Two methods of finishing

By

Justin McCarthy

Some useful books on finishing

When it comes to finishing there are a number of books on the market that I consider to be less than useful. However, the following in my view have merit, particularly the book by Bob Flexner.

- (a) "A Polisher's Handbook", by Neil Ellis (2002, U-Beaut Publishing) about \$34¹
- (b) "Understanding Wood Finishing", by Bob Flexner (2005, Fox Chapel Publishing)
 about \$40 from Australian outlets, but possibly cheaper from Amazon depending on the health of the Australian dollar at the relevant time.

The importance of sanding to finishing – some useful hints

Sanding is critical to a good finish. No finish will disguise poor sanding; rather it will only serve to highlight poor sanding.

A good sanding block can be made by bonding a piece of cork tile to 25 mm MDF. To allow for the most economical use of a standard sheet of sandpaper, the length of the piece of MDF should be $1/3^{rd}$ the length of the sandpaper and about 70 mm wide.

A sanding block should only be used when the surface being sanded is *wider than* the sanding block to ensure that the sanded surface remains square to any adjoining surface and to avoid the sanded surface becoming convex. When sanding narrow surfaces, e.g., the sides of a table top, use narrow sanding sticks instead of the wider sanding block. These sticks are made by using double-sided tape to bond sandpaper to 6, 9 or 12 mm MDF.

Use sanding boards when you need to sand two or more adjoining surfaces at the same time and the grain of the surfaces to be sanded is in opposing directions, e.g., the bottom of a box with a floating base. These are made by using double-sided tape to bond 4 sheets of sandpaper to either 19 or 25 mm MDF or 10 mm float – not toughened – glass (toughened glass is not sufficiently flat). In the reverse of the usual sanding procedure, in this instance the sanding board remains stationary (secured, for example, by a clamp) and the surfaces being sanded are pushed backwards and forwards over the sanding board.

¹ The second finishing method dealt with in this paper (wax over shellac) builds on one covered in Neil Ellis's book.

While this will involve sanding some of the surfaces *across the grain*, the scratch marks that appear on sanding with the first grit will gradually disappear as you go up the grits².



Above A sanding block, a sanding board and some sanding sticks

In the case of both sanding sticks and sanding boards, ensure that there are no gaps between the rows of double-sided tape. Thin double sided tap in various widths can be obtained from stores selling artist supplies.

Sand up to 1200 grit, starting with 80 (if necessary), and then 120, 220, 400 and 1200, dewhiskering twice at 400 and twice at 1200. During the sanding process some wood fibers are not cut off but merely flattened. "Dewhiskering³", which involves damping down the surface with water and then allowing the surface to dry, swells those flattened fibers and thus enables them to be cut off. Use "used" sandpaper to minimize the risk of removing more than the raised fibres.

This method of sanding has a number of advantages:

(a) One way of removing excess PVA involves the application of water. However, this will raise any loose wood fibers around the glue line if the sanding procedure employed did not involve dewhiskering. It is virtually impossible to completely

² I use 2 sanding boards; one uses both sides of the sheet of MDF for 120 and 220 grit while the second is used for 400 grit. It is not practicable to make a board for 1200 grit, and for this grit I hand sand the surfaces.

³ Also called "denibbing".

remove these if you are unable to sand <u>through</u> the glue line, e.g., the internal corners of a box, or where a rail meets a leg. In addition, there is a greater risk of glue splotches being left if water is used to remove squeeze out from a "non-dewhiskered" surface. Any glue splotches will both impede the penetration of the finish and appear lighter under that finish. On the other hand, if the sanding procedure involved dewhiskering there are no longer any loose wood fibers around the glue line to be raised, and once the clamps are in place any squeeze out of PVA can be removed. After first removing most of the squeeze out with a damp cloth⁴, "attack" any remaining squeeze out with a damp tooth brush and then rub dry the area around the glue line with paper towels or toilet paper. The latter procedure should be performed 2 or 3 times to ensure there are no glue splotches left. Some times there may still be a small amount of glue in the actual glue line itself. This can be removed with cooking skewers.

