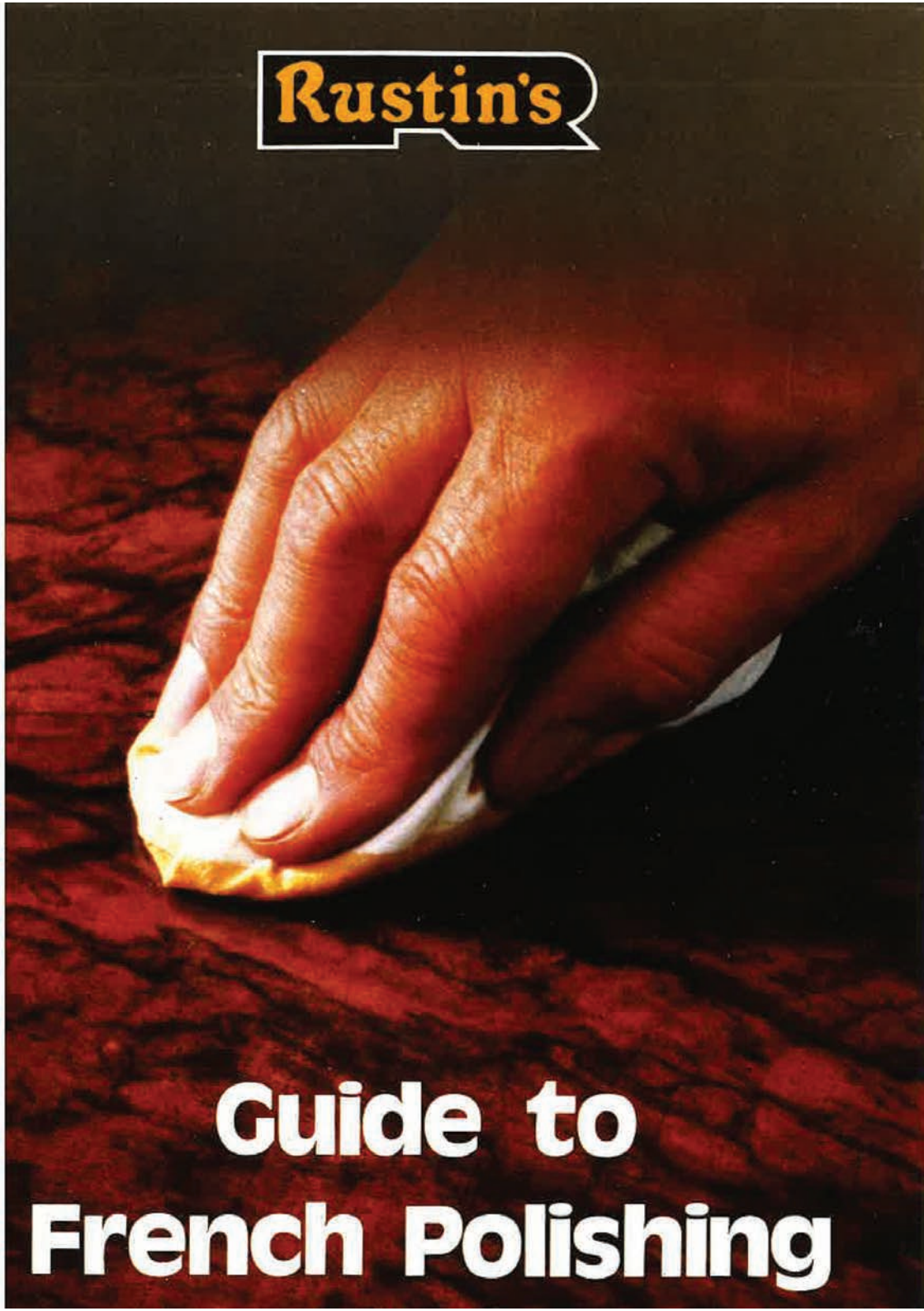
Rustin's



Guide to French Polishing

Guide to French Polishing

French Polishing is the name given to the process of coating wood with a solution of shellac dissolved in alcohol, using a "rubber" made of rag and cotton wool instead of with a brush. The alcohol evaporates, leaving the shellac deposited upon the wood. When applied correctly it produces what is possibly the finest looking finish for furniture. Shellac was first introduced into Europe about the 16th Century, but the term FRENCH POLISH was not used until about 1820, when the process was developed by a French cabinet maker.

