

No. 657,457.

Patented Sept. 4, 1900.

E. L. SCHNEIDER.

ATTACHMENT FOR SCREW DRIVERS.

(Application filed Apr. 18, 1900.)

(No Model.)

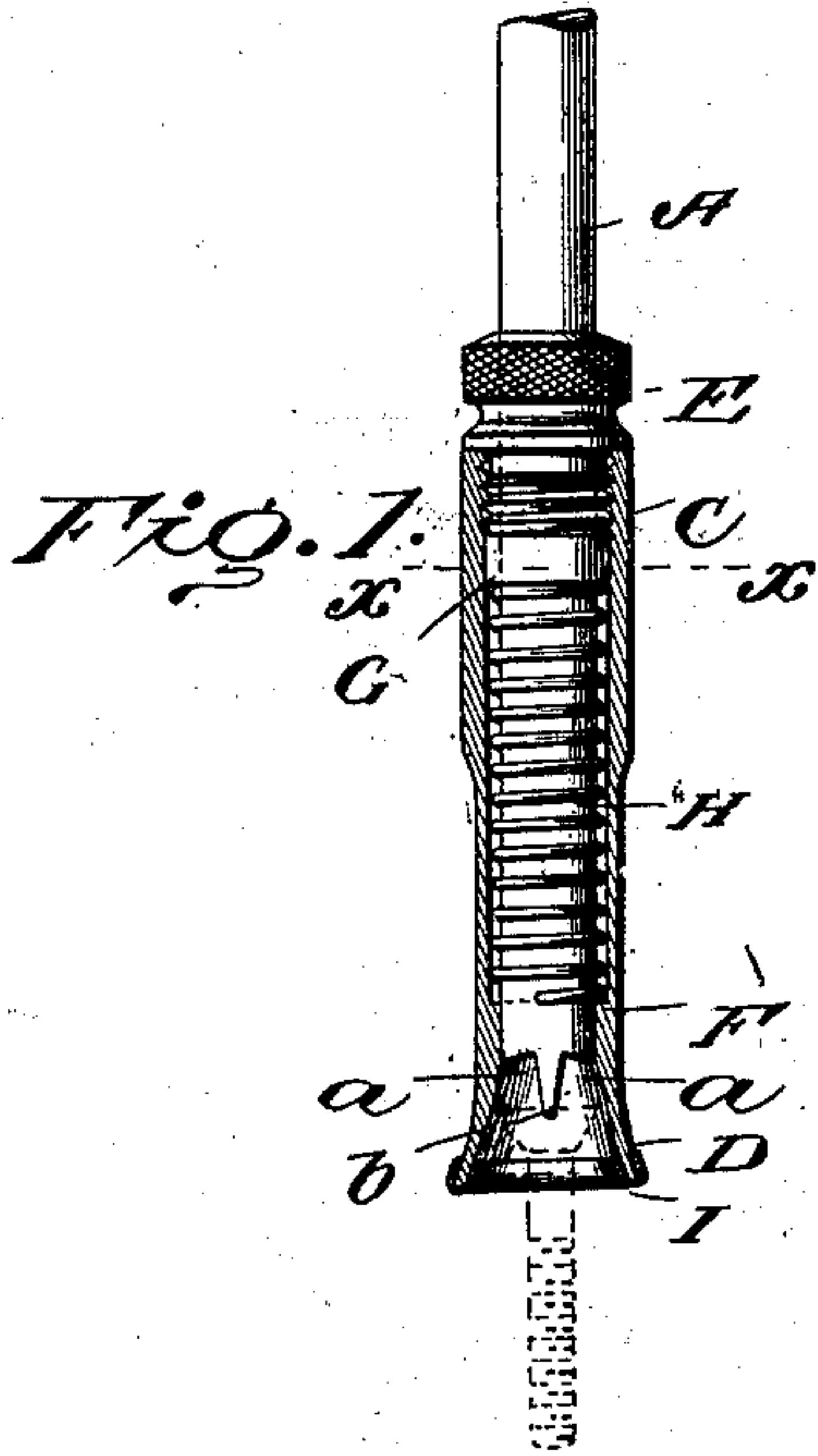


Fig. 2.