- (b) The fact that there are no more loose wood fibers can have long term advantages. A straight wax or boiled linseed oil finish provides little or no long term protection against the penetration of water and water vapour. Over time the passage of water or water vapour into and out of the wood can cause a non-dewhiskered surface that has just been waxed or oiled to feel rough to the touch.
- (c) In some cases you may decide not to apply finish to a surface that will nevertheless be on show, e.g. the insides of a box. If you do not sand up to 1200, dewhiskering at 400 and 1200 grits, then, for the reason given in (b) above, over time the surface will start to feel rough to the touch.
- (d) Not to dewhisker during the sanding stage may mean that this is merely postponed as the application of the first coat of certain finishes (such as shellac) will raise any loose fibres on the non-dewhiskered surface which will have to be removed before applying subsequent coats.
- (e) Sanding up to 1200 grit makes the lustre in the wood more prominent than would be the case if sanding stopped somewhere between 220 400 grit.

Method 1: Feast and Watson's "Fine Buffing Oil" and "Satinproof"⁵

This finish involves applying a 50/50 mix of these two products.

Oils aint oils Sol

"Satinproof" is a polyurethane and comes within the generic description "varnish", and accordingly the question arises whether this finish should be regarded as an oil/varnish

⁴ Given the short open time with PVA, you may find that by the time you are satisfied with the position of the clamps that the squeeze out has become quite hard. This can be minimized if you quickly remove as much as possible of the squeeze out with a damp cloth as soon as the clamps have been attached and then do any "fine tuning" of the clamps that may be necessary, e.g., to ensure that internal surfaces are square. Once you are happy with the position of the clamps, go back and remove the remaining glue.

⁵ I learnt this method of finishing from Greg St John, a tutor in the Visual Arts Access program "Fine Woodwork" at the School of Art, ANU, Canberra. However, Greg only explained in general terms how to apply the finish rather than actually demonstrating how to apply it, so I have no way of knowing if the procedure I follow is what he would do.

finish or simply a wiping-varnish finish. In that regard, a wiping-varnish is regarded as one that does not have any pure oil blended with the varnish⁶.

Both an oil/varnish and a wiping-varnish finish involve thinning a varnish sufficiently to enable it to be applied with a pad rather than a brush. However, there are differences between these two types of finish. The oil in an oil/varnish finish will cause each coat to cure more slowly and not as hard as a wiping-varnish finish. Secondly, a wiping-varnish finish provides better protection against the penetration of water and water vapour.

When it comes to finishing one of the problems that the woodworker can be confronted with is that the name of a product and/or the information provided on the label can provide a false impression of the nature of that product. A product with the word "oil" in the name, for example, may not in fact be pure oil but is really a varnish, containing no oil, or an oil/varnish blend.

In the case of Fine Buffing Oil, the information on the label of a 250 ml tin states that the product "is a special blend of beeswax, carnauba wax <u>and tung oil⁷</u>". It would probably be a breach of the *Trade Practices Act 1974* to state this if in fact the product contained no tung oil in the blend of ingredients, and accordingly I am assuming that this product does in fact contain some tung oil in the blend of ingredients⁸.

On the other hand, when regard is had to the Material Safety Data Sheet for this product⁹ it can be seen that its ingredients consist of far more than beeswax, carnauba wax and tung oil. Given the indicative proportions stated for those ingredients of Fine Buffing Oil that are regarded as hazardous¹⁰ (kerosene, synthetic polymers, white spirit, solvent naphtha and wood turpentine), and the fact that the product also contains beeswax and carnauba wax, it seems likely that the proportion of pure tung oil is quite low.

Accordingly, while I am assuming that Fine Buffing Oil does contain some tung oil blended with other ingredients, nevertheless this finish should be regarded as essentially a wiping-varnish finish and not an oil/varnish finish. In that regard, the fact that the Fine Buffing Oil/Satinproof finish cures sufficiently quickly that it can be lightly touched soon after applying the finish without damaging the surface and that it cures quite hard indicates that it is essentially a wiping-varnish.

⁹ See the Orica website (<u>www.orica.com</u>).

⁶ A term coined by Bob Flexner in an article in "Woodwork" magazine nearly 20 years ago to distinguish between a self mixed finish consisting of a thinned varnish and brands labeled as "Oil", "Oil Finish" or "Oil Varnish" which in fact contain no oil and are really thinned varnish.

⁷ Some tins I have purchased, however, stated that it contained "...tung oil <u>resin</u>". Frankly, I do not know what this is intended to refer to.

⁸ On the other hand, it would seem that in the United States some manufacturers consider that they can claim that their product is an "oil" because, although it is in truth a varnish, oil was used in the <u>manufacture</u> of that varnish – see Bob Flexner's book. He states (at p. 78) that this is just as ridiculous as calling bread "yeast".

