No. 839,105. PATENTED DEC. 25, 1906.

G. P. BUTLER.

SCREW DRIVER.

APPLICATION FILED SEPT. 25, 1905.

Fig. 3.

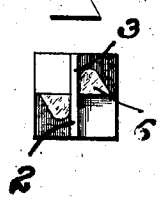
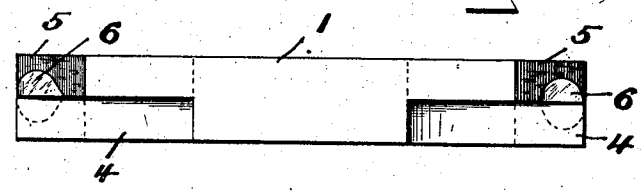


Fig. 1.



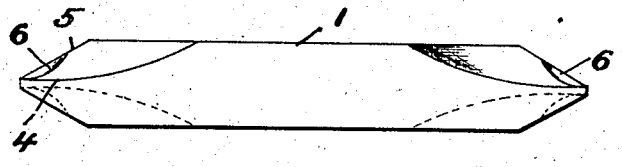


Fig. 2.

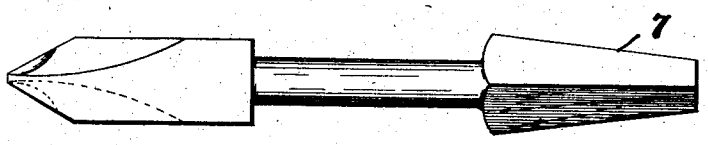


Fig. 4.

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GEORGE P. BUTLER, OF NEW HAVEN, CONNECTICUT.

SCREW-DRIVER.

No. 839,105. Specification of Letters Patent. Patented Dec. 25, 1906.

Application filed September 25, 1905. Serial No. 280,039.

To all whom it may concern:

Be it known that I, GEORGE P. BUTLER, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Screw-Drivers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to new and useful improvements in screw-drivers, and has for its object, among other things, the construction of a screw-driver which will engage the slot in a screw-head and be held therein, so as to prevent its accidental disengagement therefrom, and to reinforce and strengthen that portion of the screw-driver which is doing the work and in contact with the screw-head, and thereby produce a tool that is practically indestructible.

To these and other ends my invention consists in the screw-driver having the details of construction hereinafter described, and more particularly pointed out in the claims.

Referring to the drawings, in which like numerals of reference designate like parts in the several figures, Figure 1 is an elevation of my improved screw-driver looking toward one of its sides. Fig. 2 is a similar elevation looking at another side. Fig. 3 is an end elevation looking toward the right of Fig. 1; and Fig. 4 is a modification of my invention, illustrating how the screw-driver may be adapted for use in the ordinary brace.

Practice has demonstrated that the head of a screw-driver of the ordinary type frequently slips out of the slot in the screw-head, more especially as the screw is making its last turns when being driven in or starting the screw in taking it out, particularly if the slot has become worn or if the wood is hard. This action not only injures and mars the screw-head, but frequently the wood also, aside from destroying the head of the screw-driver by turning or twisting the end thereof.

It is to overcome these and other objections to the present type of screw-driver that I have designed the screw-driver about to be described.

Referring to the drawings, the numeral 1 designates the body of a screw-driver, which terminates at its end in a head that is provided with teeth 2 and 3. These teeth are upon opposite sides of the head, being substantially one-half of the width thereof. The front face 4 of each tooth is undercut, as shown in Fig. 2, and the rear face 5 is beveled sharply to give the maximum strength to the tooth and make a powerful drive upon the screw-head. A small notch 6 is cut in each of the faces 5 to facilitate the entrance of the screw-driver into the slot of round-head screws.

By reason of the undercut face 4 the teeth engage the walls of the slot in the screw-head near the bottom thereof, where the head is strongest and least liable to injury, and also hold the screw-driver from slipping out of the slot. A practical demonstration of the use of my invention has shown that it is almost impossible to accidentally disengage the screw-driver from the screw-head; but, on the contrary, the more powerful the drive the tighter the hold.

In Figs. 1 and 2 I have illustrated the screw-driver with a toothed head at each end, one of which is used for driving screws in and the other for driving them out.

The screw-driver may be held in any of the many forms of handles common to the art, and, if desired, a shank 7 can be provided to facilitate its use in the ordinary carpenter's brace.

Minor changes and alterations can be made in my invention, and I would therefore have it understood that I do not limit myself to the exact construction herein shown and described, but claim all that falls fairly within the spirit and scope of my invention.

Having described my invention, what I claim as new is—

1. As an improved article of manufacture, a screw-driver having a head portion provided with oppositely-disposed slot-engaging teeth of less width than said head, each of said teeth having an undercut front face, a substantially flat end face, and a beveled face opposite to said front face and terminating at the edge of said end face.

2. As an improved article of manufacture, a screw-driver having a head portion provided with oppositely-disposed slot-engaging teeth of less width than said head, each of said teeth having an undercut front face, a substantially flat end face, and a beveled face opposite to said front face and terminating at the edge of said end face, the line forming the junction of the front face of said teeth with the end face thereof being on the same line as the junction of the beveled face of the adjoining tooth with said end face.

3. As an improved article of manufacture,

a screw-driver having a head portion provided with oppositely-disposed slot-engaging teeth of less width than said head, each of said teeth having an undercut front face, a substantially flat end face, and a beveled face opposite to said front face and terminating at the edge of said end face, the line forming the junction of the front face of said teeth with the end face thereof being on the same line as the junction of the beveled face of the adjoining teeth with said end face, said end faces being of uniform width, the side edges thereof parallel with each other and one end face forming a continuation of the adjoining end face.

4. As an improved article of manufacture, a screw-driver having a head portion provided with slot-engaging teeth of less width than said head, each of said teeth having an undercut front face and a beveled rear face, said beveled face being notched adjacent to its inner edge.

5. In an improved article of manufacture, a screw-driver having a body 1 terminating at one end in a head portion, constructed with slot-engaging teeth 2 and 3, said teeth being upon opposite sides of said head portion and having an undercut face 4 upon one side of the center thereof and a beveled face 5 upon the opposite side thereof, said beveled face being provided with a notch 6.

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

GEORGE P. BUTLER.

Witnesses:
GEORGE E. HALL,
FLORENCE H. MONK.