



These three new types of tool are now commonly found in catalogs.

From top to bottom: the three-point or pyramid, the skewji gouge and the wedge.

# Unconventional Tools

*Do they work as claimed, and are they actually new?*

In the last ten years many new types of turning chisels have come on the market which are not like the traditional gouges, skews, and scrapers of earlier times. These range from miniature tools for turning pens, to large deep fluted bowl gouges and countless devices for hollowing. But here I will look at three new types of chisels that are used for spindle turning – the pyramid tool, the wedge tool and the skewji gouge. Because I have not used these tools before, I am giving you my first impressions based on 45 years of woodturning experience while recognizing that there is a learning curve with every new tool.

Since I didn't already own these tools, and I am not getting a grant to do this research, I decided to make my own chisels. The cost of the tool steel for each chisel was about \$1. The steel is W-1 quenched from 1440°F in water to a hardness of Rc 63. If you are interested in learning how to do this yourself, read my article, *Woodturning Chisels You Can Make*, in the April, 2007 issue of *The Old Saw*. If you choose to purchase these tools from a catalog, they cost about \$35 each.

Before making the chisels, I studied the pictures in several catalogs in great detail: Packard Woodworks, Craft Supplies, Woodworker's Supply, Hartville Tools, and The Cutting Edge. I tested the chisels primarily for their application as cutting tools (not scrapers) on spindle turnings.

## The Three Point (or Pyramid) Tool

The Hartville catalog attributes the invention of this tool to Bill Jones, a sixth generation English turner who famously wrote, "The lathe is man's best friend, and without it I am nothing."

It has three bevels that come together to form a single point exactly in the center of its cylindrical shaft. This idea makes perfect sense to me since I sharpen my skew chisels to a high angle (about 45°), and use the acute point

of the toe for countless operations of slicing end grain.

My first impression of the three point chisel was that obviously it does not have three points, and Craft Supplies got it right by calling it the pyramid point tool. I realized, after using it that in addition to the central point, it does in fact have three points: the central point plus the heel of each edge which works like the heel of a skew.



The Pyramid – Three equal bevels come together to form a point in the center.

**Test Results** – Results were disappointing when I tried to slice straight down with the point like I do with the point of a skew chisel. The finish obtained was not as good as with a skew. Because it has three planes instead of two, the dihedral angle cannot be less than 60°, and the “knife edge” quality is lost. The end grain fibers of the wood are cut away at such a severe angle that they tear instead of being sliced cleanly.

However, more experimenting with the pyramid tool revealed the unexpected. Convex ball forms could be cut with the heel of each edge, and a perfect finish resulted. Serious pressure was required to make the cut (because of the 60° edge angle), and as a result control was difficult. Plus my view of the cutting point was obstructed by the tool.

When used with one of the flat sides facing up, the pyramid tool also functions as a spear point scraper.

**Conclusion** – The pyramid tool is very easy to control (except as noted above), easy to sharpen, and is not prone to catches, but it cannot replace the skew because it lacks an acute edge and therefore does not produce a fine finish.

### The Wedge Tool

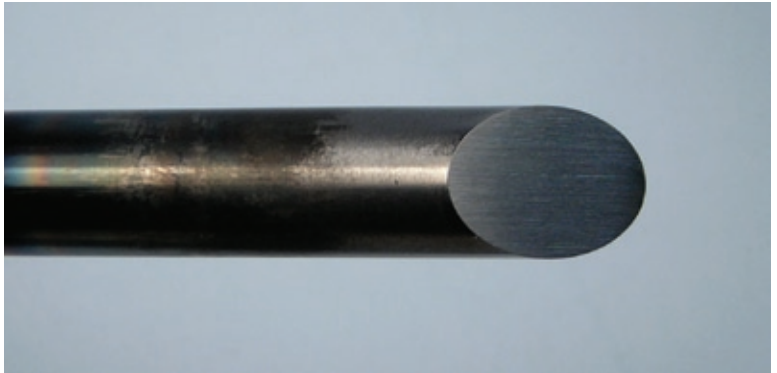
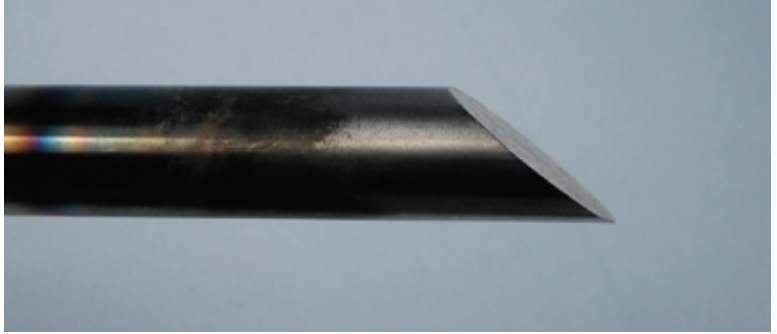
I was intrigued by this tool because of its simplicity. Surely no tool is easier to make, or sharpen.

**Test Results** – The wedge tool was at first disappointing, and it took a while to figure out what it could do. It has uses either as a cutting tool or a shear scraper. With the bevel rubbing in cutting position, the only thing it seemed to do well was planing horizontal surfaces. It was difficult to control, and prone to catches because it has a very small “sweet spot” just to either side of the point.

In bevel rubbing position (bevel down), I was unable to use the nose of the tool without getting a catch. Then I turned the tool over and put the bevel up. Now I had a shear scraper that I could use to make a cove. Of course this did not produce as good a finish as a gouge, but control was excellent. To my amazement, I was able to make straight in cuts with the nose of the tool.