¹⁰ Unfortunately, tung oil is not regarded as a hazardous substance, and accordingly the proportion of tung oil, as well as of beeswax and carnauba wax, is not given.



Above The materials needed to apply the Fine Buffing Oil/Satinproof finish. Note the large number of pads.

Mixing the finish

The two products are mixed in the ratio 1:1. Although this ratio is not critical, bear in mind that too large a proportion of polyurethane will have the consequence that the finish will not be as easy to apply. As you should allow 24 hours between coats, only mix up enough finish for one coat.

As the Fine Buffing Oil in particular is prone to going off over time once the can is opened, usually the sensible course is to buy these products in 250 ml tins (costing around \$26 in total).

As is the case with all finishes, if you want a "glass like" finish on open pored wood such as wenge or Australian cedar you will first need to fill in the pores with some form of "grain filler"¹¹. However, as the grain filler alone will not provide a completely "pit free" surface upon which to apply the finish, you will need to then apply a number of coats of a finish

¹¹ However, to avoid that filler staining the wood, first give the wood a thin coat of shellac (see below).

such as thick shellac which are cut back with fine grade sandpaper after each coat has dried.

Applying the finish

Where possible the finish is applied with pads. A pad consists of a piece of cotton wool wrapped in a lint free cloth (old bed linen is very good) with the cotton wool kept in place with a rubber band. The aim is to have a reasonably tight ball with no wrinkles in the cloth. Any excess cloth behind the rubber band can be cut off with scissors. I use Home Brand cotton wool which is available in a continuous roll of 100g. The roll is divided into sections every 40 mm by light perforations and I use 2 sections for each pad. For the reason given below, I make a large number of these pads for each finishing job.

One pad is used to apply the finish while the remaining pads are used to remove the excess. Work in small sections¹², and remove the excess <u>immediately</u> before moving onto the next section. Initially it will only be necessary to use one pad to remove the excess. However, as that pad becomes charged with excess finish it will become necessary to use a second pad to ensure that all the excess is removed. When you feel that it is taking too long to remove most of the excess with your "No. 1" pad, discard it, use the former "No. 2" pad as your new "No. 1", and use a new pad as your "No. 2" – and so on.

Use disposable gloves when applying this finish, and before applying each coat go over the various surfaces to which finish is to be applied with a tack cloth.

As each coat is very thin, there is no point in flooding the surface with finish; any excess will only have to be removed. Try and keep the excess finish that has to be removed to a minimum. If you feel that you have charged the pad with too much finish, scrape the pad against the top of the container before applying the finish to the section you are working on.

It doesn't really matter in which direction you apply the finish, although always work in the direction of the grain when removing the excess.

When removing the excess from a new section it is inevitable that some of that excess will be pushed onto one or more sections that have already been done. Although this finish cures sufficiently quickly that it is "light touch" dry within a matter of minutes, nevertheless it is quite forgiving in that regard; you just need to ensure that the extent of the overlap is not excessive, that too much time hasn't elapsed between finishing the earlier sections and working on the new section¹³ and, of course, that all the excess is removed.

When removing excess finish you need to pay particular attention to adjoining surfaces to ensure that all drips are removed and that excess finish is not left on the arris of adjoining surfaces. When working on these adjoining surface there can be a tendency, when applying the second or subsequent coats, to merely push some of that excess over the arris and onto the edge of the adjoining surface. That is why I always pass a fresh pad over the arris at 45 degrees to the arris at regular intervals.

 $^{^{12}}$ For example, if finishing a coffee table top 600 mm wide by 1200 mm long I would first notionally divide the top into, say, 12 "sections" of approximately 200 mm wide by 300 mm long. I would then work from left to right, doing the 3 sections on the left, then the next 3 sections, and so on.

¹³ Wait until finish has been applied to the whole surface before having that cup of coffee.

When applying the first coat to raw timber it is of course easy to see where finish has already been applied. However, this is not so easy once the first coat has been applied. When applying a second or subsequent coat it is a good idea to use reflected light whenever possible to minimize any overlap and to ensure that all excess is removed.

Sometimes it will not be feasible to use pads to apply the finish and to remove the finish, e.g. where a rail meets a leg. In such cases use an artist's oil brush to apply the finish to the areas concerned and remove the excess with pieces of lint free cloth.

