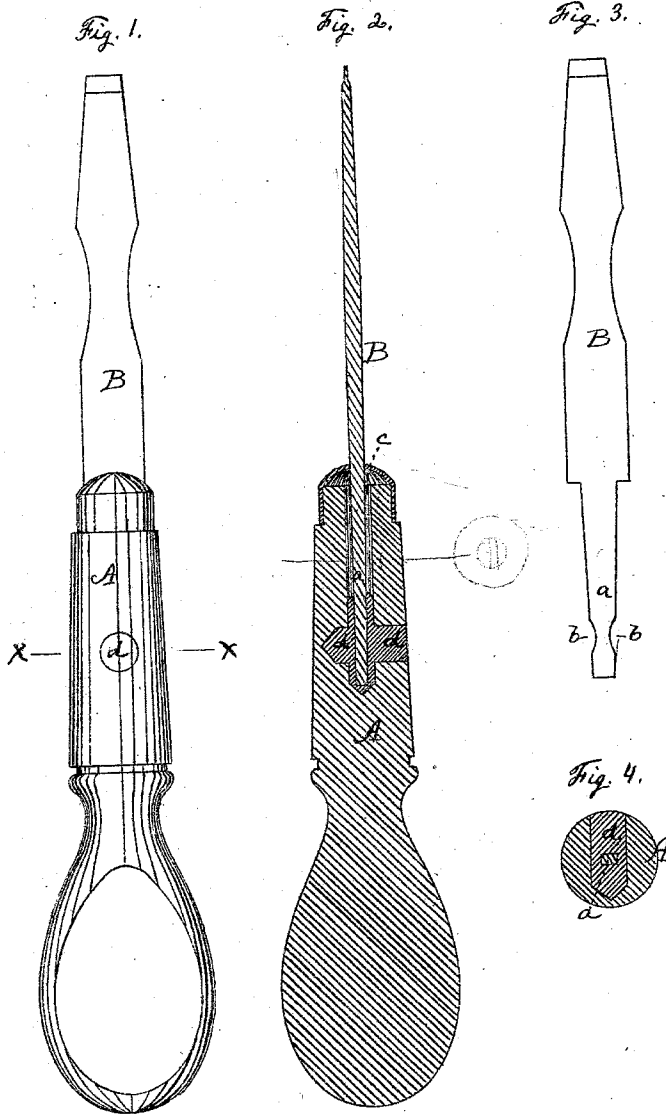


J. P. CURTISS.

Improvement in Screw Drivers.

Patented June 6, 1871.

No. 115,582.



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JONAS P. CURTISS, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN SCREW-DRIVERS.

Specification forming part of Letters Patent No. 115,582, dated June 6, 1871.

I, JONAS P. CURTISS, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Screw-Drivers, of which the following is a specification:

My invention consists of an improved article of manufacture—to wit, a screw-driver having its tang or shank secured in a solid handle, as hereinafter described, whereby a superior article for a screw-driver is produced.

In the accompanying drawing, Figure 1 is a side elevation of a screw-driver embodying my invention. Fig. 2 is a longitudinal section of the same; Fig. 3, a side elevation of the screw-driver blade and its tang; and Fig. 4, a transverse section of Fig. 1 on line *x x*.

A and B, respectively, designate an ordinary screw-driver handle and blade. The blade B is pressed out by means of a die and punch in the usual manner, but differing in the form of its shank or tang *a* by being provided upon each edge with a notch or recess, *b*, Fig. 3. As in the ordinary screw-driver handle a round hole, *c*, Fig. 2, is drilled in the center of the handle A, the diameter of which hole is greater than the thickness of the shank *a*, but less than its width. Another hole is drilled transverse with the hole *c*, and of such depth as to insure of its crossing the hole *c*, but not deep enough to extend through the handle, as shown at Figs. 2 and 4. The distance from the end of the handle to the transverse hole in the same should correspond with the distance from the shoulder on the large end of the blade B

to the recesses *b b* on the shank *a*. The parts being thus formed, the shank *a* is driven into the hole *c* in the handle A, when it is secured thereto by running molten lead and antimony, or other suitable metal, *d*, into the transverse hole in the handle A, which metal *d* fills said hole and forms around the tang *a*, Fig. 4, and also fills, for a short distance in each direction, the cavities upon the flat sides of the tang *a*, as shown at Fig. 2, thus firmly securing the same in place. The sprue is removed and the metal finished, when the device is complete.

The advantages of my invention are that the shank, being supported by the metal *d* upon its two flat sides, is much more firmly held in place than the same can be done with a pin driven into a hole in the handle and tang, and that it is much cheaper than the pin or rivet, the recesses *b b* being formed simultaneously with the tang and blade without any subsequent operation, as is necessary when a hole is made through the tang.

I claim as my invention—

As an improved article of manufacture, a screw-driver, having the tang of its blade inserted in a solid handle and partially embedded in soft metal, in the particular manner herein described.

JONAS P. CURTISS.

Witnesses:

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