**Conclusion** – As a cutting tool, the wedge is very limited, and it is a somewhat cumbersome tool and prone to catches. One thing in its favor is that it is certainly an easy tool to sharpen.

I suspect that many people who use the wedge tool are using it like a round nose scraper, and this is a poor approach to spindle turning. Yet the ability to rotate the wedge tool and use different parts of its elliptical edge may provide advantages in shear scraping.



The Wedge – Simply a round bar sliced at an angle.



Cove Comparison – Left half of cove cut with a gouge, right half is shear scraped with wedge tool.



Wedge Tool Straight In – The nose of the wedge tool will pierce straight in.

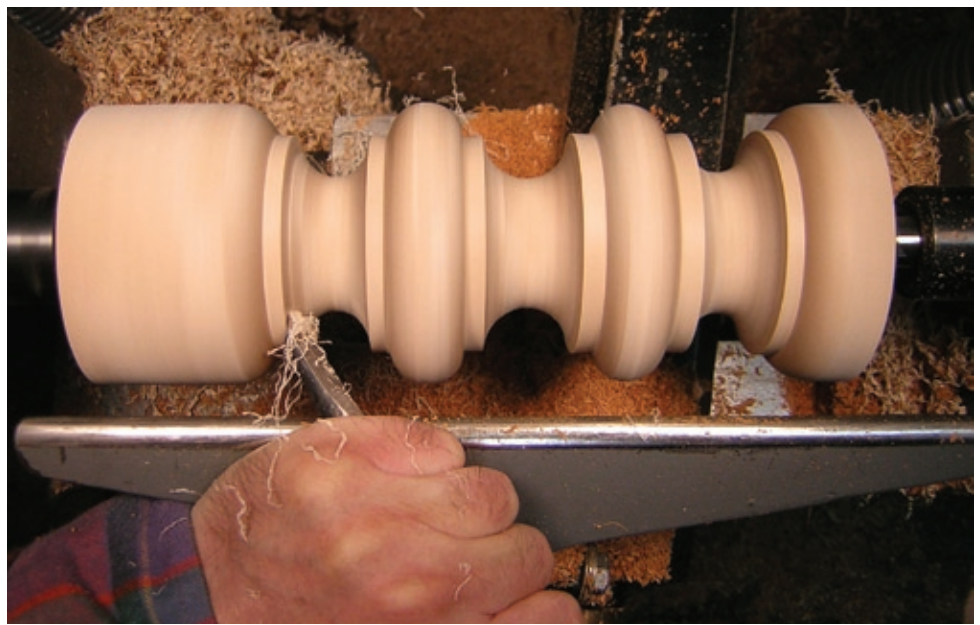


## The Skewji Gouge

The Packard Woodworks catalog attributes the invention of this tool to Allan Beecham, and they spell it skewchi gouge. I prefer the more sensible spelling of Woodworker's Supply, simply skewji gouge. The implication is clearly that this half-skew, half-gouge will do the work of both.

A skewji gouge is simply a fluteless gouge, and as such its cutting edge lies in one plane and resembles that of a curved skew. But it is beveled only on the bottom and is not ground symmetrically (equally on top and bottom) like a skew.

In order to create a flat surface at the tip, a considerable amount of material must be ground away from the top side. I have observed two ways of doing this, either ground to a long flat angle on top, or ground with a concave sweep. I chose the second method because I wanted the top surface to be parallel to the axis of the tool. In any case, the sharpening of this chisel is complicated by the fact



Skewji Example – This sample turning was made entirely with the amazingly versatile skewji gouge.

that it is necessary to periodically grind back the top of the tool.

**Test Results** – I loved the skewji gouge from the first moment the chisel hit the wood. It felt familiar, like an ordinary spindle gouge. It performed both convex ball shapes, and coves, sliding and piercing entries, just like a gouge.

But what about being a skew? Clearly, because it does not have a point like the toe of a skew, it will not perform those operations such as cutting in from the square as well as a pointed skew. What it does have is left and right heel points. The heel point of a regular gouge is not useful, because it's shape is blunted by the rounding over of the top of the flute. However, I was able to use the heel point of the skewji gouge to clean up inside corners of shoulders, something that can't be done as well with a regular gouge.

The nose of a skewji gouge will cut to the bottom of a sharp vee better than a regular gouge because the cutting edge lies in one plane. While the results were not as good as those obtained by the point of a skew, I was able to round over adjacent beads to the bottom of the vee, and achieve good results.

**Conclusion** – The skewji gouge does, to a large degree, live up to the claim of doing the job of both the gouge and the skew.

I think in the old days, thin bars of tool steel were hammered into fluted gouge shapes to make them more rigid. That was then. Now nearly all gouges are made by milling and/or grinding a flute in a round bar, and more skew chisels are being made from round stock. This is because a round bar is strong, comfortable to hold, and slides and rotates smoothly on the tool rest. Although the fluteless gouge is nothing new, the complete evolution of the turning chisel made from a round bar has now achieved a perfect marriage with the fluteless gouge. ■



Skewji – The top of the tool is flat and parallel to the shaft, while the bevel is ground in the conventional way for a gouge.



Skewji Inside Corner— The skewji gouge will clean up an inside corner better than a regular gouge



Skewji in Vee — The skewji gouge will cut to the bottom of a narrow vee better than a regular gouge.