then finish the new part so that it blends in seamlessly with the existing piece of furniture. One way of doing this is to artificially accelerate the process of oxidation (newly cut wood gradually changes colour as it reacts with the oxygen in the air). This can be achieved by bleaching the wood with an acid.

REMOVING WATER MARKS AND STAINS

Marks and stains on an antique surface can usually be categorized as either "white" or "black". If the mark is white or light-coloured, it is usually located on the surface film of the polish. If the mark is black or dark-coloured, it is usually located on the wood itself, underneath the polish. The white, ring-shaped, marks that are often found on a French-polished surface are caused by either water or heat (typically from a glass or hot cup), which has discoloured the surface of the shellac. These marks can be dealt with using a very fine abrasive to "cut" the marks out of the polish. A traditional way of doing this is to use a paste made of cigar ash mixed with a small amount of vegetable oil. Alternatively, use burnishing cream or fine wire wool (0000 grade) with a little paste wax. Reducing black marks in the wood is relatively straightforward. However, as it involves first removing polish (to "access" the stain) and then reapplying polish, it can be a long process. Dark marks are generally caused by either iron staining (due to a reaction between the wood and a metal fixing) or ink, both of which can be reduced by applying oxalic acid. This process may be repeated as many times as is necessary to achieve the desired reduction in staining, with any final residue being washed off with water before polish is reapplied. Always take care when using oxalic acid and wear the appropriate safety equipment (see Work safely, right).

REMOVING MARKS AND STAINS



1 To remove marks and stains from a damaged surface, first use fine wire wool (0000 grade) and paste wax to remove the surface polish. This will remove any "white" marks, and allow you to access any "black" stains ingrained in the wood itself.

WORK SAFELY

Although oxalic acid is found naturally in many edible plants - such as

parsley, spinach, and chard - in its purified form it is extremely toxic

and corrosive. As such, you should always take great care when using

oxalic acid. Wear the correct personal protective gear (pp.74-75), including

gloves and goggles to protect your hands and eyes from splashes, and

work in a well-ventilated area). Keep a supply of water to hand so that

vou can wash vourself if splashed. If swallowed, drink plenty of milk or

water. Store oxalic acid safely and out of the reach of children.

a dust mask to protect your respiratory tract from noxious fumes (always



2 Apply a coating of oxalic acid to the wood. This will reduce the staining. Take great care when using oxalic acid.



3 Wash off any oxalic acid residue with water. Using a pad, apply layers of shellac. Carefully distribute it to produce an even finish.

CARE OF ANTIQUES

Everyday care of antique furniture is relatively quick and easy: • Sparingly apply a good quality furniture wax – one that contains beeswax and carnauba wax (derived from the leaves of the carnauba palm) – once or twice a year. Waxing more frequently than this can cause the surfaces to become too sticky, which attracts dirt and dust.

 Periodically wipe surfaces with a damp cloth and buff them with a dry cloth. This should be enough to keep antique furniture looking at its best between waxing. Take care when cleaning and dusting, as you may damage loose veneers or bandings.

• Regularly check for any loose joints, feet, veneers, or mouldings; glue them back as soon as possible to prevent further damage.



5 You may wish to soften the shine of the shellac by applying a layer of wax. This will also help protect the polished surface from water.





required, and continue to work the

polish around the surface until you

achieve a high finish.

