(No Model.)

H. A. SAWTELL.

SCREW DRIVER.

No. 249,101. Patented Nov. 1, 1881.

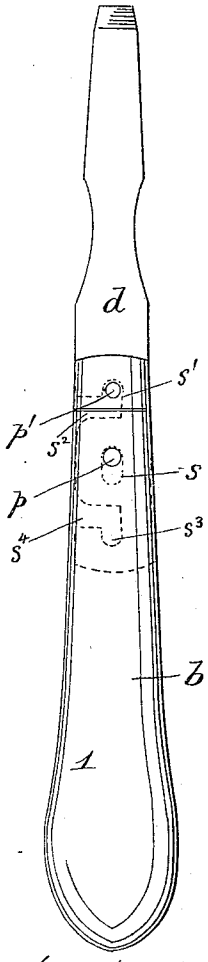


Fig. 1.

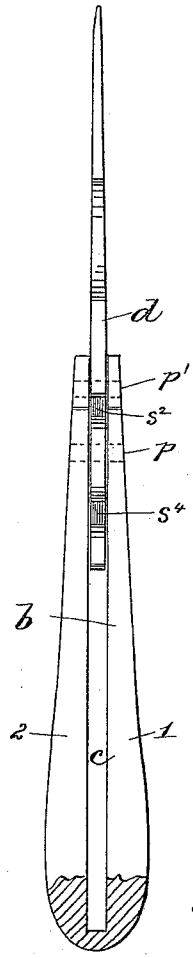


Fig. 2.

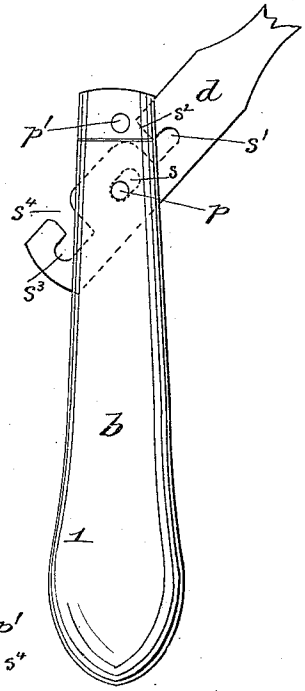


Fig. 1a.

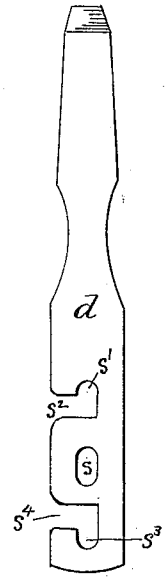


Fig. 4.

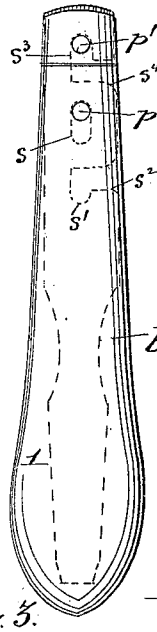


Fig. 5.

Witnesses:
H. G. Madden
W. B. Morrison

Inventor:
Henry A. Sawtell,
by Wright & Brown
Atty's.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY A. SAWTELL, OF SHIRLEY, MASSACHUSETTS.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 249,101, dated November 1, 1881.

Application filed August 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. SAWTELL, of Shirley, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Screw-Drivers, of which the following is a specification.

This invention has for its object to provide a screw-driver in which the blade is pivoted to the handle, and is adapted to be securely locked and held in two positions with reference to the handle—viz., extended from the handle in operative position and turned back between the sides of the handle to reduce the tool in length, so that it can be carried in the pocket.

To these ends my invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming part of this specification, Figure 1 represents a side view of my improved screw-driver with the blade in position for operation. Fig. 1ª represents a similar view with the blade in a different position. Fig. 2 represents an edge view of the same, the lower end of the handle being shown in section. Fig. 3 represents a side view of the screw-driver with the blade turned backwardly, and Fig. 4 represents a side view of the blade detached from the handle.

The same letters refer to the same parts in all the figures.

In the drawings, *d* represents the blade of my improved screw-driver, and *b* the handle, the latter composed of two parts or side pieces, 1 2, between which is a blade-receiving cavity, *c*. The parts 1 2 are rigidly connected at the rear end of the handle by any suitable means, and are connected near the opposite end by two pins, *p p'*, which are rigidly attached to said parts, and extend across the cavity *c*.

d represents the screw-driving blade, which is provided with a longitudinal slot, *s*, receiving the pin *p*, the latter constituting a pivot, on which the slot *s* permits the blade to turn, and also to move longitudinally. The blade *d* is provided between its outer end and the slot *s* with a slot, *s'*, in line with the slot *s*, and with a lateral opening, s^2, communicating with the slot *s'*. The slots *s s'* and opening s^2 are so arranged relatively to the pins *p p'* that when the blade *d* is extended outwardly from the handle the blade can be moved longitudinally on the pin *p* to cause the opening s^2 to coincide with the pin *p'*, as shown in Fig. 1ª, then turned on the pin *p* to cause the pin *p'* to enter the opening s^2, and then moved inwardly to cause the pin *p'* to enter the slot *s'*, as shown in Fig. 1, the blade being prevented from turning on its pivot when in the last-named position, so that it is ready for operation. When the blade is in use it is prevented from longitudinal displacement, and thus kept in the position shown in Fig. 1, by the pressure exerted against the screw which is being driven by the blade. To make the blade inoperative it is only necessary to reverse the above-described movements and turn the blade on the pin *p* until it enters the cavity *c*, as shown in Fig. 3. The blade may be held in its last-named position simply by its friction against the sides of the cavity *c*, or by means of a slot, s^3, in the blade, having a lateral opening, s^4, at the opposite side of the slot *s* from the slot *s'*, and operating in the same manner as the slot *s'* in preventing the blade from turning on the pin *p*, as shown in Fig. 3.

Having thus described my invention, I claim—

1. In a screw-driver, a handle having a longitudinal cavity, *c*, and two pins, *p p'*, extending across said cavity, combined with a blade having a longitudinal slot, *s*, receiving the pin *p*, a longitudinal slot, *s'*, adapted to receive the pin *p'*, and a lateral opening, s^2, adapted to permit the blade to be moved onto and off from the pin *p'*, said slots and opening being arranged to permit the blade to be moved longitudinally after the pin *p'* enters the opening s^2, and thereby cause the slot *s* to receive the pin *p'* and prevent the blade from turning when it is extended from the handle, as set forth.

2. In a screw-driver, the combination of the handle having the cavity *c* and pins *p p'*, and the blade having the pivot-receiving slot *s*, and the slots *s' s³*, arranged at opposite side of the slot *s*, and provided with lateral openings s^2 s^4, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 18th day of August, A. D. 1881.

HENRY A. SAWTELL.

Witnesses:
JAMES GERRISH,
SARAH GERRISH.