(No Model.)

F. CHANTRELL.

TOOL HANDLE.

No. 427,460. Patented May 6, 1890.

FIG. 1.

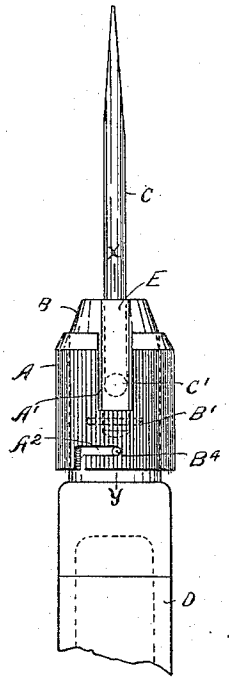


FIG. 2.

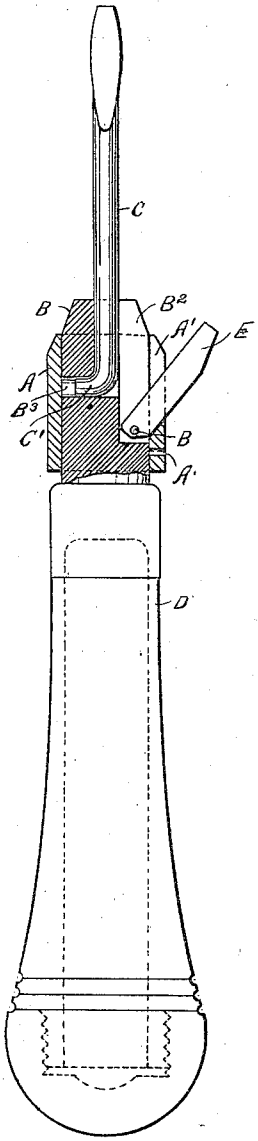
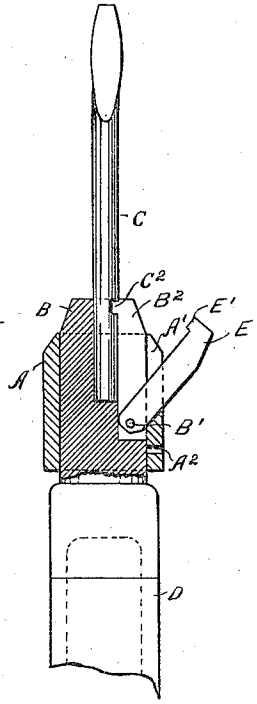


FIG. 3.



WITNESSES

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TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 427,460, dated May 6, 1890.

Application filed November 5, 1889. Serial No. 329,284. (No model.)

To all whom it may concern:

Be it known that I, FELIX CHANTRELL, a citizen of the United States, residing at Reading, in the county of Berks, State of Pennsylvania, have invented certain Improvements in Tool-Handles, of which the following is a specification.

The object of my invention is to provide an improved means of quickly and positively securing removable bits or tools to the stock or handle. To accomplish this in the most simple and effective manner I avoid entirely the use of screw-threads and springs, the principal of my invention consisting in clamping the tool-shank in the hollow stock, by means of a jaw and a clamping-sleeve, in such manner that a slight rotary movement of said sleeve will hold or release the tool.

The invention is fully set forth herein in connection with the accompanying drawings, and is specifically pointed out in the claims.

Figure 1 is a full elevation showing my tool-stock adapted to a hollow handle containing a variety of tools intended to be secured therein. Fig. 2 is a sectional view through X Y of Fig. 1. Fig. 3 shows a modification of my invention.

D represents the handle and C the tool, the shank of which enters the hollow stock B. The latter is formed with a longitudinal slot B^2, within which is fitted a jaw E, pivoted thereto at one end B′, so as to permit of its being swung outward, as shown in Fig. 2, or to be closed against the tool-shank, in which latter position it is about flush with the outer surface of the stock B. The sleeve A, when fitted on the latter, is adapted to thus close the jaw against the tool, but is formed with a corresponding longitudinal slot A′, which, when brought to coincide with the jaw E, permits the latter to be moved away from the tool so that it may be released without removing the sleeve. A pin B^4 projects from the stock B and serves to stop the rotation of the sleeve at the proper point to permit the release of the tool. It is preferably made to traverse a circular slot A^2 in the sleeve, thus preventing the withdrawal of the latter except when turned to a certain point.

The shank of the tool C is represented in Figs. 1 and 2 with a projection or hook C′, which enters a recess B^3 in the stock, and is adapted to take the end thrust and torsional strain upon the tool and to prevent the possibility of longitudinal movement when the bit is clamped in place. As shown in Fig. 1, the sleeve is against the stop B^4 and is in position to permit the jaw E to be swung back to admit or withdraw the tool. A slight rotary motion of the sleeve, however, will very effectually clamp it.

The modified construction illustrated in Fig. 3 shows the tool formed with a recess or slot C^2, instead of the projection or hook C′, the free end of the jaw E having a heel E′, which engages the recess C^2, thus accomplishing the same purpose.

I am aware that a screw-thimble having a pivoted jaw operated by the point of the stock upon which it screws has been employed, also that it is common to form tools with projections to prevent longitudinal movement.

The features of my invention have been fully set forth, but I do not limit it to the exact constructions shown, as it may be further modified without departing from the spirit of my invention.

It will be noticed that no force need be exerted upon the sleeve to effectively clamp the tool—such as is required when a screw-sleeve is employed—and a very slight rotary movement of the sleeve is sufficient to prevent the opening of the jaw and to positively hold the tool. The strain upon the latter is not conveyed to the sleeve, but is taken by the stock direct.

What I claim is—

1. In a tool-handle, the combination, with a stationary stock having a recessed side, and a movable jaw fitting within the recess, of a rotary clamping-sleeve mounted on the stock and provided with a slot adapted to register with the movable jaw and permit the latter to fall back into the slot, whereby the sleeve is locked against rotation, substantially as set forth.

2. In a tool-handle, the combination, with

a stock having a cavity for the tool-shank, a recessed side and a movable jaw, the latter being connected to the stock at a point below the bottom of the tool-shank cavity, of a rotary sleeve mounted on the stock and provided with a slot adapted, when opposite the movable jaw, to permit the latter to fall back into the slot, whereby the sleeve is locked against rotation, substantially as set forth.

3. In a tool-handle, the combination, with a stock having a cavity for the tool-shank, and a recessed side and a movable jaw fitting within said recess, of a rotary sleeve mounted on the stock and provided with a slot adapted, when opposite the movable jaw, to permit the latter to fall back into the slot, whereby the sleeve is locked against rotation, and also provided with a slot A^2 and a pin or stop secured to the stock and resting within slot A^2, substantially as set forth.

4. The tool-stock provided with pivoted jaw E, and having a socket with recess B^3, in combination with a tool having a projection entered in said recess, and a rotating sleeve with longitudinal slot adapted to clamp said jaw against the tool or release the same, all substantially as set forth.

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

FELIX CHANTRELL.

Witnesses:
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HOWARD P. WANNER.