

No. 873,625.

PATENTED DEC. 10, 1907.

L. S. STARRETT.
MAGAZINE SCREW DRIVER.
APPLICATION FILED DEC. 28, 1906.

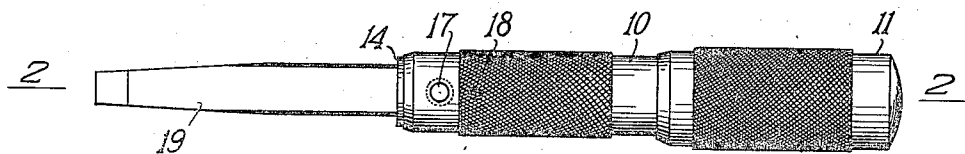


FIG. 1.

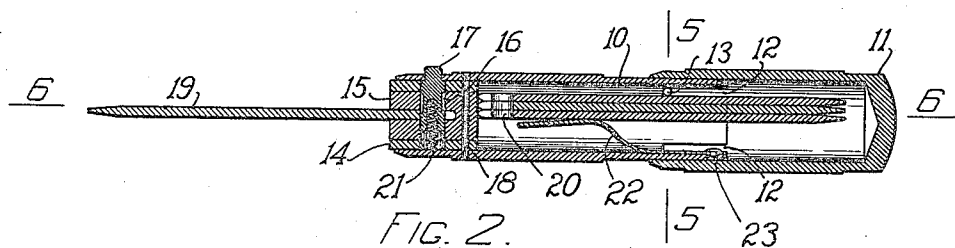


FIG. 2.

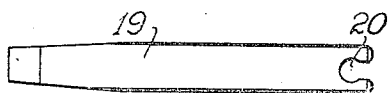


FIG. 3.



FIG. 4.

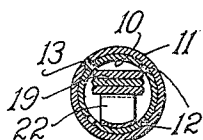


FIG. 5.

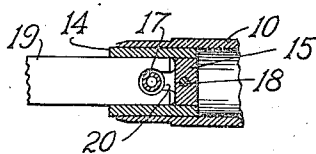


FIG. 6.

WITNESSES
A. T. Palmer
W. L. Ladd

INVENTOR
Laroy S. Starrett
by A. H. French
Attorney

UNITED STATES PATENT OFFICE.

LAROCY S. STARRETT, OF ATHOL, MASSACHUSETTS, ASSIGNOR TO THE L. S. STARRETT CO., OF
ATHOL, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

MAGAZINE SCREW-DRIVER.

No. 873,625.

Specification of Letters Patent.

Patented Dec. 10, 1907.

Application filed December 28, 1906. Serial No. 349,903.

To all whom it may concern:

Be it known that I, LAROCY S. STARRETT, of Athol, in the county of worcester and State of Massachusetts, have invented certain new and useful Improvements in Magazine Screw-Drivers, of which the following is a specification.

This invention relates to a magazine screw-driver having a hollow, two-part handle, inclosing a plurality of blades of varying size at tip but uniform and spring held at butt, where each blade is recessed to engage, when inserted for use in the handle, with a spring pressed transverse pin, which holds the blade in place or releases it by a thumb pressure. The cap fits on and telescopes one end of the body portion of the handle which is pronged, the parts being held together frictionally and engaging positively for turning together when in use. The friction may be increased if desired by spreading the prongs slightly.

In the drawing Figure 1 is a side elevation of the tool complete. Fig. 2 is a longitudinal section on line 2—2 of Fig. 1. Fig. 3 is a plan of one of the blades, Fig. 4 an end view of the end plug and blade socket, Fig. 5 a transverse section on line 5—5 of Fig. 2 and Fig. 6 a partial longitudinal section on line 6—6 of Fig. 2.

The tool handle is composed of the hollow steel body 10 and cap 11 frictionally united centrally to telescope to a defined limit, and having a positive engagement for turning together when in use. For this purpose the inner end of the body has a series of (preferably) four longitudinal slots, 12, while the corresponding end of the cap has a single short internal stud 13 headed or grooved peripherally to snugly enter any one of the slots 12 between adjacent prongs of the body 10. These prongs are terminally beveled to facilitate applying the caps. The strains of use do not tend to disengage the parts 10 and 11 which are milled or knurled peripherally to facilitate their use.

The forward end of the body has fixed within it a tubular end-plug 14 and an inclosed longitudinally slotted blade socket 15, these two parts being forced together and subsequently perforated transversely at a right angle to the plane of the blade slot as at 16, Fig. 2, to receive the reciprocating blade-holding pin or plunger 17 to be described. Parts 14 and 15 are also forced into body 10

and secured by rivet 18 in position flush with said end.

The blades 19 are of peculiar construction and are held in the blade socket and released therefrom by a locking device which is a special feature of my invention but is not herein claimed. The blade butts are of uniform thickness to fit between the walls of the blade socket 15 and of a width to bear with their rounded edges against the inner walls of the tubular end plug 14. Each blade has at its inner end a peculiar recess as shown at 20 in Fig. 3,—at first narrow with parallel walls, then somewhat wider and of circular form with the prongs terminally beveled to readily enter the slot in blade socket 15. This construction adapts the several blades to be received, held in place and released by the transverse reciprocation of the pin or plunger 17, best shown in Fig. 2. It has a limited endwise movement within the perforation 16 in the end plug and blade socket, such perforation extending, of reduced size, through one wall only of the forward end portion of the hollow body 10, see Fig. 2, where the reduced tip of the plunger normally protrudes, due to the pressure of a coiled spring 21 in an axial cavity in the other end of the plunger. This normal spring pressure is overcome by a thumb pressure when the operator desires to insert or remove one of the blades. This improved locking device is more fully illustrated and described, and is specifically claimed; in my application, Serial No. 392,318, for patent on blade fastener for tool handles, filed Sept. 11, 1907, as a division of this case.

The dormant blades are frictionally held from rattling within the handle, and from dropping out when the cap is removed, by means of a sheet steel spring 22 secured at its outer end by a rivet 23 to the inner face of one of the prongs of the body 10. This spring is so bent, intermediately, as to press the inclosed blades against the opposite inner wall of the body and hold them removably and interchangeably. The body has capacity for four blades, with an additional one in position for use in the blade socket, and the tips may vary from the full width of the butts down to one a sixteenth inch wide, with which, as a brad awl or reamer, a hole may be bored through a one inch pine board

in a few seconds. The whole device is very compact and convenient.

I claim as my invention:

1. In magazine tool handles, the hollow
5 body and its cap telescoping frictionally at the middle and there engaging positively to turn together, a series of blades inclosed therein and spring held to prevent rattling or
10 permanently secured in it with a socket fitting all blades of the series, for the purpose set forth.

2. The two part hollow handle for screw
15 drivers and like tools, comprising the body having at one end a fixed terminal socket for the blade in use, internal space for the dormant blades and, at its other end, a plurality of longitudinal slots, in combination with the cap fitting frictionally over the slotted end
20 to telescope the body, and provided with an

internal projection adapted to engage in any one of said slots to insure the parts turning together, substantially as set forth.

3. In a magazine screw driver, a two-part
25 hollow handle, comprising a body and a cap portion frictionally united and engaging positively to turn together, such body having a terminal plug and blade-socket permanently secured thereto, in combination with a series of blades therein having uniform flat
30 shanks, and a bent sheet metal spring secured within the handle and bearing laterally on said shanks, substantially as set forth.

In testimony whereof I have affixed my
35 signature, in presence of two witnesses.

LAROE S. STARRETT.

Witnesses:

FLORENCE E. BOYCE,
FRANK E. WING.