BASIC RAW MATERIAL OF FRENCH POLISH

Shellac is an encrustation surrounding an insect known as Laciffer Lacca, which is a parasite living on certain trees in India and other Eastern countries. The insect is about a 50th of an inch long and has a life cycle of about six months.

The shellac is gathered by cutting the infected twigs from the trees. In this form it is known as Stick Lac. The shellac is scraped off the twigs and washed with water to remove the particles of twigs and other impurities and when dry, is known as Seed Lac. This is put into canvas tubes and heated over a fire. One end of the tube is fixed and the other is rotated to squeeze the molten shellac through the hessian as it melts. The initial shellac that comes through is clean and small amounts are dropped on to a cold stone, where it sets in the form of a thin disc up to about 3" in diameter. This is known as Button Lac from which Button Polish is made. The next amount of shellac that oozes through may contain impurities which would easily be detected visually if the shellac was in the form of a button and it is, therefore, stretched into a thin sheet and crushed, when cold, into flakes, from which French Polish is made. Modern processing plants now exist for producing machine made shellacs, similar to the hand made varieties.

White and Transparent Shellac is made by dissolving the Seed Lac in a hot caustic solution of water and then bleaching the solution with chlorine. After bleaching the caustic is neutralised with an acid, which causes the shellac to precipitate out of solution. In this form it is known as Bleached Shellac. Bleaching shellac alters its chemical properties, so that unless it is dissolved in alcohol within 3-4 days after bleaching, it will become insoluble.

Shellac contains a very small amount of wax from the insect. The wax is insoluble in alcohol and causes the cloudiness which can often be seen settling towards the bottom of the container. Transparent Shellac is made by removing the wax from the bleached shellac by washing it with a petroleum solvent, which dissolves the wax but not the shellac.

FRENCH POLISHES

French Polish is both a proper and collective noun. As a collective noun it covers all polishes made with shellac and alcohol. As a proper noun it refers to one specific type of material made from flake shellac dissloved in industrial alcohol. It consists of approximately 2½-3 lbs. of shellac per gallon. The type of shellac used can vary considerably in quality and colour, from pale orange to dark brown.

French Polish is suitable for use on all dark woods and light woods, when a light to medium brown tone is required. Button Polish is used to obtain a more orange or golden tone. On light coloured or bleached woods, where it is wished to retain the natural colour, White French Polish, which has a milky appearance, or Transparent Polish, which is almost clear, should be used.

PREPARATION OF SURFACE FOR POLISHING

Preparation of the surface for french polishing is extremely important. Any slight imperfections which might not be noticeable under varnish or oil finishes would be apparent under French Polish.

It is essential, therefore, that the surface is clean and fine sanded. Furniture that is being renovated should be cleaned to make sure that it is free from wax and grease. This can be done with white spirit and fine steel wool. If the finish on the furniture is in a very bad condition, and is scratched or stained, it would be best to remove it completely with Strypit Paint & Varnish Remover. If, after stripping, the wood is still stained, it may be bleached with Rustins Super Wood Bleach.

If the wood is open grained and a smooth mirror-like surface is required, the grain should be filled, before french polishing, with Rustin's Grainfiller, or extra coats of French Polish must be applied which are then cut back with fine glass or garnet paper until the grain has been filled with the polish. If the wood is to be changed in colour, it may be stained before french polishing, with Rustin's Wood Dye. This is supplied in 10 wood shades which may be inter-mixed to make a wide range of other shades. If the grain of the wood is to be filled with Grainfiller and the colour changed, then the filler can be mixed with the Wood Dye, so that staining and filling can be carried out in one operation.

It should be noted that wood can only be stained to a darker shade than its existing colour. If the wood is required a lighter shade, then it must be bleached first with Rustin's Super Wood Bleach and then stained to the required colour.

