## **Preparation of the parts**

It is easier to sand and polish the wood of the nuts and bridges *before* you glue them down, so I hope you've already done that, along with the buff batten. Use your sanding block on the flat surfaces, perhaps with 220-grit paper. Don't do any sanding on the bottom surfaces which must be kept absolutely flat for good gluing with the soundboard and wrestplank veneer. Finish with 400-grit and then fine steel wool, and we are ready to glue.

## Gluing the nut

The shorter length of the nut makes it easier to handle, and provides good practice for the bridge. Use the long nails with two nailhead pads on each—oak is a very hard wood and it would be difficult to drive the nails in for their entire length without bending them.

First, attempt a dry run in order to relocate the holes and make sure the nut is aligned correctly. You've already drilled the wrestplank for your tuning pins. Glue and nail the 8' nut, and a little later, clean off the excess glue when it has reached the consistency of chewing gum.

When all is dry, pull out the nails very carefully; making every effort not to break them, or they will be impossible to remove! It is best to tear the pads off the nails to give you clear access to the shaft, and pull them straight up or else you run the risk of elongating the holes. If you do happen to break one of the nails, drive it further in with your nailset and fill in the hole from above later with a glued toothpick.

## Gluing the 4' nut

The 4' nut glues similarly, using your shorter padded nails. You can glue it down while you are waiting for the excess glue of your 8' nut to gel before cleaning.

## Gluing the 8' bridge

The holes that you made for the nails in the 8' bridge can now help you with positioning that piece. Re-use the long nails with nailhead pads (if you have one or two C-clamps, using them with blocks of wood at the ends will facilitate proper pressing, but don't make them so tight that the bridge crushes into the soundboard). If some holes no longer line up between the board and the bridge, it is undoubtedly because the humidity has changed. The board has to be made dryer or more humid so everything will fit again.

If you properly dried the soundboard for marking but it no longer easily fits in the case, you can dry it on both sides evenly, as described for its preparation. If it is loose in the case, you can either wait until a more humid day or humidify the room a little bit.

Prepare enough nails (and even a few extras, just in case) with their nailhead pads. Prepare some shorter nails at the same time, ready for the 4' bridge.

Apply glue to the bottom of the 8' bridge in sufficient quantity, and from this point on move very quickly so that it doesn't dry before you've finished clamping.

Nail the treble end first, and in order not to get glue smeared all over the soundboard, lift the bass end up and wedge the small block of wood under it. You will make a mess on the soundboard if you don't take this precaution. Drive in several nails along the length of the bridge to position it. Then put the other nails in the holes in between. Drive them in firmly but don't crush the crown with the nail pads.

As you work, regularly check to see that the bridge is properly joined to the soundboard: If necessary, twist the free bass end. Once the bridge is nailed, you won't be able to move it even by using other nails. You really must perform this procedure carefully, and be willing to backtrack a little if you determine that the bridge is not flat on the soundboard.

If the bridge isn't making good contact in some areas, you can try to slide a block of wood or even a wooden wedge under part of the soundboard to raise it a little. You can also—moving quickly—pull one or more nails out, then position the bridge with your hands until it is perfectly flat while your assistant drives new nails—into new holes if necessary—to hold it in place again. Finally, you can try using a C-clamp, if it is deep