

Patented Apr. 25, 1899.

(Application filed July 26, 1898.)

(No Model.)

FIG.2.

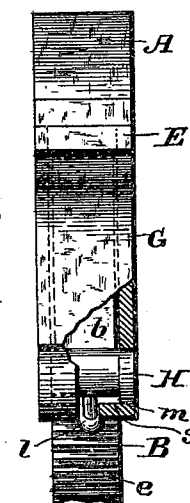
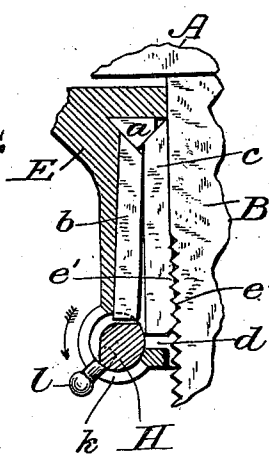
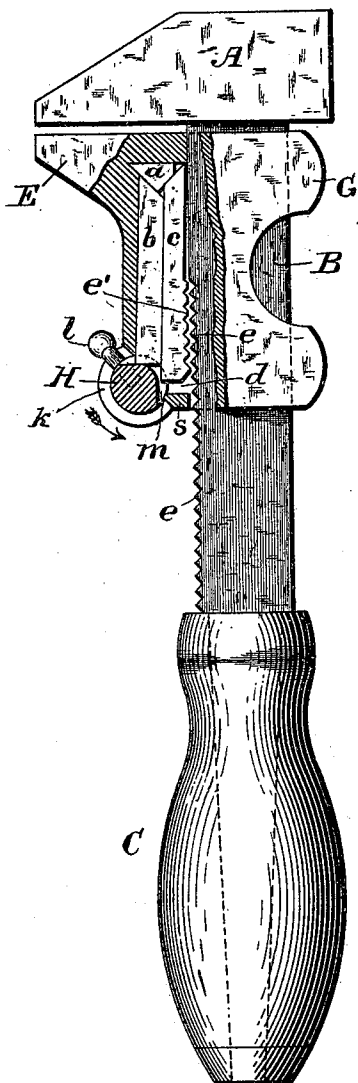
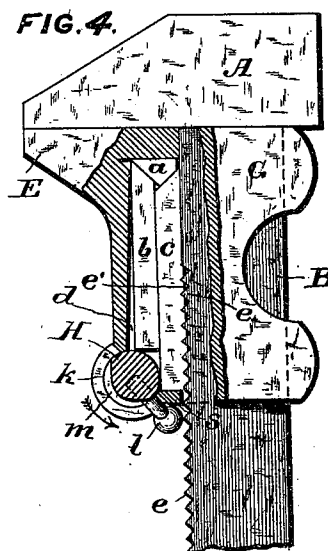


FIG. 4.



ATTEST.

INVENTOR.

ATTEST. INVENTOR.
Franck L. Ourand Maschil D. Corneau
Jos. L. Coombs

UNITED STATES PATENT OFFICE.

MASCHIL D. CONVERSE, OF NEW YORK, N. Y.

MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 623,946, dated April 25, 1899.

Application filed July 26, 1898. Serial No. 686,907. (No model.)

To all whom it may concern:

Be it known that I, MASCHIL D. CONVERSE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to that type of wrenches commonly called "monkey-wrenches;" and the objects of my invention are to provide means for quick adjustment of the jaws and a durable, simple, compact, and reliable locking device for securely holding the sliding jaw at any desired position and that may be instantly applied or released; and my present invention consists, essentially, in the use of peculiarly-constructed tappets confined in a chamber in the sliding jaw alongside of the shank of the fixed jaw, one of said tappets being provided with teeth to intermesh with corresponding teeth transversely of the shank of the fixed jaw and actuating mechanism adapted to lock and adjust or to unlock instantly, as will hereinafter be fully described and claimed.

In the drawings, Figure 1, which is partly sectional, is a side elevation of my invention as applied in a wrench fully assembled, showing construction and manner of operation in part. Fig. 2 is a front view of the same, partly sectional, showing certain details of construction. Fig. 3 is a sectional side view further illustrating a feature of operation; and Fig. 4 is a side elevation, similar to Fig. 1, further showing the operation of my invention. All of said figures will be hereinafter more fully described in detail.

Like letters indicate corresponding parts throughout the several figures.

A is a fixed jaw having a shank B of rectangular cross-section, the latter having teeth *ee* on its front side transversely thereof and provided with a handle C.

E is the sliding jaw, having the slide part G mortised for reception of the shank B, as shown, and having a chamber *d* along the side and opening to the front of the shank B, within which are three sliding tappets *a b c*, the upper ends of *b* and *c* being beveled in opposite directions transversely, forming a space of triangular shape between them in which the similarly-shaped tappet *a* is placed.

The lower ends of the tappets *b c* are squared off, the latter one being longer than the former and provided with teeth *e' e'* to intermesh with the teeth *ee* on the shank B.

H is a short cylinder having a portion of its middle section *m* recessed or cut away for a part of its circumference, revolubly fitted in a hole therefor transversely the lower end of the chamber *d*, and provided with a short lever *l* for rotating the same, said lever extending through a slot *k* in the enlarged part of the lower front of the slide G.

The operation of my invention is as follows: When it is desired to span a nut, the lever *l* is put in the position shown in Fig. 1, which causes the recess *m* of the cylinder H to be next the lower ends of the tappets *b c*, leaving both said lower ends free to move laterally within the lower wider part of the chamber *d*, while their upper ends are confined laterally between the inner side and end wall of the chamber *d* and the front side of the shank B, tappets *b c* having room for limited vertical movement also. It will now be seen that the sliding jaw E can be readily pushed down or up on the shank B, since in doing so the teeth *e' e'*, which are graduated as to length, will by reason thereof and of the lateral freedom of the lower ends of the tappets *b* and *c* disengage themselves from the teeth *ee*. When the jaws A and E are pushed astride the nut, the lever *l* is then turned around in the direction of the arrow to the position shown in Fig. 3, which movement causes the full side of the cylinder H first to swing the lower end of the tappet *c* toward the shank B and cause the teeth *e' e'* on the former to intermesh with the teeth *ee* on the latter, as seen in this figure, and continued movement of the lever to the position shown in Fig. 4 will push the tappet *b* upward, and the right-hand beveled upper end of the latter in turn will push tappet *a* to the right, and the beveled lower right-hand side of the latter in turn will slide upward on the beveled end of tappet *c*, carrying all the former and the sliding jaw E upward by pressure against the upper end of chamber *d* to close adjustment on the nut, as shown in Fig. 4, where the jaws A and E are entirely closed and the lower end of the toothed tappet *c* is in contact with the lower end *s* of the chamber *d*.

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

1. In a wrench, in combination, a fixed jaw,
5 a shank provided with teeth, sliding tappets
carried in the sliding jaw, one thereof provided with teeth, and each constructed with beveled ends adapted to impart successive angular movement, and a revoluble, recessed
10 cylinder, the whole adapted to operate substantially as and for the purposes shown and described.

2. In a wrench, in combination, a fixed jaw, a shank provided with teeth, sliding tappets

carried in the sliding jaw, one thereof provided with teeth, and each constructed with beveled ends adapted to impart successive angular movement, and suitable mechanism adapted to actuate the same, substantially as and for the purposes shown and described. 15 20

3. In a wrench, a tappet provided with teeth of graduated length, substantially as and for the purpose shown and described.

MASCHIL D. CONVERSE.

Witnesses:

SAML. A. DRURY,
W. McKINLAY.