

Triangle Marking

A simple and reliable system

by *Adrian C. van Draanen*

Suppose you are making half a dozen drawers. You have cut all the pieces for them, and they are neatly stacked up. Your next steps are dovetails and grooves for the bottom. As you pick up a piece, you can probably tell whether you are holding a front, side or back. But can you tell which way is up, or which is the outside? Can you tell the left sides from the right? If the drawers are of different sizes, can you find matching pieces without remeasuring?

If you can answer "yes" to all these questions, you must have an adequate system for marking your work. If not, I'd like to suggest the triangle method.

Textbooks ignore marking. One is often advised to "mark the face," or "mark the top." But a particular method is never mentioned, and it is left to the worker to adopt or develop a system. Hence the use of lines, letters, numbers and other devices.

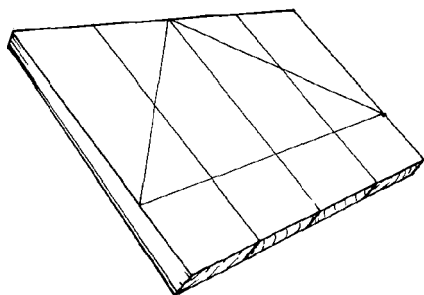
European carpenters and cabinet-makers use a system that employs a triangle, and nothing else. This system is widely used, and it is taught in trade schools. But it doesn't seem to be known outside Europe.

The rules of the system are:

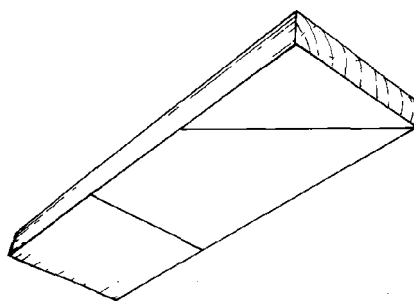
—the triangle is an isosceles triangle and it must point up, or away, from you;

—each piece of wood must have two lines of the triangle on it.

Here is a glued-up panel, marked according to these rules:

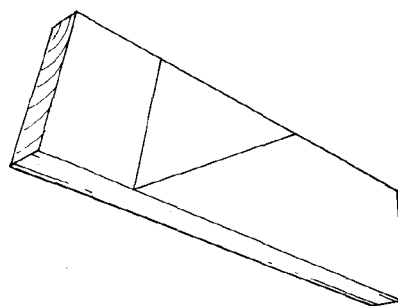


It is possible to take away each piece and put it back in the same place later. And each piece can immediately be identified. If, for instance, you were holding this piece,



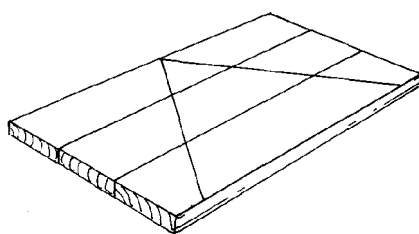
you would know right away that it is an inside piece, located to the left of the center of the panel.

If you had picked up this piece, you



would know that you were holding it upside down. You would also know that it is the rightmost piece of the panel.

A glued-up tabletop is similar to a panel that has been rotated 90°.

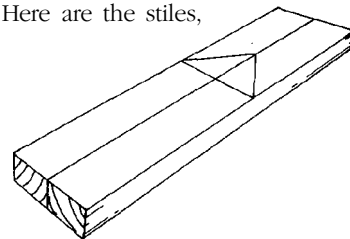


You may draw the base of the triangle on the tabletop, but it is not required and in practice it is never done. Look at each board and you'll find two lines, the two sides of a triangle that points away from you.

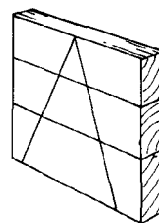
Now we have marked a panel and a tabletop. You can mix all the pieces any way you like and you can always put them back together. Each piece can be identified as either part of a panel (a vertical construction, because the base of the triangle is drawn at right angles to the sides of the individual pieces), or a tabletop (a horizontal construction, because the base of the triangle is parallel to the sides of the individual pieces). Just two lines give you all this information.

You may say at this stage that your own method is just as simple and fool-proof, and you are probably right. Very few constructions are as simple as a panel or a tabletop, though. When the work becomes complicated, as with drawers, the triangle method remains as simple as for the tabletop. Let's consider something that has both vertical and horizontal components, such as a door.

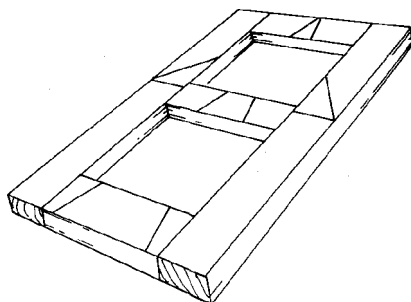
Here are the stiles,



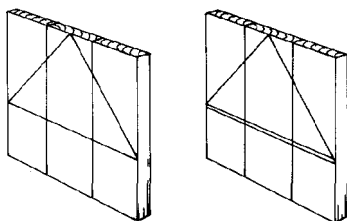
and here are the rails.



