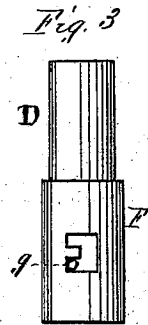
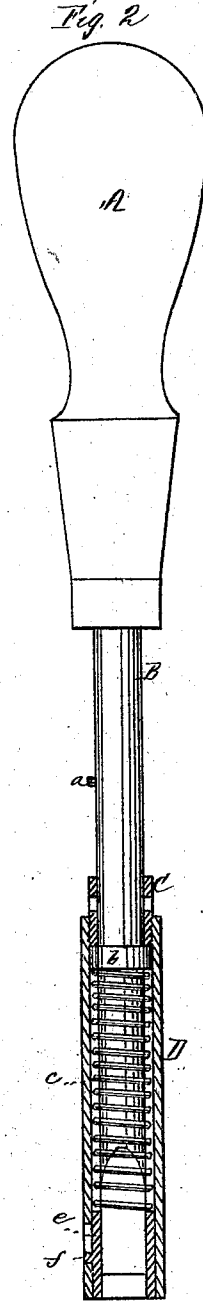
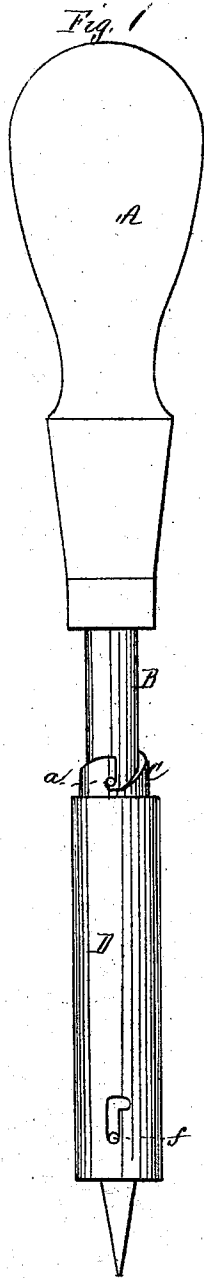


S. R. KNEELAND.
Screw-Drivers.

No. 147,654.

Patented Feb. 17, 1874.



Witnesses
H. E. Metcalf
Cyrus Wilson

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UNITED STATES PATENT OFFICE.

SYLVANUS R. KNEELAND, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN SCREW-DRIVERS.

Specification forming part of Letters Patent No. **147,654**, dated February 17, 1874; application filed February 2, 1874.

To all whom it may concern:

Be it known that I, SYLVANUS R. KNEELAND, of Charlestown, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Screw-Drivers, of which the following is a description sufficiently full, clear, and exact, to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of my improved screw-driver. Fig. 2 is a sectional view of the same. Fig. 3 represents an alternate method of constructing and arranging the auxiliary guide.

Like letters refer to like parts in the different figures of the drawing.

My invention relates to that class of screw-drivers which are provided with a tubular guide or sheath for inclosing the head of the screw while being driven in, and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, the object being to render such implements adjustable, and hence adapted to a greater range of work, and more effective than those now in common use. The extreme simplicity of my invention renders an elaborate description unnecessary.

In Fig. 1, A is the handle of the screw-driver; B, the body or shank; C, the tubular plug, and D, the casing or sheath. The plug C is threaded and screwed into the top of the sheath D, and is also spirally slotted to form a lantern-lock with the pin *a* projecting from the shank B. In Fig. 2, *b* is a boss or ring secured firmly to the shank B, and fitting closely in the sheath D below the plug C. Within the sheath D there is also a short auxiliary sheath, *e*, provided with the pin *f*, projecting through an angular slot in the outer sheath to form a lantern-lock, as shown in Fig. 1. Between the boss *b* and the auxiliary sheath *e*, there is a coiled spring arranged around the shank B, which acts expansively against the lower side of said boss and the upper side of said sheath.

From the above description, the nature and operation of my invention will be readily understood by all conversant with such matters.

The casing D is designed to prevent the blade of the driver from slipping from the slot in the head of the screw and thus doing injury to the work. The object of the auxiliary casing or sheath *e* is to render the driver adjustable to different sizes of screws, as it is important, in order to drive the screw perfectly, that the sheath should fit as closely as possible around the screw-head. Thus, when it is desired to drive a larger screw than will readily enter the inner sheath, it is raised out of the way by the pin *f*, Fig. 1, and the pin moved into the side or lateral slot in the sheath D, by which means it will be retained in that position. I sometimes attach the auxiliary sheath to the outside of the case D instead of the inside, as at F, Fig. 3, in which case the auxiliary sheath is used for the largest screws in place of the main sheath, and is secured in position by the pin *g*, projecting from the sheath D, and forming a bayonet-lock in the angular slot of the auxiliary sheath. My improvement is also adapted to square and flat screw-drivers as well as round, as will be readily understood. In Fig. 2, the sheath is represented as in position for use. When it is desired to employ the driver without a sheath, it is raised and secured by the pin *a*, as in Fig. 1, leaving the blade exposed in the ordinary manner.

As Letters Patent of the United States for an improvement in screw-drivers were granted to me December 16, 1873, I do not herein claim anything secured to me thereby, or shown and described therein, and not so secured, when in and of itself considered; neither do I claim anything shown or described in a patent granted to one Martyn, February 15, 1870, when in and of itself considered, his invention being essentially different from mine; but

What I claim is—

In the screw-driver described, the auxiliary sheath *e*, substantially as and for the purpose specified.

SYLVANUS R. KNEELAND.

Witnesses:

C. A. SHAW,
H. E. METCALF.