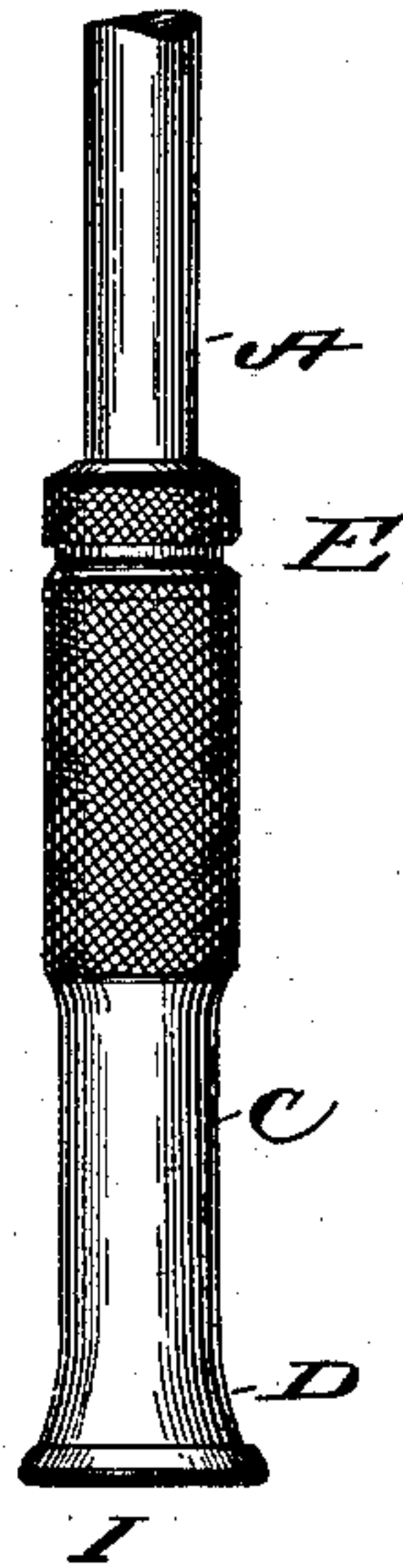


Fig. 3.

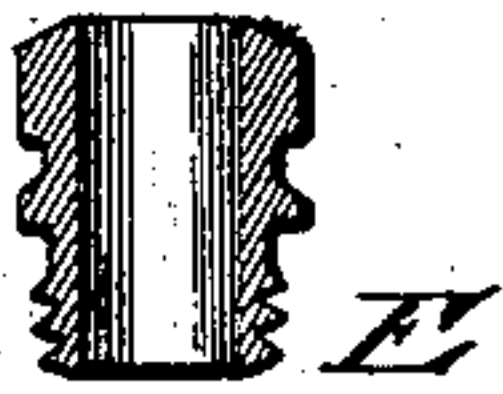
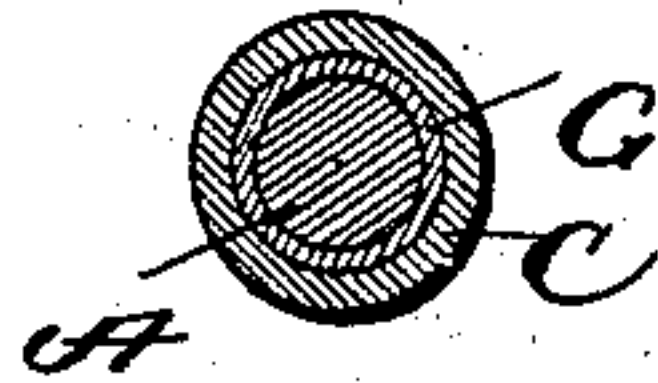


Fig. 5.

