Missing in action

John Lloyd trained with Bruce Luckhurst and gained a City & Guilds silver medal in Furniture Advanced Crafts. He now has his own workshop on Ditchling Common, Sussex, where he restores and copies mainly traditional furniture. John is a full member of the British Antique Furniture Restorers' Association.

Above: **How not to do a veneer repair – the cut is too vertical and the grain direction is bad, causing it to be even more obvious in reflected light**

Right: **The same repair from a different angle... it's bad but it doesn't stand out**

Don't despair about your wandering veneer – because **John Lloyd** has all the answers

Having last month dealt with veneer which is trying to escape, for this issue I am going to tackle the problem of veneer which has already made its get-away or needs repairing because it has been in a fight.

Replace it

When a piece of veneer is missing, the obvious remedy is to replace it with another piece, preferably with identical grain and figure. However, repairers perhaps less gifted at woodwork, or who don't have a large stock of veneers to choose from, will often resort to using something a bit less challenging.

On the face of it, filler sounds like it could be the perfect quick and easy solution to all veneer repair problems. In fact, why bother with veneer for repairs at all? Using filler means that there is no time wasted searching for that piece of veneer which is the perfect match. There's no tricky cutting to fit, no waiting for the repair to sink before levelling the patch and no real chance of making a perfect match with the surrounding wood.

We all use filler of various types to blend minor damage, but anything of any consequence has to be repaired with real wood or there is not really any way to make a good job of the repair.

Filler

So, what's the problem with using filler in place of veneer? Well, filler has no grain, no figure and no texture, and is also very flat from a depth and colour point of view. I realise this might be beginning to sound a bit ethereal, but filler is just soulless man-made splodge. It can be coloured to look something like wood, but it is impossible to make it look convincingly like its surrounding wood from all angles and in all lighting conditions. So, in conclusion, if veneer repairs are to be at all convincing, they must be made using real wood.

Right: **Another bad repair, again too vertical a cut and poor selection**

"Will we be able to sleep at night if we use the wrong species of timber in a repair?"

But not just any veneer will do though; it has to be a veneer that has the same sort of grain and figure, and, if at all possible, a similar colour. Some might say the wood used to repair veneers should be the same species as the original, preferably of the same age and with an original oxidised/polished surface.

Veneer merchant

For a professional restorer this assumes an extensive stock of breakers – antiques sacrificed for the repair of other antiques – and a limitless amount of time to sort through this vast stock of veneer. In the real world there might not be either the vast stock, or the time to sift through the acres of original timber, so an alternative is required. This might be to sift through someone else's vast stock of new veneer – a veneer merchant perhaps!

I have certainly visited veneer merchants clutching a drawer, or some other damaged bit from a piece of furniture needing a leaf of something to effect a repair, and they can usually find something to fit the bill. When repairing veneers on antiques we have the burden of the ethical considerations to bear in mind – will we be able to sleep at night if we use the wrong species of timber in a repair?

Colouring trickery

I personally believe the critical thing is that the grain and figure are as close as possible to the original. If the colour is wrong because it is the wrong species, this can be dealt with at a later stage using colouring trickery. I would rather have the wrong species of timber and the right grain and figure than the right species and the wrong grain and figure. My, perhaps rather simplistic, rationale behind this standpoint is that whatever timber is being used for the repair it is an impostor because it was not an original part of the piece. So, if it's an impostor my priority is for it to blend in well.

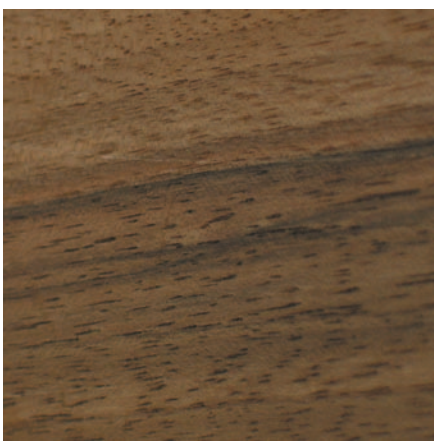
Nothing in life is that simple, of course. A downside to using modern veneer is that the majority of it is knife-cut, which means that it is only about 1mm (3/64in) thick, or at best just over 1mm thick if it's double knife-cut. If the veneer being repaired is on an antique, the original veneer will be considerably thicker, which could mean an embarrassing step between the old and new veneers, or the need for a bit of packing to get everything in register.

