## COMBINATION SAWS By Bob Garay

As a tool collector I am always fascinated by the ingenious combination tools thought up by inventors wanting to make a better mousetrap. In many cases these tools were overly complicated to easily use and

were tossed by the wayside for the more practical singular use tool. Today the impractical tool that never caught on becomes a rare collectible. The hammer that is also a plane, the square that is also a rabbet plane, or the ruler that is also a level. Being a saw collector I am alwavs on the lookout combination for saws. The holy grail of combo saws is the Disston No.43



saw. It is a beauty of a saw with a 26 inch straight back blade that has a incremented ruler etched into the top edge. The specially shaped handle forms a 90 degree square with the saw blade and has a brass bar riveted into the blade to keep this critical angle true. The handle has a double level set at 90 degrees to each other so the saw can be used to plumb vertically or level horizontally. The levels are set in a beautifully cast brass fixture with floral decorations boldly displaying "DISSTON" and the 1858 patent date. The applewood handle is exquisitely shaped with a hole in the top to house a long steel scratch awl for layout work.

This saw originated with a patent by Jackson Gorham issued on May 13, 1856 for a square and rule combination saw. Hiram Smith of Camden, New Jersey added onto this design when he patented on May 18, 1858 improvements on the Jackson Gorham patent. His design included brass shoulder strips riveted directly to the blade instead of the handle to ensure squareness and provided a scratch awl located in the handle for layout. It was utilized by the Disston Company when Henry Disston along with Thomas L Morss patented the double level arrangement in May 25, 1858. These saws were sold until 1918 when Disston

dropped them from their product line.

Others copied the combination of saw-squareruler design but none came close to the beauty of the Disston No.43 saw. Disston manufactured a line of combination saws over the years with various numbering denotations. Below is the offerings Disston's from 1911 catalog.

## **IMPROVED COMBINATION SAWS** THE MOST COMPLETE AND USEFUL SAWS EVER OFFERED TO THE TRADE

**No. 43.** Combination Saw, with 24-inch Square and Rule, Straight-edge and Scratch Awl; Apple Handle, with Plumb and Level attachment. Blade same quality as Disston, No. 7 Hand-Saw. 26 inches, \$30.00 per dozen.

**No. 42.** Combination Saw, with 24-inch Square and Rule, Straight-edge and Scratch Awl; Apple Handle. Blade same quality as Disston, No. 7 Hand-Saw. *Without* Plumb and Level attachment. 26 inches, \$25.00 per dozen.



**No. 38.** Combination Saw, with 24-inch Square and Rule, Straight-edge and Scratch Awl; Apple Handle. Blade same as "Brown's," No. 3. 26 inches, \$17.00 per dozen.

No. 39. Combination Saw, with 24-inch Square and Rule, Straight-edge and Scratch Awl; Apple

Handle, with Plumb and Level attachment. Blade same quality as "Brown's," No. 3. 26 inches, \$22.00 per dozen.



**No. 29.** Combination Saw, with 24-inch Square and Rule, Straight-edge and Scratch Awl. Beech Handle. 26 inches, \$12.00 per dozen.

Over the years Disston offered many different varieties of combination saws. In Erwin L. Schaffer's book "HAND-SAW MAKERS OF



At left is Disston No.43 brass square & level assembly riveted to blade. On right is Disston No. 29 square and rule with original scratch awl.

NORTH AMERICA", he lists over a dozen different Disston models as combination saws. Below are some of the offerings.

| 1856 - 1918   | No.38 - Gorham sq. & rule        |
|---------------|----------------------------------|
|               | No.39 - Gorham plumb & level     |
|               | No.42 - Gorham sq. & rule        |
|               | No.43 - Gorham plumb & level     |
| 1858 -1860    | No.25 - Gorham plumb & level     |
|               | No.28 - plumb & level            |
|               | No.29 - Gorham sq. & rule        |
| 1860 - 1 year | No.37 - Gorham plumb & level     |
| 1875 - 1 year | No.8 - Keystone plumb & level    |
| -             | No.9 - Keystone teeth sq. & rule |
| 1880 - 1 year | No.77 - square & crosscut        |
| 1904 - 1 year | No.086 - Defiance sq. & rule     |
| 1914 - 1918   | No.087 - Enterprise sq. & rule   |
|               | _                                |

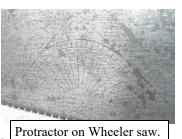
Of course Disston was not the only manufacturer of combination saws. The company of Harvey Peace offered their "COMBINATION SAW NO. 1, a 26" saw with a square, rule, and



With all these different models I can see how one might get confused. From sample saws I have even the worker's at Disston must have been confused as I have one No.43 type combo saw boldly stamped "22" at left, and another stamped "24" at right.

straight edge. They also offered an "IMPROVED COMBINATION SAW No.29, comprising all the components of their No.1 saw with the addition of a scratch awl. Woodrough & McParlin is well known for their No.12 carved panther-head handle. Their No.33 "On The Square" combination saw offered a 24" rule, straight-edge, and square. Wheeler, Madden & Clemson Mfg. Co. offered their "Hard To Beat" combination saw with a 24" square and rule, straight edge and scratch awl. I have another of their saws with a protractor on the blade to help draw angles. Richardson Bros. also offered a

No.1 & No.2 combination saw. The differences between the two is the No.1 had a rule on both sides and a scratch awl with a fancier handle.



During more

recent times manufacturers have revitalized the combination saw. I have a "GEOMETRIC" combination saw made by the Geometric Saw Co. from the 1950's. It has plumb & level vials imbedded in the bakelite handle. It also has a 24" rule and square and a bevel gauge with different

angles marked off at the top horn.

Also from the 1950's is a combination saw patented to Harry M. McConnell



from Harpster, Idaho Feb. 17, 1953. Manufactured by the Joy Tool Co. of Cornelius, Oregon, the No.100A combination saw has plumb & level vials imbedded in the heavy plastic handle, and a 24" rule and straight edge at the top edge of the blade.

In 1949 another saw manufactured in Kingsland Gaorgia, was called the "7 IN 1" combination saw. The Kingsland Saw Works was established and seems to have con-



tinued operations for 6 or 7 years, up until 1956. The only product that they offered, is the Ulmos Hand Saw with a cast miter gauge - square attached to both sides of the blade directly in front of the handle. The miter gauge has steps cast into it for accurately laying out 90, 23 1/2, 32 and 45 degree angles. While the handle may look awfully funny and appear homemade or missing the top horn, it is, in fact, complete and is original to the saw. All of the Ulmos Saws observed to date, have the same style handle, the top horn is not



missing and in fact the handle has a little thumb rest on the top edge. Besides the miter gauges on the back side of the blade is etched a compass multi-angle gauge. It also has a rule at the top and a small scribe cast at the top of the gauges.

Another combination saw is the



"MITREWRIGHT SAW" patented in 1906 by H.G. Osborne. It is a 12" back saw with an angled back that assists when marking 45 and 90 degree angles.

Of course I have not found all of the different combination saws yet. The search is never ending. That is what makes collecting tools so much fun. Just when you think you have it all along comes something you have not seen before. Below are two patents of combination saws I have



not seen produced. I am sure there are more in our members collections so take a picture and email them to our editor. And if by chance you don't mind parting with it, I would love to add it to my collection.

