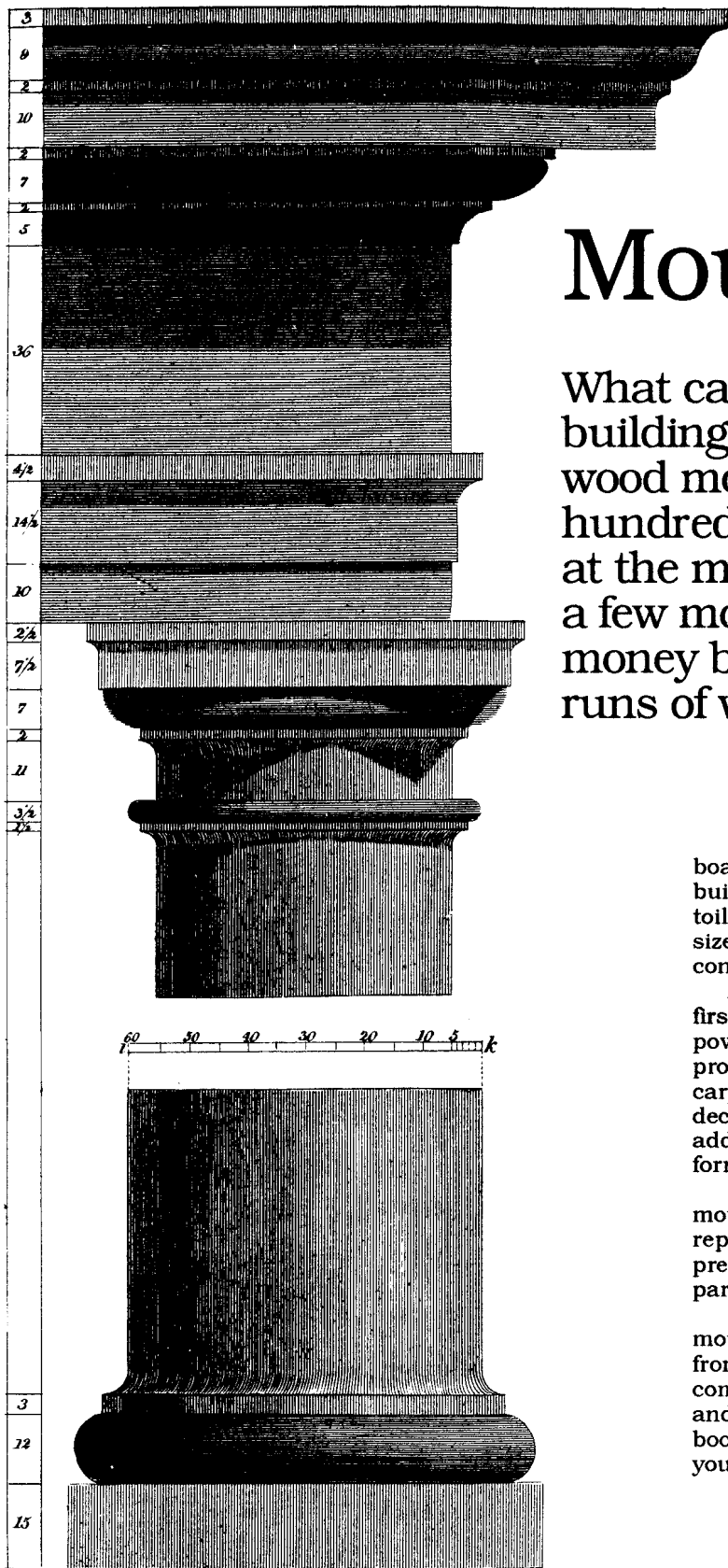


by JOHN LEEKE, Preservation Consultant



Mouldings

What can you do if your early building is missing short lengths of wood mouldings? You can spend hundreds of dollars in setup costs at the millworks each time you need a few mouldings, or you can save money by learning to make short runs of wood mouldings yourself.