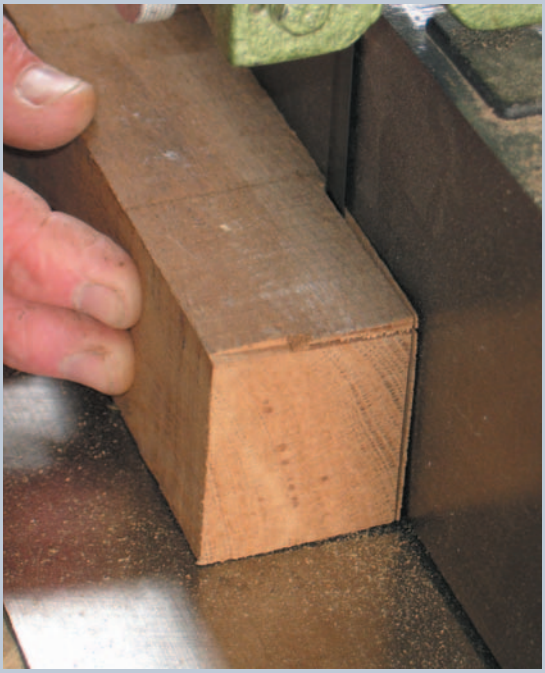
Sourcing

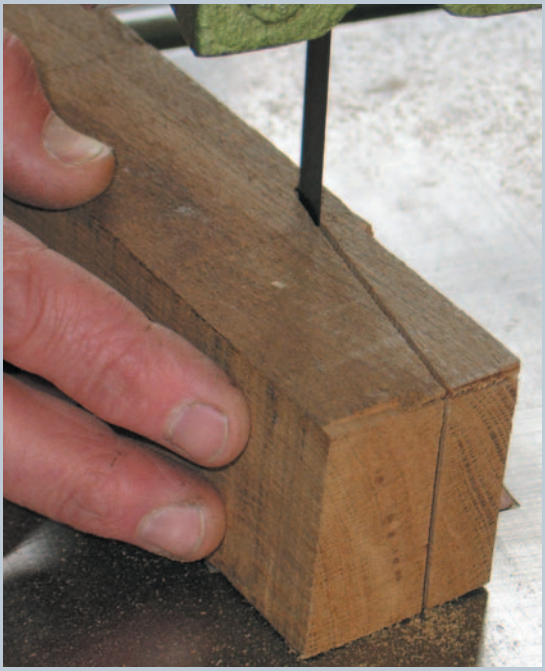
An option for sourcing veneers, if your local veneer merchant is not actually that local, is to cut your own veneers from the solid using a bandsaw. In fact, this can sometimes be a better bet than relying on 'off the shelf' veneer, because you will have control over the angle at which the cut is made, which has a huge bearing on the appearance of the grain, and also the thickness of the veneer.

Whilst we're on the subject of grain, direction of the grain and

Below: **The same piece of wood cut at different angles will give completely different grain figure**







Far left:
Cutting a veneer on the bandsaw is sometimes a better option

Left:
An angled slice

reflectivity are hugely important factors to take into account when choosing and using veneers for repairs. Grain direction just relates to the angle at which the pores in the timber exit the cut surface. When planing timber this is an important consideration to prevent tear out and when repairing veneers it is an important consideration to prevent the repair from standing out like a beacon rather than blending in seamlessly with its surroundings.

Grain direction

Grain direction will often not be particularly obvious when a veneer has no polish on it, and there is many a restorer who has unwittingly got this wrong, only to discover the error of their ways once some polish has been applied. To help make the grain and figure more apparent, timber, whether in the solid or veneer, can be wetted with alcohol during the choosing and orientation process. To actually patch veneer causes the conservation debate to rear its ugly head again. Conservation dictates, by definition, that original material, in this case veneer, should be retained and prevented from deteriorating. But to let in a successful veneer patch will generally mean that some original veneer has to be sacrificed to produce join lines which have a fighting chance of blending in with their surroundings.

