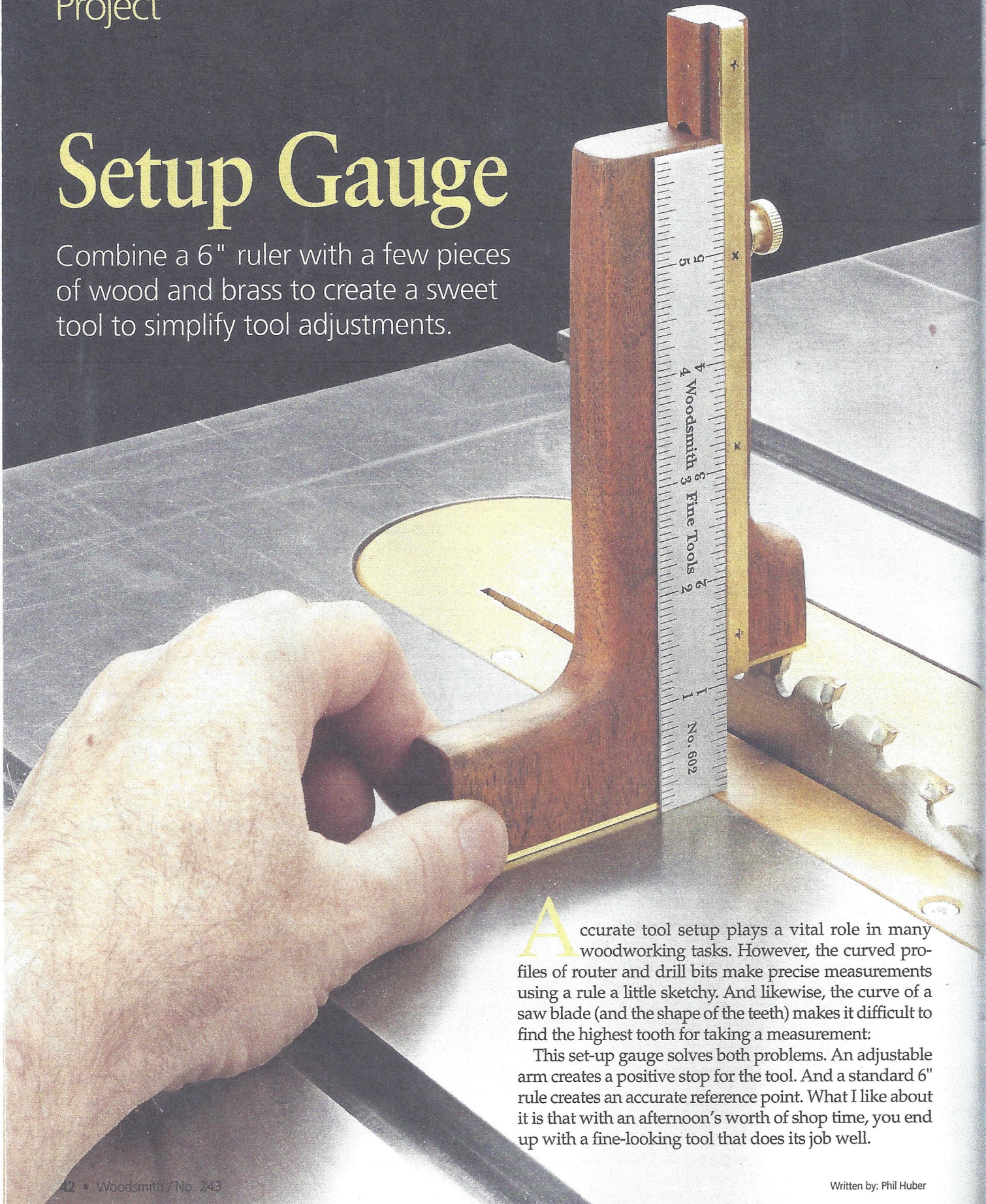


# Setup Gauge

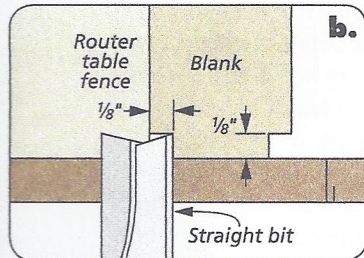
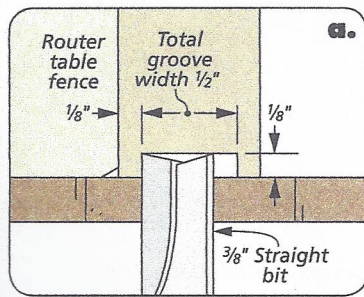
Combine a 6" ruler with a few pieces of wood and brass to create a sweet tool to simplify tool adjustments.