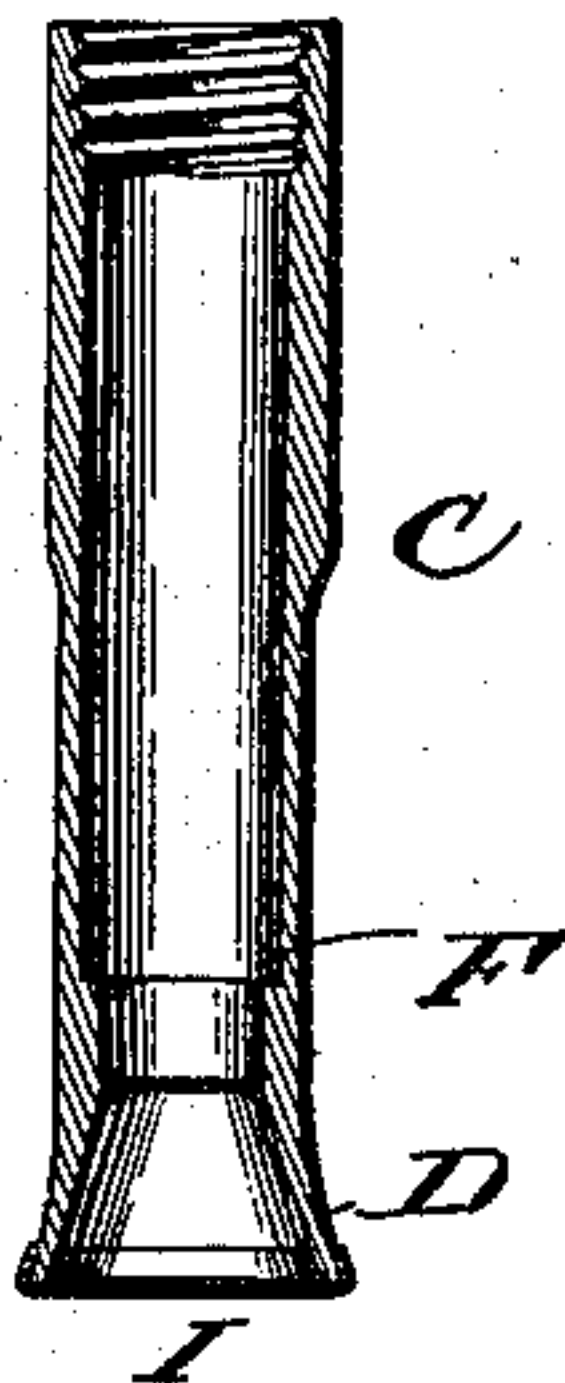
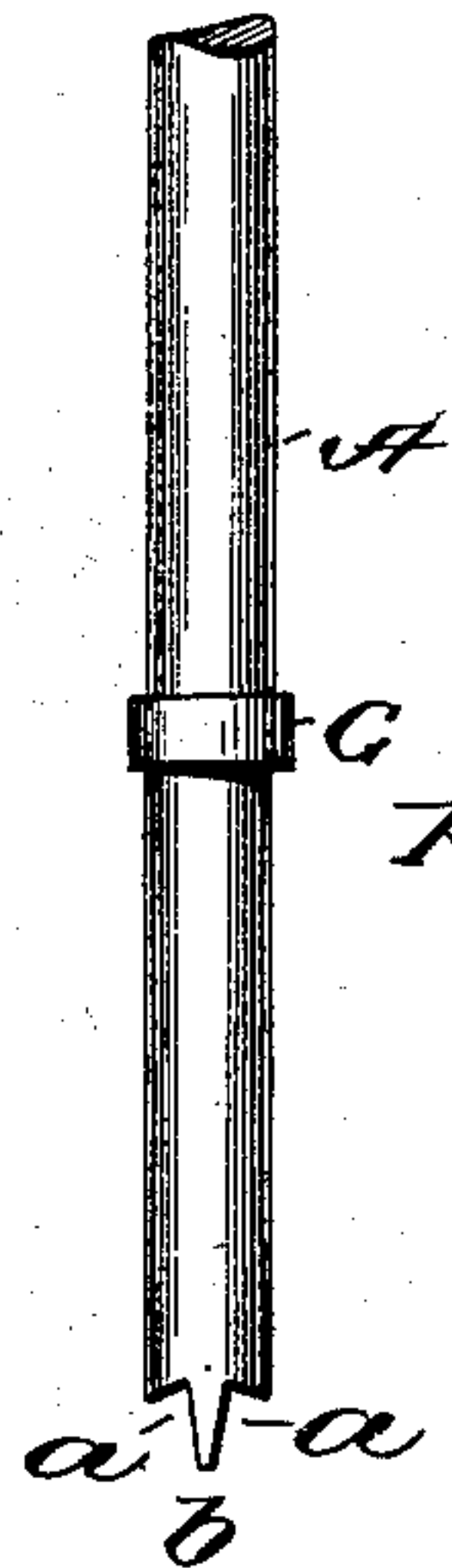
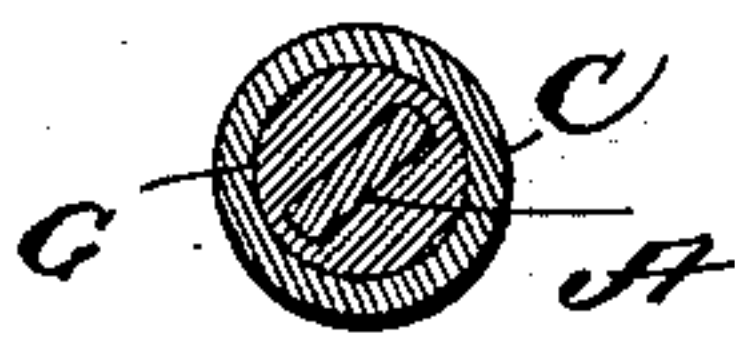


Fig. 6.



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EMANUEL L. SCHNEIDER, OF ANN ARBOR, MICHIGAN.

ATTACHMENT FOR SCREW-DRIVERS.

