

(No Model.)

P. P. COLLINS.
WRENCH.

No. 555,677.

Patented Mar. 3, 1896.

Fig. 1.

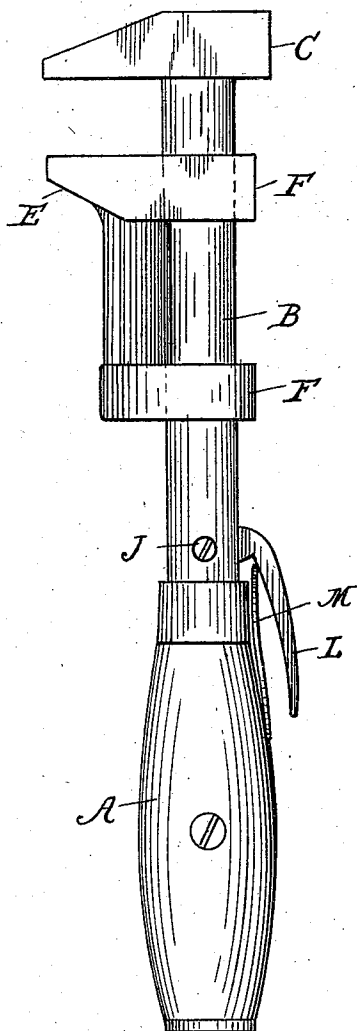


Fig. 2.

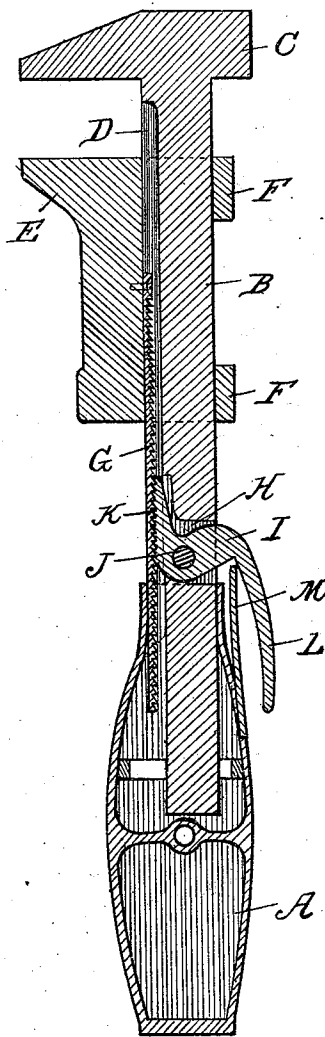
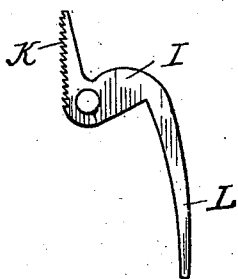


Fig. 3.



Witnesses

Albert Popkine
Claude Lunsford

Inventor

Peter P. Collins
By Lucy B. Hills
Attorney

UNITED STATES PATENT OFFICE.

PETER P. COLLINS, OF TORONTO, OHIO.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 555,677, dated March 3, 1896.

Application filed June 28, 1895. Serial No. 554,373. (No model.)

To all whom it may concern:

Be it known that I, PETER P. COLLINS, a citizen of the United States, residing at Toronto, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to that class of wrenches having a fixed and a sliding jaw, and has for its object to provide an improved mechanism for controlling the movement of the sliding jaw, whereby the said mechanism is concealed from view within the shank and handle of the wrench and is not exposed to the collection of dust and dirt. This object I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved wrench. Fig. 2 is a central vertical longitudinal section of the same, and Fig. 3 is a detail side elevation of the pivoted clamping-jaw.

Similar letters of reference indicate corresponding parts in the several views.

In the said drawings, the letter A denotes the handle of the wrench, B the shank of the same fixed in the handle, and C the fixed jaw mounted on the outer end of the shank B. The said shank B is provided with a longitudinal groove or recess D, as shown in Fig. 2, for a purpose hereinafter to be described.

Mounted on the shank B is the movable jaw E, having the collars F encircling said shank to retain said jaw in place on the shank while at the same time permitting a longitudinal movement with respect thereto. Detachably fastened to the movable jaw E is the rod G, serrated on its inner face and extending into the handle of the wrench, as shown. This rod is located in the groove or recess D in the shank B, completely filling the same in cross area.

The shank B of the wrench is apertured, as at H, to receive a pivoted spring-clamp I, as shown in Fig. 2. This clamp is pivoted in the shank by means of the screw-bolt J, and is provided on one end with the serrated face K, adapted to normally engage with the serrations on the rod G and retain the latter firmly in any adjusted position. The other end of the clamp I is extended into the thumb-piece L, extending down the handle A within

convenient reach of the hand grasping the wrench. A spring-plate M, fixed to the handle A, engages at its free end with the under side of said thumb-piece, pressing the latter outward and thereby normally retaining the serrated face K in engagement with the serrated rod G.

From the above description the operation of the wrench will be readily understood. When it is desired to adjust the sliding jaw E on the shank B, the operator presses the thumb-piece L, thereby raising the serrated face K of the clamp I from engagement with the rod G and permitting the longitudinal movement of the sliding jaw on the shank. When the pressure on the thumb-piece L is removed, the spring-plate M instantly forces the serrated face of the clamp into engagement with the rod G, thus firmly holding the movable jaw in its adjusted position.

By locating the serrated rod G in the groove or recess D with its serrations on its inner face, the liability of the teeth thereon becoming clogged with dust or dirt is reduced to a minimum, the operative parts being concealed from view. Moreover, by detachably connecting the rod G to the movable jaw E, should the teeth thereon become broken the same can be readily removed and replaced by a new rod at a very trifling expense.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a wrench, the combination with a handle, a fixed jaw, a shank having a longitudinal groove or recess in one side, a movable jaw, and a detachable rod carried thereby moving in the groove or recess in the shank and having serrations on its inner face, of a clamp pivoted in the shank and having a serrated clamping-face engaging with the serrated rod and a thumb-piece extending externally down the handle, and a spring-plate for normally forcing the said clamping-face into engagement with the serrated rod, substantially as described.

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

PETER P. COLLINS.

Witnesses:

JOHN MCCLOVE,
J. F. PURVIANCE.