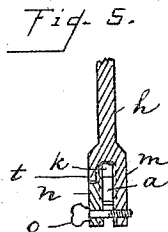
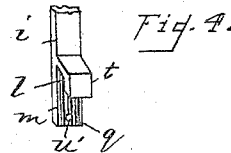
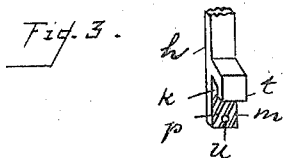
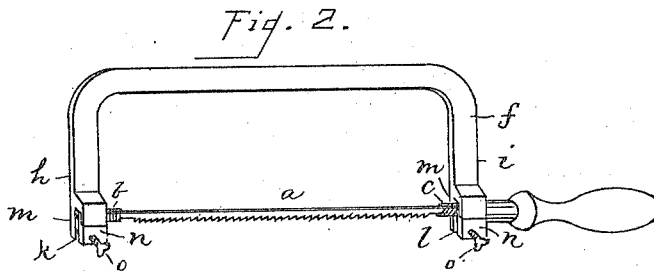
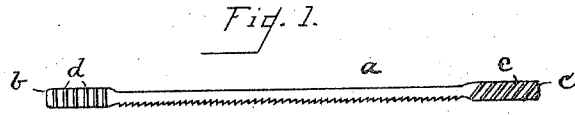


J. ULLRICH.
 SAW AND HANDLE FOR THE SAME.
 APPLICATION FILED AUG. 31, 1909.

948,151.

Patented Feb. 1, 1910.



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 Inventor

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH ULLRICH, OF NEW ORLEANS, LOUISIANA.

SAW AND HANDLE FOR THE SAME.

948,151.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed August 31, 1909. Serial No. 515,399.

To all whom it may concern:

Be it known that I, JOSEPH ULLRICH, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Saws and Handles for Same, of which the following is a specification.

This invention relates particularly to hand saws, such as are used by jewelers and other workers in precious metals; the said saws being extremely fine and of small size require special adaptation to handles to insure positive and effective use.

My improvements consist in providing a saw of the above character with enlarged ends and in providing the flat surfaces of the said ends with parallel transverse and oblique ribs.

The improvements further consist in the combination, with a saw of the above description, of a handle having a pair of arms the ends of which are adapted to receive the ribbed ends of the saw and to securely clamp same, so that there will be no slipping of the saw while in use.

Referring to the annexed drawing, Figure 1 is an enlarged view of my improved saw, detached from its handle. Fig. 2 represents the saw connected with the handle and means whereby the same are secured together. Figs. 3, 4 and 5, are detail views of the saw receiving parts of the handle and means employed for securing the saw therein.

On the drawing, the letter *a* designates the saw-blade; *b c*, its widened ends, and *d, e*, the parallel-transverse and oblique ribs of same. These ribs are preferably made on both sides of the saw blade; the transverse ribs of the one side being opposite, or in rear of the oblique ribs of the other side, so that the ends of the saw blades shall be prevented from moving either vertically or horizontally, when secured in the handle, as hereinafter described.

The saw-frame *f*, is of the ordinary D form, the saw holding members *h, i*, being in the same line of projection and having saw-receiving slots *k, l*, the construction of which differs, however, from those of the ordinary D frame, in, that but one side or jaw *m* is integral, the other jaw *n* being detachable and adapted to be held, when in place by a

tightening screw *o*. The inner side of each jaw is provided with parallel transverse or oblique grooves *p, q*, to correspond with the parallel transverse or oblique ribs of the saw blade; and the upper edge of each detachable jaw is adapted to normally rest against a shoulder, formed at the lower front-edge of the saw holding member, as shown at *t*, in Fig. 5. The lower part of each jaw is provided with a bolt hole *u, u'*, the holes in the fixed jaws being slightly smaller than those in the detachable jaws, are screw-threaded to receive the ends of the thumb-screws *o*, whereby the jaws are made to clamp or release the saw blade between same.

The widened ends of the saw blades may be formed during the rolling process, by specially prepared rollers, or the enlargements may be effected by the rib producing dies and the punches or presses connected therewith.

The parallel transverse or oblique ribs are preferably made on both sides of the saw blade. The transverse ribs of one side being opposite, or in rear of the oblique ribs of the other side.

Having described my invention what I claim as new and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a saw-blade having the faces of its respective ends provided with transverse holding-serrations or ribs.

2. As a new article of manufacture, a saw-blade having its respective ends widened, and the faces thereof provided with transverse holding serrations or ribs.

3. As a new article of manufacture, a saw-blade having the faces of its respective ends, on one side thereof, provided with transverse holding-serrations or ribs, and the other or opposite side with oblique-holding serrations or ribs.

4. As a new article of manufacture, a saw-blade having its respective ends widened, one side of said ends being provided with transverse holding-serrations or ribs, and the other or opposite side with oblique holding-serrations or ribs.

5. The combination of a saw-blade having its respective ends widened, and the faces thereof provided with transverse holding-serrations or ribs, and a saw-frame provided

with means for detachably-clamping the ends of the saw-blade.

6. The combination of a saw-blade having its respective ends widened, one side of said
5 ends being provided with transverse holding-serrations or ribs, and the other side with oblique serrations or ribs, and a saw-frame provided with correspondingly ser-

rated or ribbed clamping means, for detachably securing the saw blades.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH ULLRICH.

Witnesses:

LOUIS J. ERICKSON,
F. D. CHARBONNET, JR.