Each coat will be "light touch" dry within a matter of minutes¹⁴, and quite dry within a few hours (depending on temperature and humidity). However, the safer course is to allow 24 hours between coats to ensure the previous coat is completely cured¹⁵.

How many coats?

It is only when applying the first coat that any finish will actually penetrate into the wood itself; second and subsequent coats will only increase the depth of the finish lying on the surface. It is a matter of personal choice as to how many coats to apply. I am usually satisfied with 4-5 coats. The first coat will have a sheen that is somewhere between matt and satin, with successive coats becoming more "shiny". However, the extent to which the surface becomes "glossy" will depend to some extent on the nature of the pores of the wood you are working on (assuming they have not been filled). The pores of rock maple and European sycamore, for example, are minute, and a glossy rather "glass like" surface will start to appear by the third coat. The pores of Tasmanian myrtle, on the other hand, while probably too small to fill satisfactorily, nevertheless are a little wider than those of rock maple and European sycamore and, more importantly, much longer. There are also a large number of them. These will preclude a glass like surface being achieved.

Bear in mind that, while each coat is very thin, eventually the stage will be reached where the more coats you apply the more the finish will appear to be a finish that sits on top of the wood rather than in it.

Finishing the finish

For those prepared to go that extra yard, you can then "finish the finish". In the case of this finish, that involves waxing the finish after it has completely cured¹⁶. Although this finish cures quite quickly, nevertheless there is always the chance that the odd dust particle has adhered to the finish. In addition, an application of wax will give a more "sensuous" feel to the surface and enhance the shine (although admittedly the difference in the case of the latter is only slight). The softer paste waxes are best¹⁷. Again, work in small sections.¹⁸

¹⁴ The first coat will dry quite quickly as much of the first coat is absorbed into the wood.

¹⁵ Having said that, if time is critical you can usually get away with applying a coat in the early morning and the next coat in the late afternoon.

¹⁶ To be on the safe side, allow 48 hours to elapse after the final coat before applying the wax.

¹⁷ For example, "Howard Citrus Shield Paste Wax".

¹⁸ The ease with which the wax can be buffed off varies from brand to brand, and if using a wax for this purpose for the first time it may be worthwhile to first try the wax out on a test piece or on an inconspicuous part of the work piece. Do <u>not</u> do what I once did and apply wax in one go to all of a coffee table top and then spend the next 3 hours buffing it off! In addition, heed the advice provided on a tin of Gilly Stephenson's Cabinet Maker's Wax that it is not suitable for application over modern finishes (another lesson learnt the hard way!).

Method 2: Wax over shellac

In brief, this finish involves the application of a number of coats of shellac with a special brush (shellac mop), lightly leveling the surface with fine wet and dry sandpaper, burnishing the surface with fine steel wool and then applying wax over the shellac. It might sound complicated but it is actually quite easy.

Pre-mixed shellac or make your own?

The shellac that is applied to the work piece consists of shellac dissolved in denatured alcohol¹⁹. While shellac can be purchased pre-mixed, once the shellac has been dissolved in the alcohol the solution has a limited shelf life²⁰. The better course is to mix your own. This should be dated and stored in a dark and cool place²¹.

Mixing your own mix

In a jar²² dissolve 1 part by volume of shellac in 2 parts by volume of denatured alcohol²³. Shake occasionally over the next 2 to 3 hours and then leave overnight. Then remove any foreign matter in the shellac and any shellac that has not fully dissolved by straining it through panty hose²⁴ secured to the top of another jar by a rubber band. If you feel at this stage that the solution is a little thick, add some more denatured alcohol.

What type of shellac?

Shellac comes in three forms (flakes, buttons or granulated, although flakes is the most common form) and in a variety of colours (blond, orange, ruby etc²⁵). In addition, unless the flakes etc have been "dewaxed", when the shellac is dissolved in the alcohol the wax will separate out and settle on the bottom of the jar as a whitish liquid. The shellac solution at the top should be decanted into a fresh jar or siphoned off and the wax solution discarded as it tends to "cloud" the finish if retained. It also reduces the shellac's water resistance. Some shellac comes already dewaxed, e.g. blond dewaxed. This particular shellac is very good on lighter woods such as maple and sycamore as it only darkens the wood to the same extent as the application of water.

First stage - applying the shellac

Before applying each coat go over the various surfaces to which finish is to be applied with a tack cloth.