SPECIFICATION forming part of Letters Patent No. 657,457, dated September 4, 1900.

Application filed April 16, 1900. Serial No. 13,070. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL L. SCHNEIDER, a citizen of the United States, residing at Ann Arbor, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Attachments for Screw-Drivers; and I do hereby 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.

My invention has relation to screw-driver attachments designed and adapted to guide the end of the screw-driver to the nick in the head of a screw and maintain the screw-driver in such position relatively to the screw that if the edge of the screw-driver should slip out of the nick it can be immediately replaced by simply continuing the rotary motion of the screw-driver.

My invention has for its object the provision of a novel attachment which can be readily removed for the purpose of regrinding or sharpening the screw-driver.

In carrying my invention into effect I provide an attachment of novel form and construction adapted to be applied to screw-drivers of the ordinary construction, whether round or flat, and comprising a sliding sleeve or ferrule having a bell-mouth at one end and a screw-threaded gland at the other, a ring adapted to be rigidly secured upon the shank of the screw-driver and capable of being removed, and a spiral spring located within the sleeve and adapted to impel the sleeve toward the end of the screw-driver, so as to cover or inclose the same, whereby the said sleeve will serve to guide the screw-driver to and maintain it in proper position upon a screw.

My invention consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

Referring to the accompanying drawings, Figure 1 is a vertical sectional view of my improvement applied to a round-shank screw-driver. Fig. 2 is a side view of the same; Fig. 3, a transverse sectional view on the line *xx* of Fig. 2; Fig. 4, a transverse sectional view of a modified form applied to a flat screw-driver; Figs. 5 and 6, detail views of separate parts.

A designates the shank or body of a screw-

driver, which is of the ordinary form—that is, round—and of equal size throughout its length. In applying my attachment to a screw-driver of this form I prefer to cut away the shank on each side of the point or working end, as shown at *a a* in Fig. 1 of the drawings, so as to leave a short edge *b* and afford a bearing for the sliding sleeve C down to a point closely approximating said edge. The sleeve C consists of a hollow cylindrical section somewhat larger in internal diameter than the shank of the screw-driver and having at one end a bell-mouth D and at the other a gland E, that screws into the sleeve and is milled on its outer side, as shown. A shoulder F is formed on the inside of the sleeve C just above the bell-mouth D, such shoulder being conveniently formed by soldering a ring within the sleeve, and a ring G is fixed on the shank of the screw-driver in any convenient way, as by “sweating” or soldering it in position, and between the ring G and shoulder F a spiral spring H is arranged, said spring tending to impel the sleeve toward the end of the screw-driver.

The lower end of the bell-mouth D is covered by a rubber or other soft covering I, the purpose of which is to prevent scratching of surfaces against which the sleeve may be pressed in driving or drawing a screw.

The parts being constructed as described are applied to a screw-driver in the following manner: The gland E is slipped on the shank of the driver, and the collar or ring G is placed in position and secured to the shank by sweating or soldering it thereon. Then the spiral spring H is slipped on the shank, its upper end bearing against the collar or ring G, and the sleeve is placed in position and the gland E screwed into its upper end, thus confining and compressing the spring between the collar or ring G and the shoulder F.

Operation: In using my improved device the bell-mouth of the sleeve is pressed down over the head of the screw to be operated on, and the screw-driver is then pressed against the screw and turned, and, the sleeve maintaining it in alinement with the screw, the end of the screw-driver will engage with the nick in the head of the screw, and the screw is then turned in the usual manner. If the screw-driver should accidentally slip out of

the nick in the screw, it is only necessary to continue the rotary motion of the screw-driver until it again catches in the nick. The soft covering I of the end of the bell-mouth serves
5 to prevent scratching or abrasion of any surface with which it may come in contact and permits the use of my device in driving screws in finely-finished or varnished surfaces.

In the modification shown in Fig. 4 the
10 only change necessary is in the interior configuration of the ring or collar G and the shoulder F, both of which are made to conform to the shape of the shank of the screw-driver.

15 Having described my invention, I claim—

The combination with a screw-driver, of a collar rigidly secured thereon but capable of being removed, a shell or sleeve having a bell-mouth to receive a screw and of a di-

ameter throughout its length to pass freely 20 over said collar except for a shoulder or internal flange at its lower end and loosely fitting the screw-driver, and internally threaded at its upper end to receive the screw-threaded end of a gland, a gland fitting on the screw- 25 driver shank and a spring interposed between the shoulder on the sleeve and the collar on the screw-driver, the whole constituting an attachment for holding and driving or removing a screw, and readily removable for the 30 purpose of regrinding or sharpening the screw-driver substantially as described.

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

EMANUEL L. SCHNEIDER.

Witnesses:

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