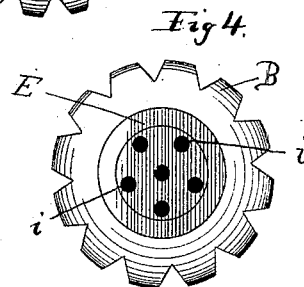
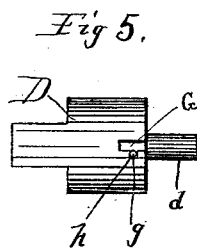
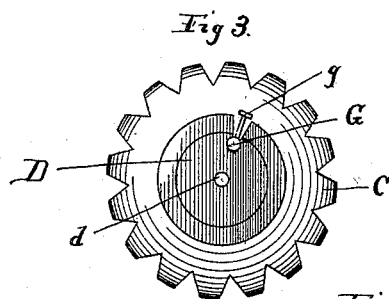
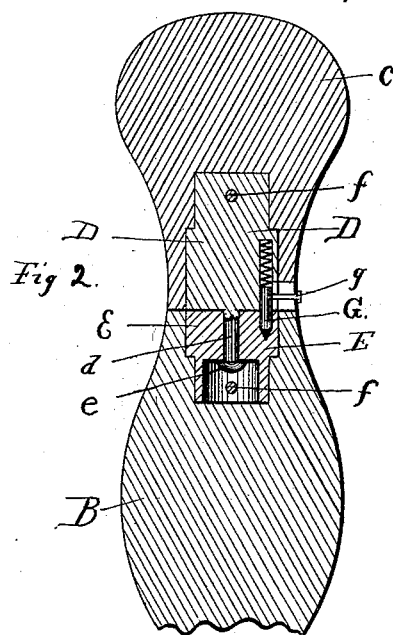
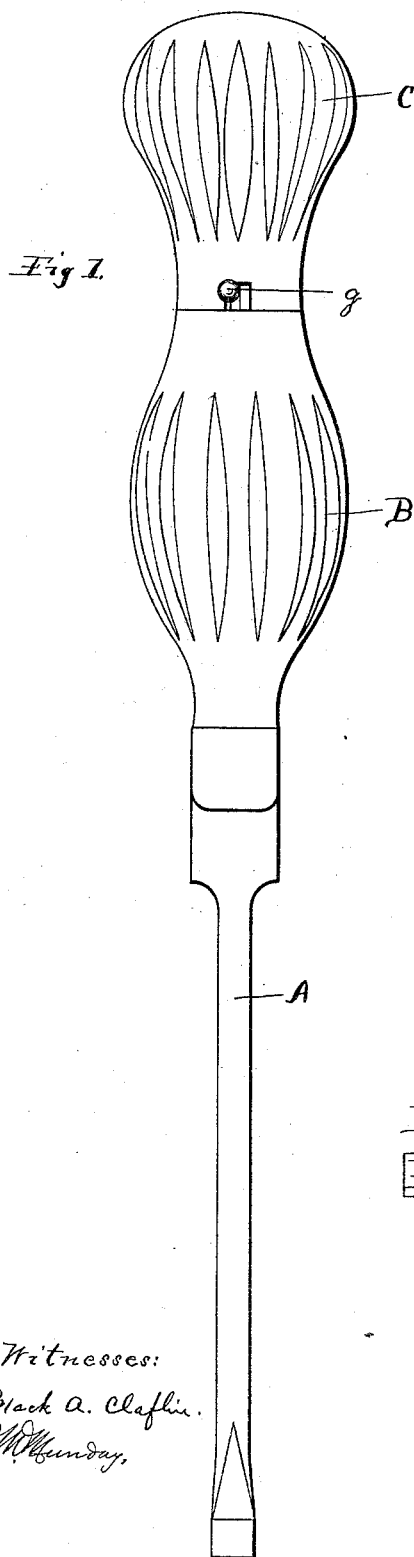


(No Model.)

T. E. COPELIN.
SCREW DRIVER.

No. 418,167.