¹⁹ I have only been able to find one outlet for this – "The Woodworks" at Mona Vale (telephone number: (02)99797797; web: <u>www.thewoodworks.com.au</u>). Five litres costs around \$35 (not including freight). A more resourceful person than I may be able to source this closer to home as it is regarded as hazardous for transportation purposes and accordingly freight is expensive.

²⁰ Note that, while U-Beaut's pre-mixed shellac comes with a use by date, Liberon's does not.

²¹ I throw out old shellac after 6 months.

²² Do not store the shellac solution in a metal container as the shellac reacts with the metal making it darker.

²³ Do not use household grade methylated spirits as this contains 5% water.

²⁴ I use "Wicked" by Kolotex of Australia.

²⁵ Bunnings and the like only stock the orange. The Woodworks carries a wide range of shellac types.

Apply the liquid shellac using a shellac mop²⁶. It is important to avoid the shellac mop being charged with too much shellac as this will result in too much shellac being deposited in the initial brush strokes. Rather, what you should be aiming to achieve is the application of a <u>consistently thin film</u> of shellac from the outset. Accordingly, after charging your mop by dipping it in the shellac solution, remove much of the shellac from the brush by pressing the brush against the insides of the jar.

As the alcohol in the shellac solution evaporates very quickly, it is difficult to avoid ridges being formed as a result of overlapping brush strokes, particularly when it becomes necessary to recharge the shellac mop. The potential for these ridges to be formed can be minimized to some extent by working as quickly as possible and/or by thinning the mixture with a little more alcohol. Bear in mind, however, that the latter approach will require the application of more coats. In addition, it will be impossible to avoid a ridge being formed when you need to stop to recharge the mop with shellac.



Above The materials required for the "wax over shellac" method

You will also be able to minimize the *number* of ridges on the piece you are working on by using a wider brush, although bear in mind the bigger the brush the bigger the cost!

²⁶ Shellac mops are available from The Woodworks. They are not cheap. A small White Crocodile brand No. 8 in skunk hair costs about \$46, while a No.16 in squirrel hair costs around \$320!

After each brush stoke rotate the brush 180 degrees before the next brush stroke to access the shellac which was pushed to the back of the brush in the preceding brush stroke.

In trying to minimize the extent of the overlap in brush strokes it is perhaps inevitable that you will sometimes leave a gap between stokes, and you will be tempted to go back and "fill in" the gap. Resist that temptation. You will only end up making a ridge, and the wiser course is to just leave it. Sufficient coats will be applied to ensure that any such gaps do not present difficulties later.

This first coat should be dry within 15 - 20 minutes and you can then proceed to apply the second coat. The coat will be dry when there is no suggestion of "tackiness" on the surface when you touch it. Put another way, it is dry when it feels dry. Having said that, I tend to play it safe and apply the second and subsequent coats at hourly intervals. As you need to allow the various coats to fully cure overnight before proceeding to the next stages, nothing is lost by allowing more time between coats, and you will still be able to apply all the coats in a day.

Again, in the application of this and subsequent coats avoid drips forming on adjoining surfaces. Keep an eye on this and, if you see a drip, quickly use a pad of the kind employed in Method 1 to remove it. Any resulting damage to the integrity of the surface can be corrected in the later stages of the finishing process.

Remove any brush hairs or parts of brush hairs that have come loose before applying the next coat as these can be almost impossible to remove later, particularly if they are "buried" under 2 or more coats.²⁷ Usually it will be possible to rectify any resulting damage to the surface in the later stages of the finishing process.

Thoroughly wash the shellac mop in methylated spirits when not in use and then, after thoroughly drying it on a dry rag, store it in a re-sealable plastic bag. You may find that when you next come to use the mop that the bristles are a little stiff. However, moving the bristles backwards and forwards over your hand and then dipping the brush into the shellac solution will restore it.

How many coats?

I usually apply 5 - 6 coats if the shellac has been dissolved in the proportions indicated above²⁸. It is not possible to be more precise. What I am looking for is the *appearance* of sufficient depth in the coverage of shellac so that it will hold up to the rigours of the subsequent stages without going through the covering of shellac.

As indicated earlier, allow the various coats of shellac to completely cure overnight.

Second stage - a light sand

<u>Very lightly</u> sand the surface with 400 wet and dry sandpaper and then 800 wet and dry, using water and a little dishwashing detergent as a lubricant. The object of this stage in the process is to remove any ridges that may have been formed by overlapping brush

²⁷ With a good quality mop this is only occasionally a problem.