The completed door looks like this:

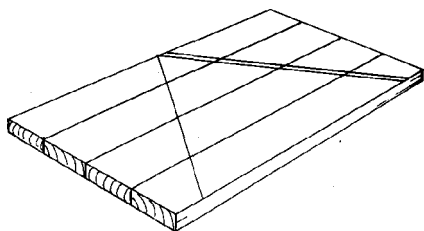
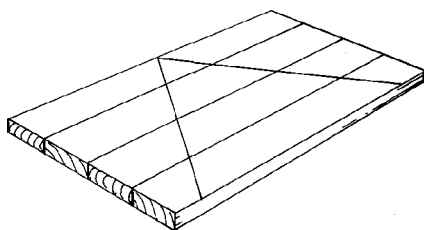


For simplicity the panels have been omitted, but you already know how to mark them. If this door had two panels of equal height, and both were marked the same way, it would be possible to get the pieces mixed up. To avoid this confusion, a double line on the second panel distinguishes it from the first.



The base line on the second panel is the one to double, because it is the only line that is common to all the pieces.

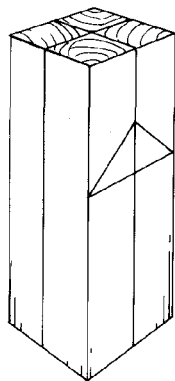
Two identical tabletops would be marked thus:



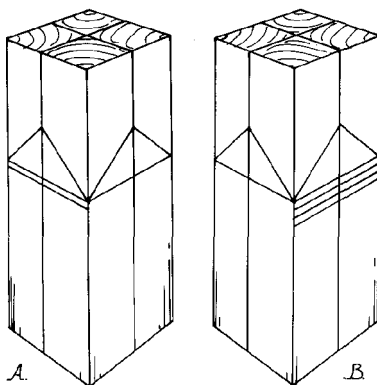
Again, a mix-up is impossible, because of the double line.

So far we have worked only with flat, two-dimensional assemblies. A set of four legs introduces a third dimension. There are front and back legs, left and right, and mortises are worked in the two inside surfaces of each leg.

A triangle drawn across the face of the front legs is clearly not enough.

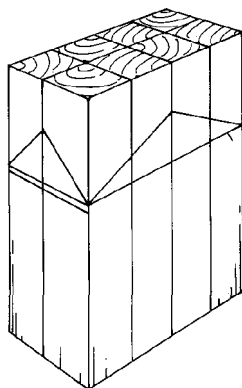


We must mark all four faces of the bundle. Going around clockwise, we draw the second triangle (A), doubling



the base line, as this line is common to the two legs, then the third (three lines) and the fourth triangle (B).

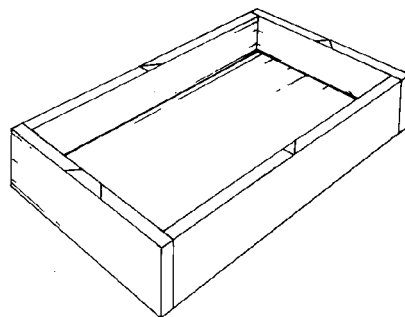
It makes no difference whether the piece has four legs, or more than four



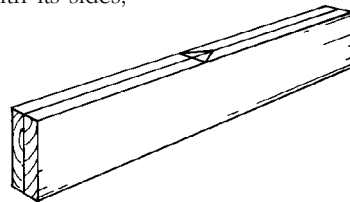
legs; they are all marked in the same manner.

Until now we have marked the sides of the stock, because that was the way the pieces had to be assembled. But in a box or a drawer, the edges, not the sides, are in the same plane; therefore marks are put on the edges.

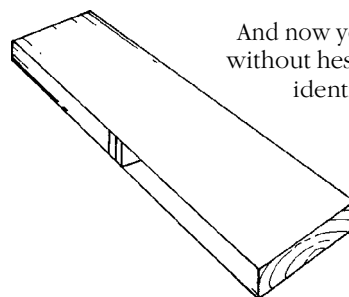
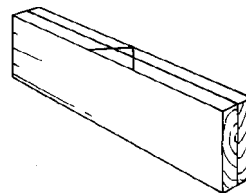
Here is a drawer:



with its sides,

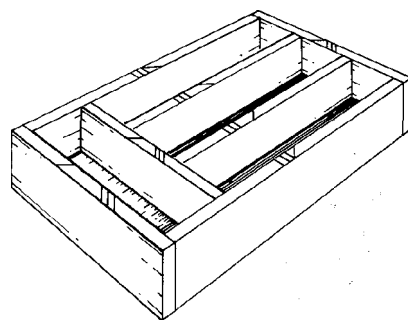


and its front and back.



And now you can without hesitation identify this piece.

It belongs to a drawer. It is the right-hand side of it. You also know which side is the inside, which way is up, and that it belongs to the third drawer.



Adrian C. van Draanen, 49, has worked as a cabinetmaker in his native Holland and in Ottawa, Canada, where he is now a government Computer expert.