Holes and cracks should be filled with Rustin's Woodstopping before polishing, but it should be noted that where Woodstopping has been used, it will always be noticed, as the pattern of the grain has been broken. The area filled with Woodstopping can be made less noticeable by painting a grained effect over the Stopping with artists colours and a fine artists brush.

APPLICATION OF FRENCH POLISH

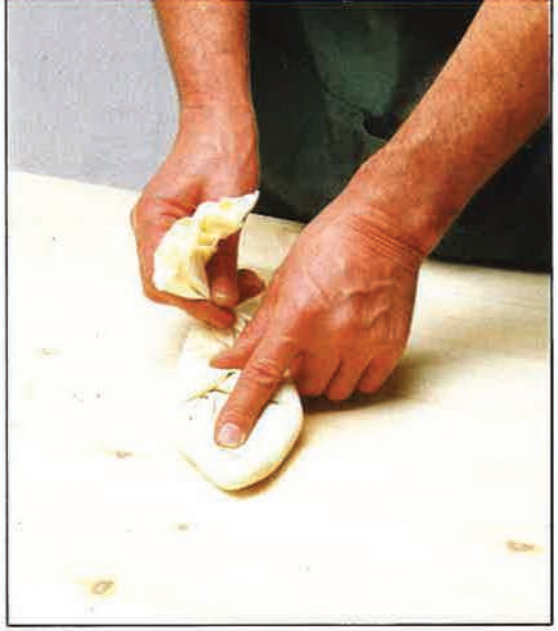
There has always been a mystique about the art of french polishing, but in fact it is a process that can be carried out by any competent amateur after a little practice. There are several traditional methods of applying French Polish, but the method that follows is relatively simple and will produce an acceptable high quality finish.

The actual process of polishing consists of bodying in, building up and spiriting out. The polish in all three processes is applied with a "rubber" made by wrapping a piece of unmedicated cotton wool in a piece of soft cotton or linen rag. An old handkerchief or a piece of cotton sheet would be ideal. The actual size of the "rubber" depends upon the size of the hand and the size of the work being polished. A large "rubber" is best for say, a table top, but a small "rubber" would be better for a small item like a coffee table. The "rubber" is made by taking a piece of cotton wool, about the size of a tennis ball, and moulding it into a triangular shape which is then laid on a piece of rag, as shown in the illustration. The rag is then folded, as illustrated, to make a pear shaped pad. It is very important that the bottom of the pad is perfectly flat and does not contain any creases. If a piece of stitched cloth has been used, it is also important that no stitching is on the base of the pad. The "rubber" should now be held in one hand and the cloth carefully unwrapped so that the polish is poured into the cotton wool. On no account should the polish ever be poured on to the outside of the "rubber", nor should the "rubber" be dipped into the polish. By pouring the polish into the cotton wool and squeezing it out through the rag, the rag acts as a strainer and ensures that no scratches occur on the surface, due to any foreign body that may have inadvertently entered the polish. Sufficient polish should be poured into the "rubber" until the cotton wool is saturated. The rag should then be wrapped round the cotton wool again to make the pear shaped "rubber" and the "rubber" should then be pressed on to a spare piece of wood or cardboard to squeeze out the excess polish. If a "rubber" is used that is too wet, then ridges of polish will be left on the work, which could

(continued on page 6)