²⁸ Obviously, more coats will be necessary if the mixture has been further thinned.

strokes or other imperfections. To guard against the possibility that you may end up going through the shellac to the bare wood, I suggest you use a detergent that is as clear as possible²⁹.

Work in smallish sections, and buff dry immediately you have finished a section.

While it may not be possible to remove all the ridges, usually it will be possible to remove sufficient material that, in conjunction with the next stage, you will have a sufficiently smooth surface upon which to apply the wax.

Do not be disheartened if, despite your best endeavors, you end up sanding through to the bare wood. Usually only a small section or sections of bare wood will have been exposed, and usually the wax itself will be able to disguise this to a large extent.

Third stage - burnishing with steel wool

The surface should then be burnished with 0000 steel wool. What you are aiming to achieve is a uniformly matt surface. It is important that all the "shine" of the shellac is removed. If you leave areas that are still "shellac shiny" there will be differences in sheen under strong or reflected light after the wax has been applied.

Fourth stage – applying the wax

This is when the finishing process all comes together. As is the case with the "finishing the finish" stage for Method 1, work in small sections. I usually use Gilly Stephenson's Cabinet Maker's Wax, which I apply with 0000 steel wool. With this wax I work on sections no bigger than 3 inches by 3 inches, and I buff off the wax with soft cloths immediately the wax has been applied to a section, changing frequently both the steel wool and the cloths. Look for errant specs of wax by frequently inspecting the work piece under reflected light and even lightly running your fingers over the work piece.

Using "wax over shellac" for the internal surfaces of a box.

The application of a finish to internal surfaces, such as the insides of a box or a display cabinet, will usually present two major problems. First, it is impossible to satisfactorily apply certain finishes to internal surfaces after the piece has been glued together because you will then be required to work into corners. In the case of the "wax over shellac" finish, for example, there is no way that you can neatly undertake all the various stages involved³⁰. Secondly, while the need to work into corners does not present any real difficulties in the case of certain finishes such as a straight oil finish or the finish covered earlier in this paper, with these finishes there is the problem that the odour associated with them will linger for years if the surfaces to be finished are to be enclosed³¹.

²⁹ The more observant members will no doubt have noticed that sections on the inside of the lid of my jewellery box in birds eye maple at the 2008 Show seemed to be more yellow than is characteristic of that wood. I was grateful that Home Brand dishwashing detergent does not come in pink!

³⁰ Another lesson learnt the hard way.

³¹ Yes, you guessed it, I also learnt this lesson the hard way.



Above The various stages in applying the "wax over shellac" finish (from left to right: bare wood, the shellac applied, after lightly sanding back, after burnishing with steel wool and after applying the wax.

The solution to the first problem is to finish the relevant surfaces <u>prior to</u> gluing them together. The following uses the example of a jewellery box where the internal surfaces are finished by the wax over shellac method. In the case of such a box there may also be internal compartments that need to be finished prior to glue up as well as the internal sides, lid etc of the box itself.

Of course, the following also has application in other situations apart from working on internal surfaces where it would be impossible to neatly apply the particular finish because of the need to work into a corner or some other "obstacle", for example, the frame for a floating panel.

While the actual method of application of the finish will be the same as outlined above, there is of course the additional consideration that you will need to first protect all areas to which glue will subsequently be applied. I use Tamiya masking tape to mask off all areas to which glue will subsequently be applied. This tape, which is available in hobby shops, is thin but has very good adhesion and is available in a number of widths (e.g. 6 and 10 mm).

Where I need to protect a mortise, and the corresponding tenon has shoulders, I will locate the outside edge of the tape covering either side of the mortise a little in from where the outside edge of the shoulder of the corresponding tenon will meet the surface containing the mortise. This is really playing it safe. When it comes to gluing up I don't want to find that the finish on the piece containing the mortise stops short of the corner where the two surfaces meet. While this practice involves some loss in gluing area, it is minimal and will involve pieces that are not under any real stress.

As the internal surfaces have already been finished, removal of any squeeze out of PVA merely involves wiping with a damp cloth and then drying with paper towels.

Conclusion

Finishing is one of the most important stages in the making process. A good finish will compensate to some extent for a badly made piece, while a poor finish will only detract from an otherwise well made piece.

While the techniques discussed above can be mastered quite easily, good planning, and taking your time, is essential.