During the 18th and early 19th century all flat boards and mouldings used for finished woodworking on buildings were planed by hand. You can imagine the toil and sweat involved. Subtle tool marks and slight size variations indicate the handcrafted methods which contribute to their historic value.

As the industrial revolution geared up through the first half of the 19th century, woodworking mills with power planers and moulding machines began to produce stock mouldings. This was a boon to busy carpenters. They could produce much more striking decorative effects with a lot less time and effort. This added greater value to buildings at lower cost than in former days when mouldings were made by hand.

Today we appreciate the character these early mouldings lend to an historic building. Saving and reproducing mouldings retains the original value and preserves the decorative features that are an important part of our cultural heritage.

This report covers the basics of replicating wood mouldings and details on three methods that range from using ordinary shop tools to using speciality combination planes. The use of portable power routers and router tables is not covered since there are good books on the subject. Check for titles on this subject at your library or bookstore.

Moulding Fundamentals

Taking Profiles

Documenting the profile of an existing moulding is the first step. An accurate profile is needed whether you will be ordering custom mouldings or making your own. The methods described here can also be used to make a template of cardboard or sheetmetal. Such templates are needed to check the accuracy of reproduction mouldings when the level of detail is exacting.

Locate areas along the original moulding that seem typical and take a profile at each location. Compare the profiles. The profile of early hand-planed mouldings varies slightly. Later machined mouldings will be exactly the same all along. Watch for mouldings that are similar in size and general shape but that differ in detail. These details may be obscured by heavy paint buildup. Remove paint buildup before taking a profile if the appearance of removed paint will not cause problems.

First measure the thickness and width of the moulding with a ruler or caliper. Layout these basic dimensions on paper. (See Fig. 4.) This accurately establishes the overall size of the moulding and the end points of the profile.

Then use a profile gauge. This is a device that loosely holds a row of slender rods or plates in a row. You press the row of rods against the moulding and they slide along conforming to the profile of the moulding. (See Fig. 5.) Then a lever locks the position of the rods. You can take the gauge away from the moulding and lay it on the paper, lining up the gauged profile with the end points previously established on the paper. Trace along the ends of the rods to mark the profile down on paper. (See Fig. 6.) The advantage of using a gauge is that there is little damage to the existing moulding.

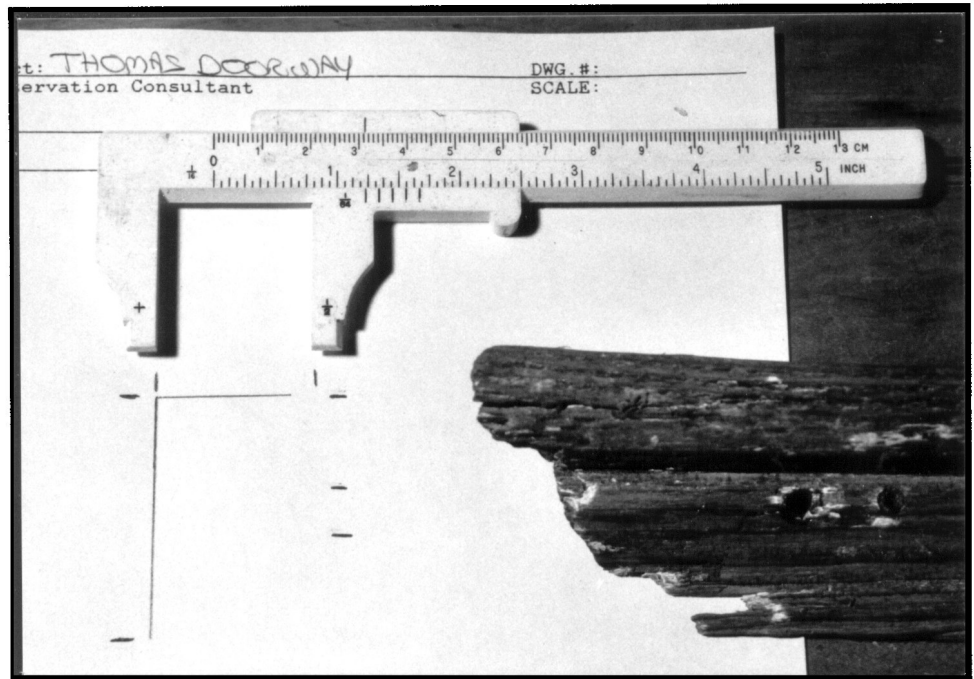


Figure 4. Lay out moulding height and width.

