No. 12,590. PATENTED MAR. 27, 1855.

L. D. GILMAN.
SCREW WRENCH.

Fig. 1.

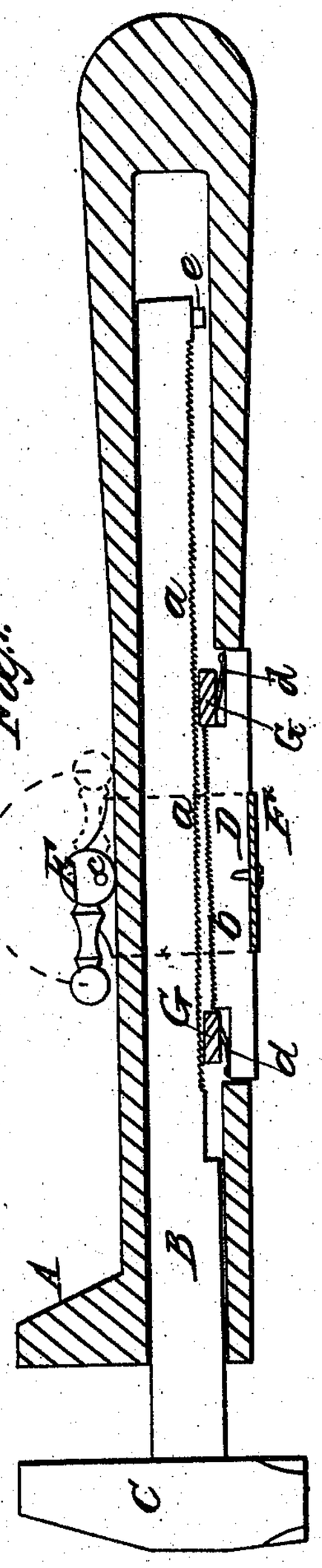
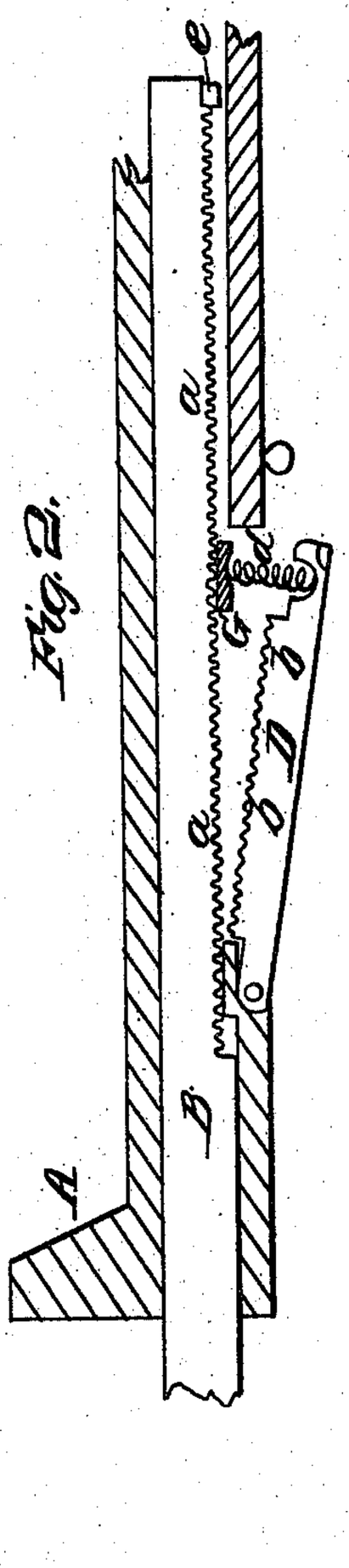


Fig. 2.



UNITED STATES PATENT OFFICE.

L. D. GILMAN, OF TROY, NEW YORK.

SCREW-WRENCH.

Specification of Letters Patent No. 12,590, dated March 27, 1855.

To all whom it may concern:

Be it known that I, L. D. GILMAN, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Constructing Adjustable Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a sectional view of the wrench and Fig. 2 is a sectional view of a modification of the arrangement shown in Fig. 1, the same letters showing like parts in each of the figures.

The nature of my invention, and that which distinguishes it from other improvements heretofore made in adjustable wrenches, consists in holding the adjustable jaw firmly, when set in position for use, by means of rack teeth on the shank of the adjustable jaw; and an adjustable toothed plate, whose teeth are made to catch or lock into the teeth of the shank of the adjustable jaw. The wrench being adjusted and set for use, by means of an eccentric or cam motion which acting upon a strap of the toothed adjustable plate, causes its teeth to catch or lock with the shank teeth, thereby holding the jaw of the wrench firm in its set position.

The construction is as follows, viz:

A is the stationary jaw and handle of the wrench, made hollow, in order to receive the shank B of the adjustable jaw C, one side of this shank is formed with a rack of teeth (*a a*).

D is an adjustable toothed plate, its teeth (*b*) matching with and locking into the rack teeth (*a a*). This plate is placed in a slot formed in the wrench handle, and has a vertical, or a motion at right angles to that of the jaw shank, its teeth are brought into gear with the teeth of the adjustable shank by means of an eccentric, or cam E, arranged on the opposite side of the wrench handle; this cam has its eccentric bearings (*c*) attached to a loop or strap F secured to the adjustable plate, so that by reversing the handle of the eccentric, as shown by the dotted lines, in Fig. 1, the strap, by the eccentric motion is brought up, and with it the adjustable plate so as to lock its teeth into those of the shank, thereby holding the shank jaw firmly in its set position while the wrench is in use.

G, G, are guide bars, for guiding the adjustable plate, and also serve as bearings for the springs (*d d*) which unlock the toothed plate quickly. (*e*) is a stop in the end of the shank to prevent the same from slipping out of the handle.

I make no claim to the teeth on the sliding bar of the wrench. But

What I do claim as new and desire to secure by Letters Patent, is—

The arrangement of the adjustable toothed plate with its springs, the toothed shank of the adjustable jaw, and the eccentric with its strap attached to the toothed plate, the several parts being operated in the manner as herein fully described and shown.

L. D. GILMAN.

Witnesses:

J. J. SAVAGE,

Z. WELLS.