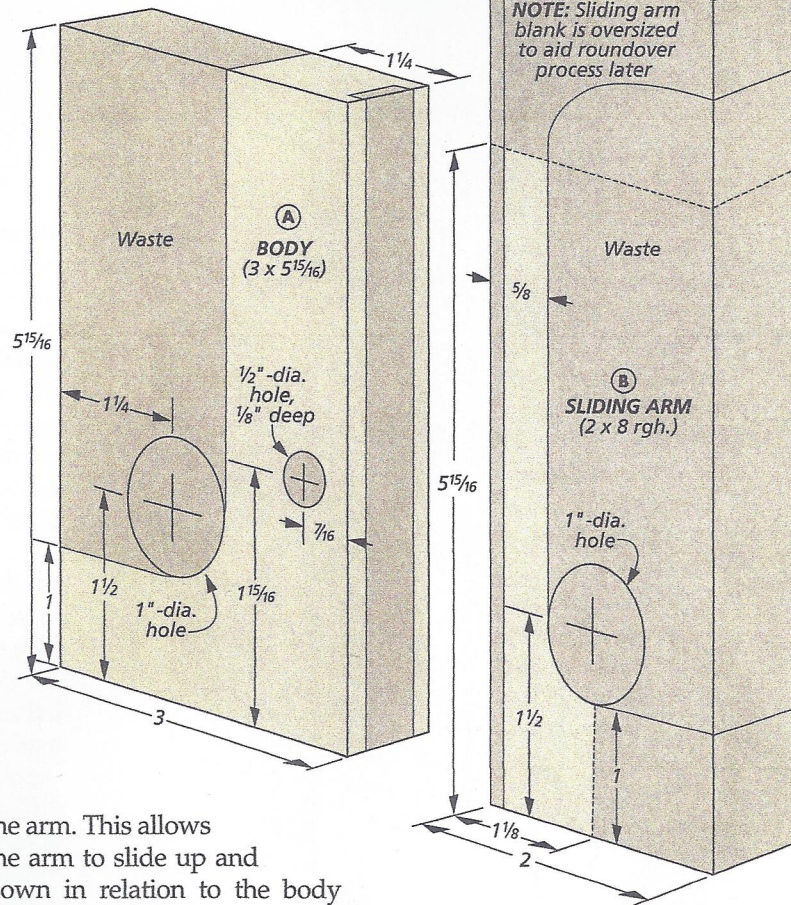
**A**ccurate tool setup plays a vital role in many woodworking tasks. However, the curved profiles of router and drill bits make precise measurements using a rule a little sketchy. And likewise, the curve of a saw blade (and the shape of the teeth) makes it difficult to find the highest tooth for taking a measurement:

This set-up gauge solves both problems. An adjustable arm creates a positive stop for the tool. And a standard 6" rule creates an accurate reference point. What I like about it is that with an afternoon's worth of shop time, you end up with a fine-looking tool that does its job well.





NOTE: Parts are cut from 3/4"-thick stock



## The BODY & ARM

Just two wood parts make up the gauge: a body and a sliding arm. The drawing above shows the size of the blanks for each piece. Take note that the blank for the sliding arm is extra long for safer handling while shaping.

**SLIDING PARTS.** The two parts are joined with a sliding tongue and groove and secured with a thumbscrew. A groove cut in the body accepts a tongue on

the arm. This allows the arm to slide up and down in relation to the body and stay in alignment.

With small parts like this, I prefer to form the joints at the router table with a straight bit. Details 'a' and 'b' show the goal.

Form the groove first. It serves as the basis for sizing the tongue on the arm. Shifting the fence slightly lets you trim

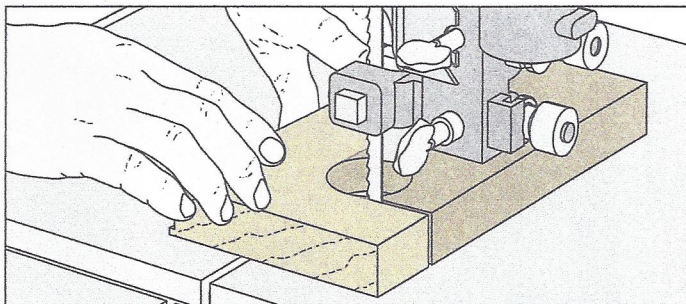
small amounts off the tongue. The pieces should slide together with a minimum of slop.

Before you start shaping the parts, head to the drill press. There you can drill a shallow hole for a rare-earth magnet that keeps the 6" rule in place.

**DRILL TO SHAPE.** While you're at the drill press, begin the shaping process. Both the body and arm have an L shape. A radius on the inside corner softens the profile for a more comfortable grip. You could certainly cut this entirely at the band saw, but I often use a Forstner bit to form a consistent curve.

Using the drilled holes as a guide, you can finish the shaping at the band saw, as you can see in the box at left. With a steady hand, it's a matter of filing and sanding to remove the blade marks and smooth the edges.

## SHAPING THE HALVES



**Making Straight Cuts:** After drilling the inside radius, draw lines tangent to the hole to define the shape of the body and arm. Cut on the waste side of the edge and sand to the lines.