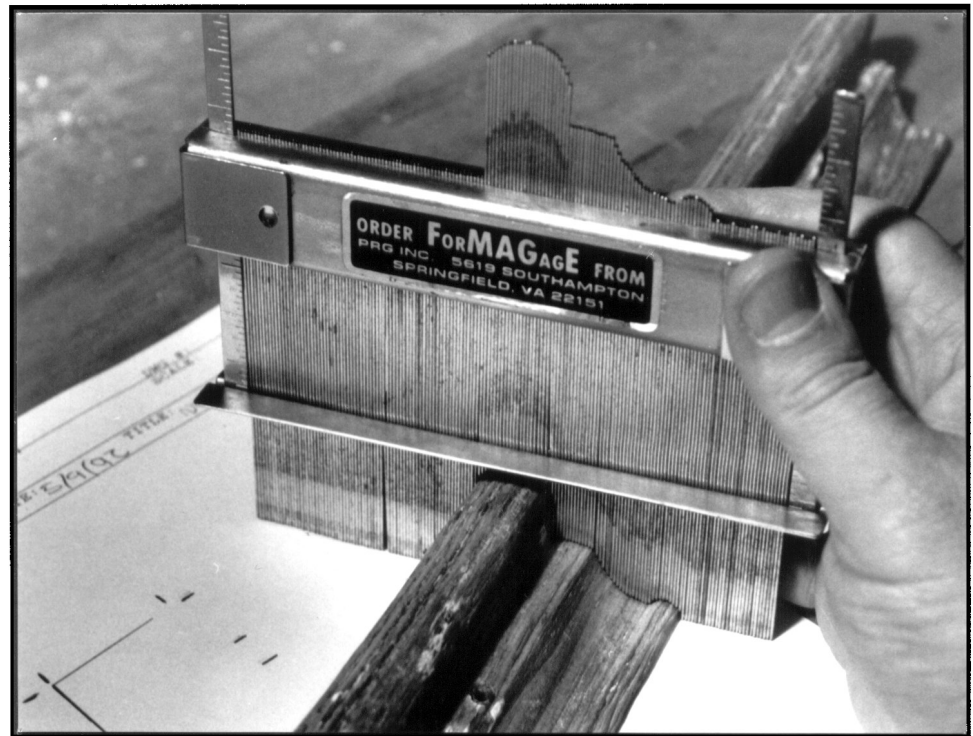


Figure 5. Take profile with gauge.