The conservation approach will often result in join lines which are almost at right angles to grain direction, meaning blending the repair is a great deal more challenging. I personally have an aversion to join lines which are anywhere vaguely near to being at right angles to the grain. I prefer to try to strike a balance between retaining original material and making patches that work well visually.

Patch positions

So, having created the patch it now has to be positioned exactly over the area being repaired. This time it's critical that the grain lines up with the surrounding veneer, and that the patch doesn't move while it is being scribed around with a scalpel. A little piece of double-sided sticky tape can be used, although it is best not to use an excessive amount as it may prove to be impossible to remove the patch without destroying it – making another patch can be rather tedious!

With the patch we are aiming for invisible glue lines, so accurate cutting in is critical. Just as important is the careful cleaning out of the space for the patch, especially with a range of mountains. Great care has to be taken not to lose the peaks of the mountains during the cutting and fitting process.

"I prefer to try and strike a balance between retaining original material and making patches which work visually"

Right: **Cutting a piece of stringing for an inlay repair**

Animal glue

To help a patch make a seamless repair it is fitted dry. When it hits the glue it will get wet and will expand slightly into its new home. The glue to use for veneer repairs to antiques is, of course, animal glue. This, combined with the fact that the patch is expanding as soon as it hits the glue, means speed is of the essence.

Just to add to the challenge a block and a cramp are required, and, of course, some release paper between the sticky bits and the block. Using a 'hot block' as described in *F&C* 89, is an option which can be used to get some heat into the glue and to ensure the patch goes down well.

Having successfully inserted the patch it's important that it's left for a week or so, before trimming the top surface flush with the surrounding veneer. This is because animal glue effectively draws the patch down as it sets, and if it is cleaned up too quickly it will create a step between the new and old veneers.

Trimming the surfaces into register can be a bit tricky, but using a small, cranked carving chisel will allow very precise localised trimming of the patch without touching the surrounding veneer. A small cabinet scraper can also work well, but great care is needed to avoid removing any of the original surfaces which will not only affect the levels but can also create a halo around the patch.

String lines

Patching missing or damaged string lines may, on the face of it, seem very straightforward. However, as with veneer patches, straight join lines across the stringing will stand out like a sore thumb. So once again an angled cut has to be made.

A long splice at a very shallow angle can easily be cut with a wide chisel, and can result in a completely invisible glue line.

Having successfully completed the woodwork, the final challenge is to get the colour right using chemicals and colours, but that will have to be covered in more depth in a future issue. **F&C**

Patch shape

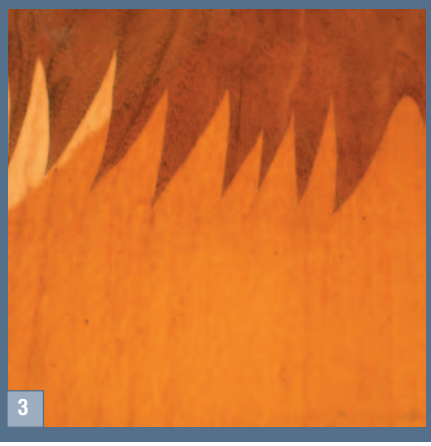
To come up with the shape for a patch is usually just a question of using a little imagination and applying a simple basic principle. The join lines of the patch should be as close as possible to the direction and shape of the grain in the original veneer. For very straight-grained timber this might mean a patch resembling a range of mountains, whereas a burr would probably require something a bit more like a sinuous blob.

The basic technique I use for creating a patch is to take a piece of tracing paper a little larger than the area of damage and lay it over the damage, before drawing on a rough outline of the damaged section.

I'll add some lines to show grain and grain direction and then draw in the shape of the patch that will best suit its surroundings. Having looked at reflectivity, the patching veneer is set in the right orientation with the tracing paper laid on top, using the guide lines on the tracing to get things lined up exactly. It is then just a case of using a scalpel to cut along the traced outline and through the veneer. To help stop the tracing paper from moving around I sometimes add some masking tape to an edge, but it's often just as easy to hold the tracing in position with pressure from a finger. Let's face it, it's not the end of the world if it slips a little because the patch is used as the template for final fitting.

1 **Selecting a patch having traced out a compatible pattern**

2 **Tracing the outline on the patch veneer**



3 **A finished repair**