

(No Model.)

W. L. PARMELEE.

SCREW DRIVER.

No. 294,663.

Patented Mar. 4, 1884.

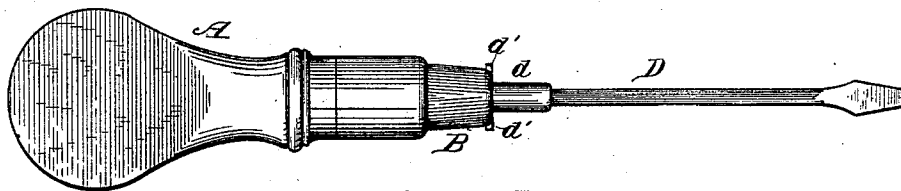


Fig. 1.

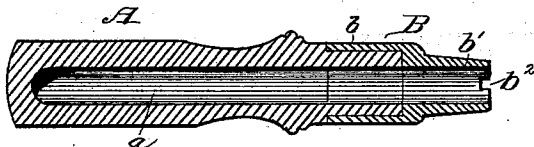


Fig. 2.



Fig. 3.

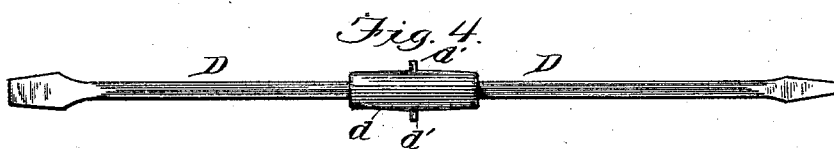


Fig. 4.

Witnesses:

Wm J Dural
Beside

Inventor:

William L. Parmelee
per Edson Prot.
attys.

UNITED STATES PATENT OFFICE.

WILLIAM L. PARMELEE, OF ANSONIA, CONNECTICUT.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 294,663, dated March 4, 1884.

Application filed October 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. PARMELEE, a citizen of the United States, residing at Ansonia, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Screw-Drivers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to reversible bits, having for its object to provide a bit that can be easily and quickly reversed, and which shall have a firm and broad bearing in the ferrule, which is also adapted to receive one end of the wooden handle; and it consists of the combination and arrangement of parts, as will be hereinafter more fully set forth and claimed.

In the drawings like letters indicate like parts in the several figures.

Figure 1 shows a side elevation of my improved tool. Fig. 2 is a longitudinal section of the handle. Fig. 3 is a cross-section of the ferrule or thimble at a point above the cylindrical portion which receives the boss or head of the bit. Fig. 4 is a side elevation of my reversible bit.

In putting my invention into practice, I bore the handle A from front to rear, forming a longitudinal socket, *a*, the handle being otherwise solid. I use a ferrule, B, which is made in one piece, but is divided into a handle portion, *b*, and a bit portion, *b'*. The tenon of the handle has parallel sides and circular edges, and fits closely within the handle portion of the ferrule, which is of like shape, to prevent the turning of the handle within the ferrule. I am aware that it is common to thus

attach a ferrule and handle, and to this I lay no claim *per se*. The bit portion of the ferrule is cylindrical externally and internally, and is made, preferably, slightly flaring in the inside to receive the boss *d* of the bit D. The boss *d* is provided with studs *d'*, which fit into notches *b²* in the ferrule, and thus prevent the bit from turning.

I do not limit myself to the exact construction shown and described, but hold myself at liberty to make such alterations as fairly fall within the scope of my invention—as, for instance, the boss *d* can be keyed to the bit D, instead of being in one piece therewith, or webs can be cast on the boss in lieu of the studs.

I am aware that it is not new to form a screw-driver with laterally-projecting flanges which engage with a ferrule to prevent the bit from turning.

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

1. A reversible bit provided about equidistant from its ends with a cylindrical boss having studs, in combination with a handle and ferrule having notches to receive the studs on the boss, as and for the purpose set forth.

2. A handle having a longitudinal bore from its smaller or ferrule end, an unbroken exterior, and a ferrule, in combination with a reversible bit having a cylindrical boss about equidistant from its ends, and means for interlocking it with the ferrule of the handle, as and for the purpose set forth.

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

WILLIAM L. PARMELEE.

Witnesses:

REUBEN H. TUCKER,
E. BARTLETT.