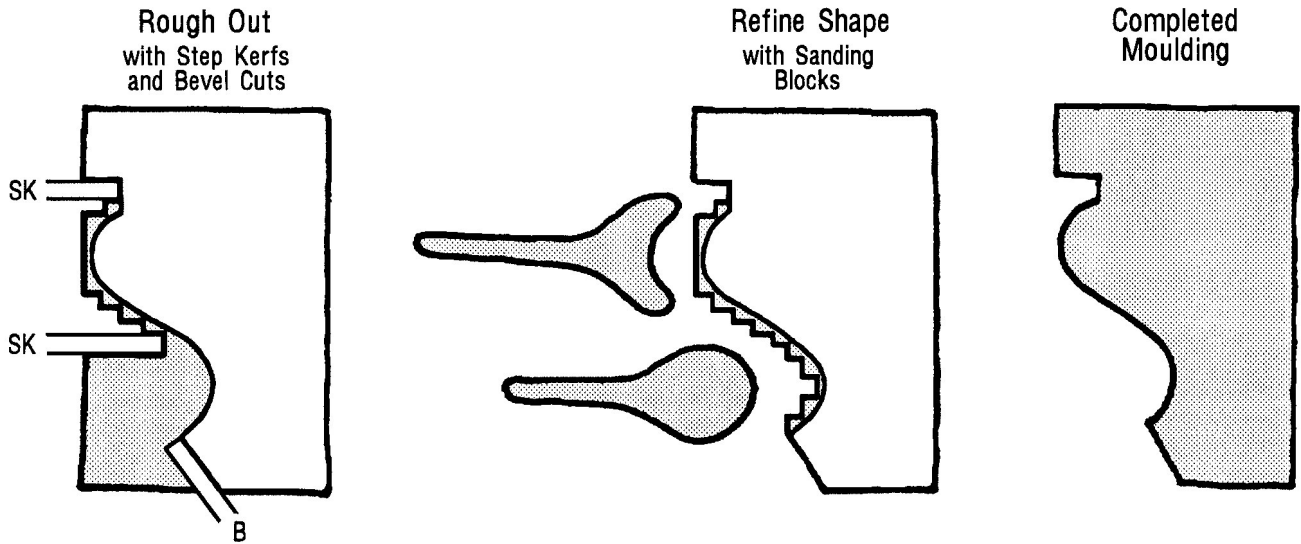


Figure 10. *Fig. 1. A full-form moulding is begun on the table saw by wasting away unwanted wood with step kerf and bevel cuts (left), and refined with sanding blocks (center), forming the finished moulding (right).*

To make stepped kerf cuts that will define a curved profile work with the blade set at 90 degrees and the face of the moulding down on the saw table. For each cut, step the fence over not more than the thickness of the blade, adjusting the depth of the cut so the edge of the kerf is just shy of the profile marked on the end of the test length. (See Figs. 10, 11.)

The stepped kerf method efficiently wastes away most of the unwanted wood and accurately defines the shape of the moulding for later refining.

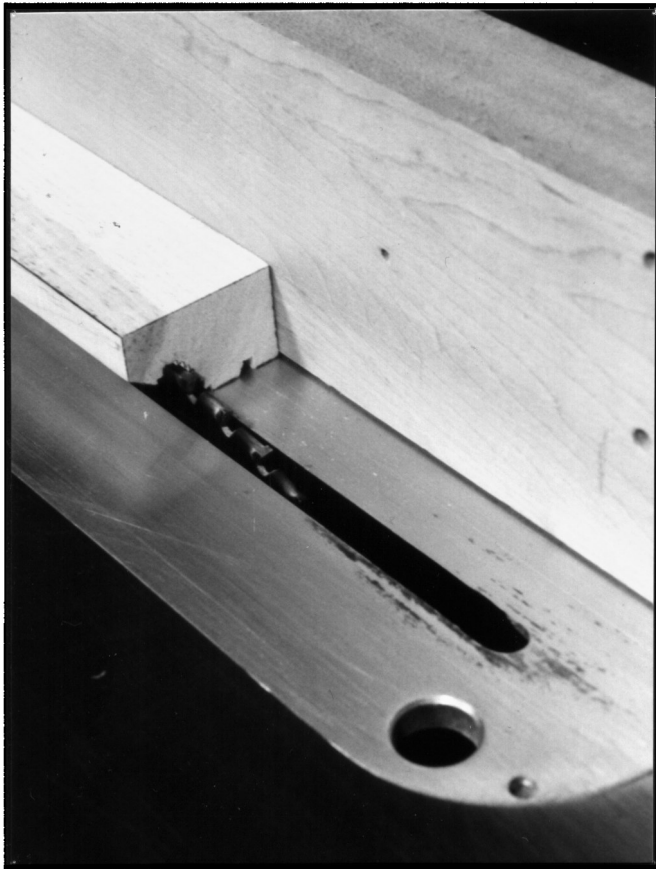


Figure 11. *Cutting step kerfs on the table saw.*