1 Lay cotton wool in centre of rag, fold front of rag, about 2", over cotton wool and then fold over one corner.

2 Fold over other corner to make point.

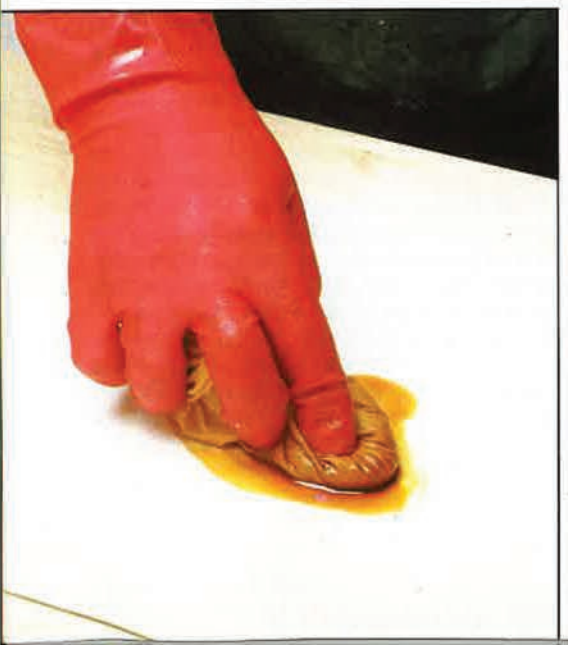


3 Twist end to make shoe shape with flat pear shaped base.

4 Open "rubber" and pour in polish to saturate cotton wool and re-twist end.

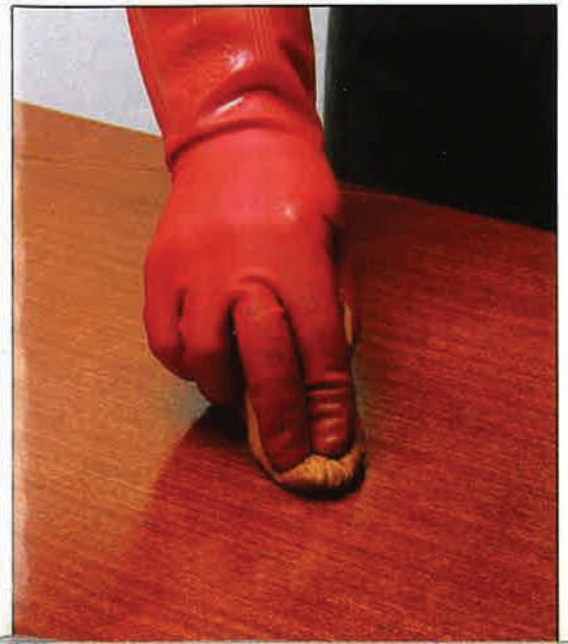
Pictures 1–6 and 8 photographed on workbench. Picture 7 shows mahogany surface being polished.

5 Squeeze out excess polish by pressing "rubber" on to a card or spare piece of wood.



6 Dab a drop of Linseed Oil on to the base of "rubber".

7 Slide "rubber" on to surface and rub in circles or figure of eight movements. Never allow "rubber" to remain stationary on work. Remove by gliding off.



8 Keep "rubber" in airtight jar between applications to prevent it becoming hard.

only be removed by rubbing down with glasspaper.

The first applications of polish should be made by rubbing up and down over the surface quickly with the "rubber" without exerting too much pressure. As the polish in the "rubber" is used, the sides of the "rubber" should be pressed with the fingers and thumb to force more polish out. As the polish dries it is possible, when coating large areas, to make several applications of the "rubber" by going from one end of the work back to the other. Small items should be left for a few minutes for the polish to dry, before another application is made. On no account should the "rubber" be passed over polish that is not dry, as it will remove polish that has already been applied.

It is possible that if wood has not been filled, the first coat of polish may make short fibres in the wood stand proud of the surface, in which case, after the polish has been allowed to harden, the surface should be rubbed with the grain with fine flour or 9/0 Garnet Paper, preferably paper that has already been used, so that only a mild cutting action is obtained.

Further applications of polish are made by using the "rubber" in a circular or figure of eight motion, passing quickly and lightly over the surface. It is important that at all times the "rubber" is slid on to the surface from the side with a gliding action and lifted off in the same way. At no time should the "rubber" ever be lifted from the work in the middle or applied to the middle, as a mark will be left, which will be very difficult to remove. For the same reason the "rubber" should never be left stationary on the surface, as the alcohol will immediately start to re-dissolve the polish that has already been applied.