Patented Dec. 31, 1889.



Witnesses:
Mack A. Clapham.
A. M. Munday,

Inventor:
Thomas E. Copelin.
By Munday, Evans & Adcock
His Attorneys:

UNITED STATES PATENT OFFICE.

THOMAS E. COPELIN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD TO FRANCIS KERNAN, JR., AND JOSEPH F. KERNAN, BOTH OF UTICA, NEW YORK.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 418,167, dated December 31, 1889.

Application filed February 25, 1889. Serial No. 301,069. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. COPELIN, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Screw-Drivers, of which the following is a specification.

This invention is designed to render the ordinary screw-driver more easily operable, especially with light screws, and in putting together stoves and other metal-work where the screw enters an already threaded recess. To this end the handle is made in two parts, the outer portion being swiveled upon the inner portion, which permits the use of the fingers for rotating the driver while the hollow of the same hand is pressing against the outer end of the handle. To enable severe work to be done with the same driver, I provide means whereby the two parts of the handle may be locked together, thus permitting its use as a solid driver. These features of the invention are fully shown in the accompanying drawings, in which similar letters of reference indicate like parts, and wherein—

Figure 1 is an exterior view of a driver; Fig. 2, a vertical section of the handle. Figs. 3 and 4 show the abutting ends of the two parts of the handle; and Fig. 5 shows the metal part carrying the pivot upon which the outer part of the handle is swiveled.

In said drawings, A represents the driver, and B and C the two parts of the handle, the part C being swiveled upon the part B. The part B, which is intended to be rotated by the fingers, is given a swell form, and its surface is preferably roughened, as indicated, so that the fingers may not slip upon it. The dividing-line between the two halves of the handle, it will also be noticed, is about midway of the handle. The construction which I prefer for thus swiveling one part upon the other is fully shown in the drawings, and consists of a metallic block D let into the outer half C of the handle and carrying a projecting pivot *d*. The inner half of the handle receives another metal block E, which is recessed to receive said pivot. In order to pre-

vent the detaching of the outer part, these metal blocks are secured in their respective portions of the handle by pins *f* and the head of the pivot is upset, as at *e*.

The driver thus far described is, as already stated, more especially adapted for use where no great power is necessary to turn the screw, and it admits of the convenient and quick insertion of screws by the use of one hand only, the exterior of the under handle being corrugated or otherwise roughened, so that the fingers may easily rotate it. It may, however, be used with heavy work by employing one hand to rotate the driver and pressing against the swiveled portion with the other hand or with the body.

To enable the use of the driver as a solid tool, I insert in the block D a spring-bolt G, which is provided with a thumb-piece *g*, whereby it may be locked from engagement by moving said thumb-piece into the notch *h*, and which bolt, when released from such notch, will be projected by its spring against the face of block E and enter the first one of the openings *i* in the latter which it may encounter in its rotation. When the two halves of the handle are thus locked, the driver becomes a solid one and may be used in the ordinary manner of using solid drivers. I prefer to corrugate the surface of the exterior half C also, chiefly for convenience when using the driver as a solid implement.

The outer half of the handle should be made of such length as to prevent contact by the palm of the hand with the inner part when the latter is being rotated by the tips of the fingers. In a handle of ordinary size this is accomplished by dividing it about midway, as indicated in the drawings.

I claim—

1. The screw-driver wherein are combined a handle made in two parts B and C, united by a swivel-joint, the under part being adapted to be rotated by the fingers of the hand while the palm of the same hand is pressing upon the upper part, and a locking device whereby the two parts may be locked together and used as a solid handle, substantially as set forth.

2. The combination, with the screw-driver A, of the handle made in two parts B and C, the part C being provided with the block D, carrying pivot *d*, and the part B being provided with the block E, recessed to receive said pivot, said block D being also provided with a spring-bolt, and the part E having one or more recesses to receive said bolt, substantially as specified.

THOMAS E. COPELIN.

Witnesses:

EDW. S. EVARTS,
H. M. MUNDAY.