Nov. 10, 1942. R. SIGNORELLI 2,301,590

SCREW DRIVER

Filed Nov. 19, 1941

Fig 1

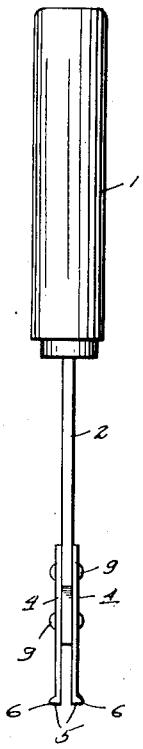


Fig 2

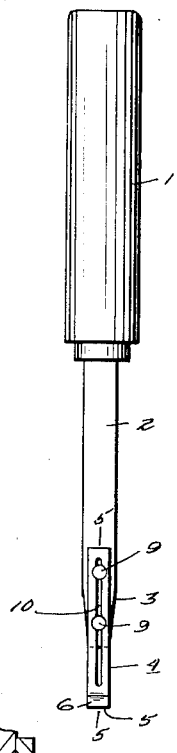


Fig 3

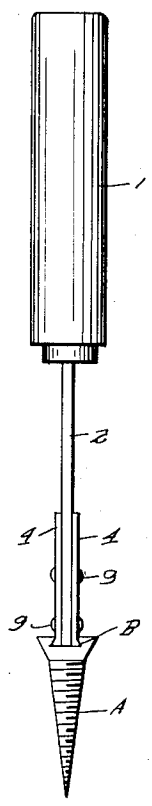


Fig 5

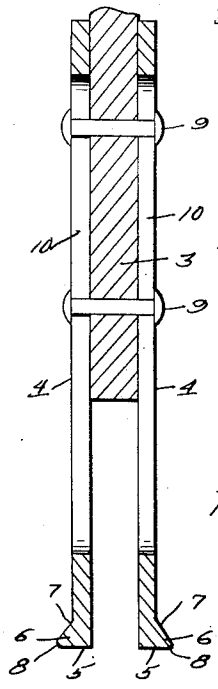
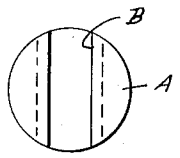


Fig 4



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SCREW DRIVER

Rudolph Signorelli, Lodi, N. J.

Application November 19, 1941, Serial No. 419,773

1 Claim. (Cl. 145—50)

My invention relates to improvements in screw drivers for use more particularly with screws having dovetailed kerfs, and the principal object in view is to provide a simply constructed, easily manipulated device of this character which may be quickly and positively interlocked with the kerf of a screw so that the screw cannot be lost, the screw driver cannot slip and the screw can be held and driven at any angle.

To the accomplishment of the above, and subordinate objects presently appearing, a preferred embodiment of my invention has been illustrated in the accompanying drawing, set forth in detail in the succeeding description, and defined in the claim appended hereto.

In said drawing:

Figure 1 is a view in edge elevation of the preferred embodiment of my improved screw driver,

Figure 2 is a view in side elevation,

Figure 3 is a view similar to Figure 1 illustrating the driver applied,

Figure 4 is a view in end elevation of the screw, and

Figure 5 is a detail view in longitudinal section taken on the line 5—5 of Figure 2 and drawn to an enlarged scale.

Referring to the drawing by numerals, the screw driver of my invention is designed to be used with a special screw, such as shown at A having a dovetailed kerf B with undercut sides. The screw driver comprises a handle 1, a flat shank 2 extending from one end of the handle and having an outer end 3 tapered edgewise, and a pair of elongated, strip-like, bit members 4 of resilient metal mounted upon opposite sides of the outer end portion of the shank 2 to extend endwise longitudinally of said shank and for endwise sliding movement on the shank.

The bit members 4 are provided with straight, outer working ends 5. A pair of transverse ribs 6 extend along the outer working ends 5 of said bit members, respectively, on the outer sides thereof for engaging the sides of the kerf B. The ribs 6 are beveled, as at 7, to fit the sides of the kerf B and are provided with rounded edges, as at 8, to facilitate entering the ribs 6 in the kerf B. The mounting for the bit members 4 comprises headed studs 9 extending laterally from the shank 2, and a longitudinal slot 10 in each bit member through which said studs extend, the studs 9 and slot 10 providing for limited endwise sliding of the bit members 4 on the shank 2 and for extension of the working ends 5 of said bit members 4 beyond the outer end 3 of the shank 2 equidistantly.

In the use of the described screw driver, the bit members 4 are pulled outwardly of the shank 2 into their limit of movement in that direction as established by engagement of one end of the slots 10 with one of the studs 9. With said bit members 4 held in such extended position as by a finger and thumb, the working ends 5 of said members 4 are forced into the kerf B. By virtue of the rounded edges 8, the ribs 6 may be entered in the kerf B with a snap action. As will be clear, when said working ends 5 are entered in the kerf B, the ribs 6 interlock with the sides of the kerf B. The handle 1 may next be manipulated to push the outer end 3 of said shank into the kerf B and between the ribs 6, in which position of said end of the shank 2 the ribs 6, or in other words, the working ends 5, are preventing from flexing toward each other and are thereby positively interlocked with the sides of said kerf B. To detach the bit members 4, it is merely necessary to exert the requisite pull on the handle 1 to withdraw the outer end 3 of the shank 1 from the kerf B and from between the working ends 5 of the bit members 4 until one of the studs 9 engages the inner ends of the slots 10, at which point the shank 2 will withdraw the working ends 5 of said bit members 4 from the kerf B.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claim.

What I claim is:

A screw driver for use with a screw having a dovetailed kerf with undercut sides comprising a handle, a flat shank extending from one end of the handle and having a transversely straight outer end, and a pair of elongated strip-like bit members of resilient metal mounted upon opposite sides of said outer end of the shank to extend endwise longitudinally of said shank in spaced apart parallel relation, said bit members having straight outer working ends for entering the kerf of the screw, and a pair of transverse ribs extending along the working ends of the bits, respectively, for engaging and interlocking with the sides of the kerf, the mounting for said bit members providing for relative endwise sliding movement of said members and said shank whereby the latter may be slid into the kerf of the screw between said working ends of said bit members to maintain said ribs interlocked with said sides of said kerf, said ribs being beveled to fit the sides of said kerf and having rounded outer side edges for facilitating entering said working ends in said kerf.

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