No. 739,606. PATENTED SEPT. 22, 1903.

S. P. KEMM.

SCREW DRIVER.

APPLICATION FILED OCT. 23, 1902.

NO MODEL.

Fig. 1.

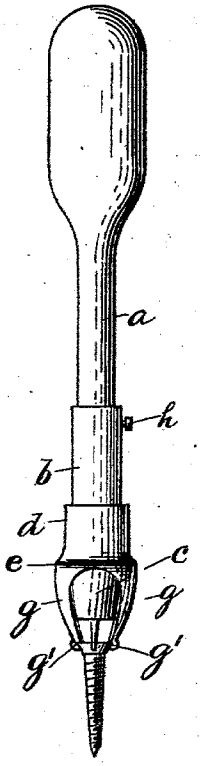


Fig. 2.

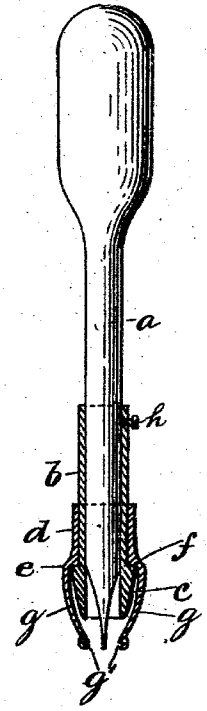
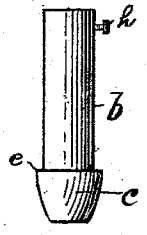


Fig. 3.



Witnesses

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No. 739,606. Patented September 22, 1903.

UNITED STATES PATENT OFFICE.

SAMUEL P. KEMM, OF FRANKLIN, PENNSYLVANIA.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 739,606, dated September 22, 1903.

Application filed October 23, 1902. Serial No. 128,498. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL P. KEMM, a citizen of the United States, residing at Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in 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 relates to screw-drivers, and more particularly to means for gripping and holding the screw preparatory to and during the initial part of driving the screw. Devices of this kind heretofore employed have as a general rule been too cumbersome and expensive and cannot be readily applied to an ordinary screw-driver.

My invention aims to produce a device of very simple and efficient character and one that can be readily applied to and removed from an ordinary screw-driver of the proper size.

To these ends my invention consists of the means substantially hereinafter described and claimed.

In its preferred embodiment my invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front view in elevation of my invention; Fig. 2, a central vertical section. Fig. 3 is a view of the adjustably-fixed guiding-sleeve.

Referring to the drawings, *a* designates a screw-driver of ordinary form. Upon the screw-driver at the end thereof is secured a sleeve *b*, provided with an offset conical tapering head *c*. The sleeve when properly adjusted on the screw-driver has its conical head projecting down over the beveled sharpened part of the screw-driver and extending to within a short distance of the latter.

Upon the sleeve *b* is slidably and rotatably mounted a sleeve *d*, which forms the screw-gripping member. This sleeve *d* has an annular projecting flange *e*, that is adapted to come in contact with the offset abutment *f* of the conical head and so limit the forward movement of the screw-gripper upon the sleeve *b*. From the flange *e* extend converging spring gripping-fingers *g*, which follow the conical contour of the head and are continued beyond the head on the same line, so that the fingers are adapted to strike against the end of the conical head, and the latter will thus form a stop for the inward movement of the sliding sleeve.

The spring-fingers on the inner sides near their forward ends are provided with notches *g'*, which are adapted to engage the edge of the head of the screw, so as to hold the screw firmly while pressure is applied thereto by the screw-driver.

The sleeve *b* is removably held on the screw-driver by a set-screw *h*, by which the sleeve may be readily adjusted on or detached from the screw-driver.

To apply the screw, the head is forced between the spring-fingers and the end of the screw-driver engaged with the cut and the screw then driven in.

Having thus described my invention, what I claim is—

1. In combination with a screw-driver, an enlarged member on the lower part thereof, a screw-gripping member carried by the screw-driver and having a collar surrounding said screw-driver and abutting directly against the upper end of said enlarged member whereby the gripping member is limited in its downward movement on the screw-driver and having spring-fingers depending from said collar and inclosing said enlarged member, said spring-fingers provided with inwardly-bent lower ends adapted to abut against the lower end of said enlarged member whereby the gripping member is limited in its upward movement on the screw-driver, substantially as described.

2. In combination with a screw-driver, an adjustably-fixed sleeve attached to the screw-driver and having an offset, conical head, a screw-gripping member slidably and rotatively carried by said sleeve and having an annular collar adapted to abut directly against the offset of said conical head whereby the gripping member is limited in its downward movement on the screw-driver, and having integral spring-fingers depending from said collar and inclosing said head, said fingers having inwardly-bent lower ends adapted to abut against the lower end of said conical

head whereby the gripping member is limited in its upward movement on the screw-driver, substantially as described.

3. In combination with a screw-driver, an adjustably-fixed sleeve attached thereon having an offset, conical head, a screw-gripping member consisting of a slidable, rotatable sleeve mounted on said fixed sleeve, conically formed, integral, spring-fingers having grooves on their inner sides adapted to engage the head of a screw at its outermost perimeter, an annular flange on said gripping member from which said fingers depend and adapted to abut against the offset of said conical head to limit the downward longitudinal movement of said gripping member, the lower ends of said fingers being adapted to abut against the lower end of said conical head to limit the upward longitudinal movement, substantially as described.

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

SAMUEL P. KEMM.

Witnesses:
W. H. FORBES,
F. C. ADAMS.