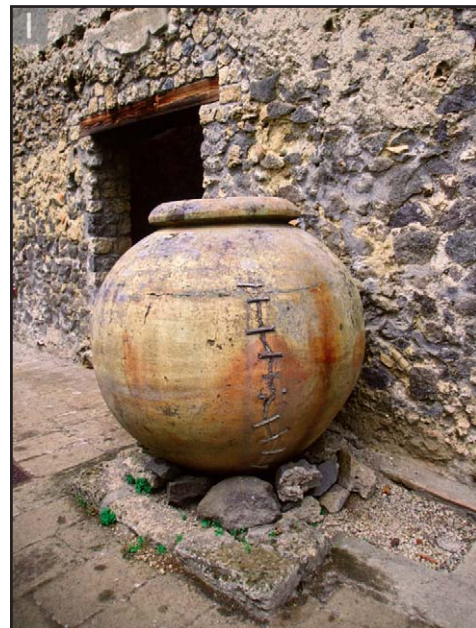## Patch tool

The patch tool uses the same complex algebra as the healing brush to carry out its blend calculations, but the patch tool uses selection-defined areas instead of a brush. When the patch tool is selected, it initially operates in a lasso selection mode that can be used to define the area to patch from or patch to. For example, you can hold down the Option/Alt key to temporarily convert the tool to become a polygonal lasso tool with which to draw straight line selection edges. You don't actually need the patch tool to define the selection, any selection tool or selection method can be used to prepare a patch selection. Once you have a selection made, select the patch tool to proceed to the next stage. As before, the patch tool has to work with either the Background layer or a copied pixel layer.

In Destination mode you can drag the selection area with the patch tool to a new destination point and Photoshop will perform a healing blend calculation to merge the sampled patch area with the underlying pixels in the new area of the image. In Source mode the you can drag the selection area with the patch tool to a new destination point to select the pixels that will replace those in the original source selection area. The Use Pattern button in the Options bar for the patch tool will let you fill a selected area with a preset pattern using a healing type blend.

1 The patch tool works in a way that is similar to the healing brush. Using the picture opposite, I can show you how the patch tool can be used in Source mode to cover up the metal staples that are holding the large pot together. When you select the patch tool you can use it just like the lasso tool to loosely define a selection area. For example, you can use the Option/Alt modifier key to temporarily switch from free form lasso to polygonal lasso selection drawing mode. Or you can use any other preferred selection method (it really doesn't matter at this stage) as you prepare the image for patching. Note that as with the healing brush, the patch tool must be used on the Background layer or a layer that contains pixels for you to modify.

2 When you have finished defining the selection for the area you want to patch, make sure that the patch tool is selected in the Tools palette and drag inside the selection to relocate it on an area of texture that you wish to sample from.

3 As you release the mouse, Photoshop will commence calculating a healing blend, analyzing the pixels from the source area you just defined and using these to merge seamlessly with the pixels in the original selection area.

4 If the patch/healing process was successful, you should see an almost completely smooth join. The pixels that you selected to be sampled from in the patch process will adjust their luminosity and color to blend with the pixels in the original defined area, to match the lighting and shade etc. However, you won't always get a 100% perfectly convincing result. In the example used here, I made a couple of attempts at patching the staples before finding a patch selection that would work well. Furthermore, as when using the Clone Stamp tool, you have to beware of any repeating patterns giving away the fact that the image has been cloned. I finished retouching this photograph by applying a few healing brush strokes to remove some of the telltale signs.