After the first few applications of polish, the "rubber" will not slide so easily over the surface, due to the dissolving action of the polish on the shellac that has already hardened. A very small amount of Linseed Oil should then be applied to the base of the "rubber". The best way of applying the oil is to dab a small drop on with a finger. If too much Linseed Oil is applied, the surface will have a smeary effect, as the Linseed Oil does not dry quickly like the French Polish. Another problem that occurs when too much Linseed oil is used to lubricate the "rubber" is sweating on the surface.

After every 4-5 applications of the "rubber" the work should be left for several hours to harden. In between applications the "rubber" should be stored in a screw top jam jar to prevent it drying and becoming hard. A little Methylated Spirits can be added to the "rubber" whilst it is stored in the jar, to keep it soft and moist. If at any time the "rubber" dries and becomes hard, it should be discarded and a new one made.

Unfortunately, French Polish tends to "sink" in the grain and it is good practice, therefore, to leave the work for at least 24 hours before the final spiriting out process, to make sure that further applications are not required to fill the pores of the grain where the polish may have sunk in.

When a sufficient layer of shellac has been applied to the surface, the final operation of spiriting out is made and it is at this stage that the final high gloss finish is obtained. The "rubber" should be charged with French Polish that has been thinned with Methylated Spirits and at this stage the rubber should be squeezed so that it is almost dry. When dabbed on to a piece of white paper it should just leave a damp impression. The "rubber" is then moved over the surface, using circular movements, but finishing off in straight even sweeps backwards and forwards with the grain sweeping on and off the ends, as described above. The surface should then be left to harden and the final process is then carried out with a "rubber" that contains just a small amount of Methylated Spirits. One can use the same "rubber" by pouring in Methylated Spirits and squeezing it until it is almost dry, or a fresh "rubber" can be made. The "rubber", which should be nearly dry, should be rubbed backwards and forwards over the surface, with the grain, with considerable pressure. This action dissolves any high spots on the surface and as the "rubber" dries, it has a burnishing effect.

It is important that if at any stage of french polishing, a hole is worn in the rag, due to friction, either a new piece of rag is used, or the rag is re-arranged so that the hole is not on the base of the "rubber".

When french polishing work that may have carved areas, it is not always possible to use a "rubber", in which case the carved areas can be coated by applying the French Polish with a flowing action, using a bear hair or camel hair brush.

Quite often, when wood has been stained, a coat of French Polish will make apparent differences in shade between one piece of wood and another. This often happens where a large area has been made by joining pieces of timber together. It is possible to make lighter areas darker by dissolving analine spirit soluble powders in Methylated Spirits and adding the coloured Methylated Spirits to French Polish. When colouring wood with tinted French Polish, the French Polish should be thinned so that very thin layers of coloured polish are applied to the surface, otherwise ridges will be left where the coloured polish has been applied. When the right shade has been obtained, french polishing can be carried out in the normal way, although it may be necessary to lightly sand the edges of the area where the tinted polish has been applied.

Before attempting to French Polish an article of furniture, one should practice on a spare piece of timber, as it is not until one actually tries out the method described above that the meaning of the process will become clear. It is essential that the french polishing operation is carried out in a warm, dry, dust-free room. If polishing is carried out in damp conditions, then "blushing" will occur. This is a milky appearance which develops as the French Polish dries and is not to be confused with "blooming", which is a deposit like the bloom on a grape, which can occur on the surface of the polish at any time after it has been applied and which can usually be removed by wiping with a damp cloth.

A satin or matt finish can be obtained, after french polishing, by rubbing with 000 or 00 steel wool and wax polish, or by sprinkling pummice powder on to the surface and brushing with a soft shoe brush.

Materials required:

French, Button, White or Transparent French Polish.
White Cotton or Linen Rag.
Unmedicated Cotton Wool.
Linseed Oil.
Methylated Spirits.
Screw top glass jar.
Rubber Gloves.
Flour Glasspaper or 9/0 Garnet Paper.

For open grained woods:
Rustin's Grainfiller

For change of colour:
Rustin's Wood Dye

For removing old finishes:
Rustin's Strypit Paint & Varnish Remover

For removing stains and lightening wood:
Rustin's Wood Bleach

For filling screw holes, cracks etc:
Rustin's Woodstopping