

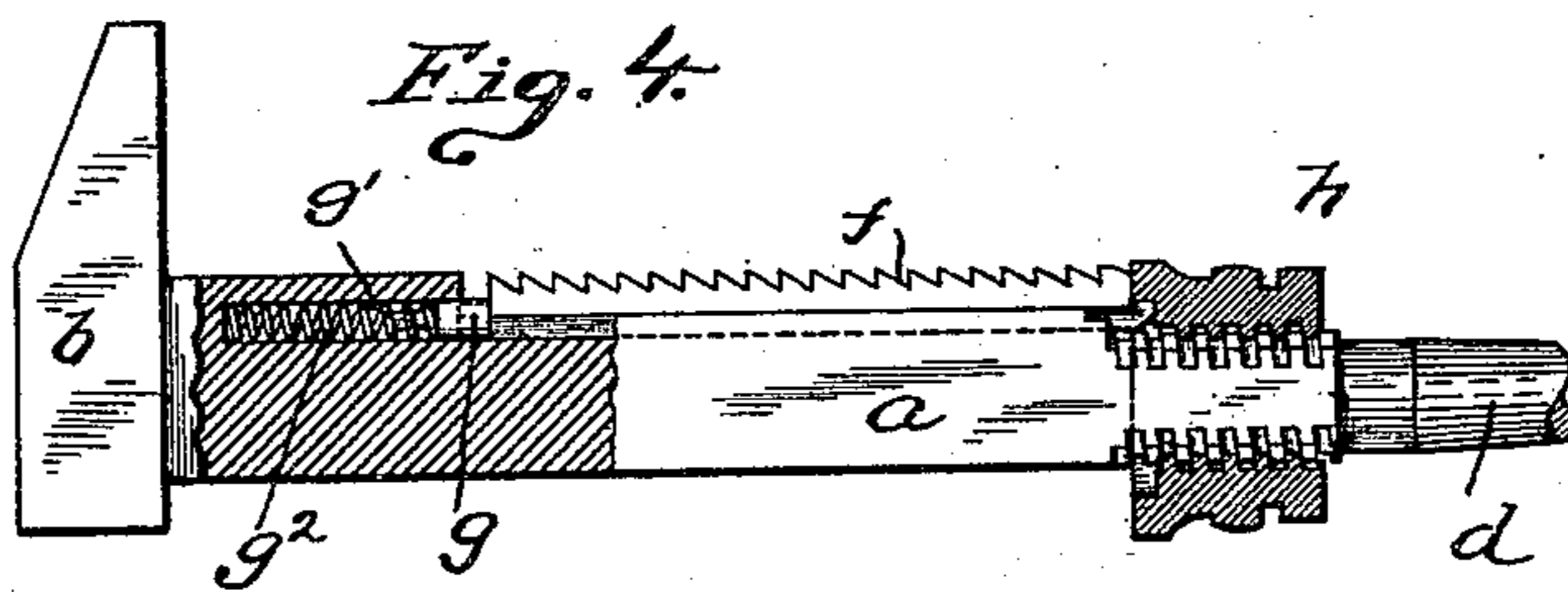
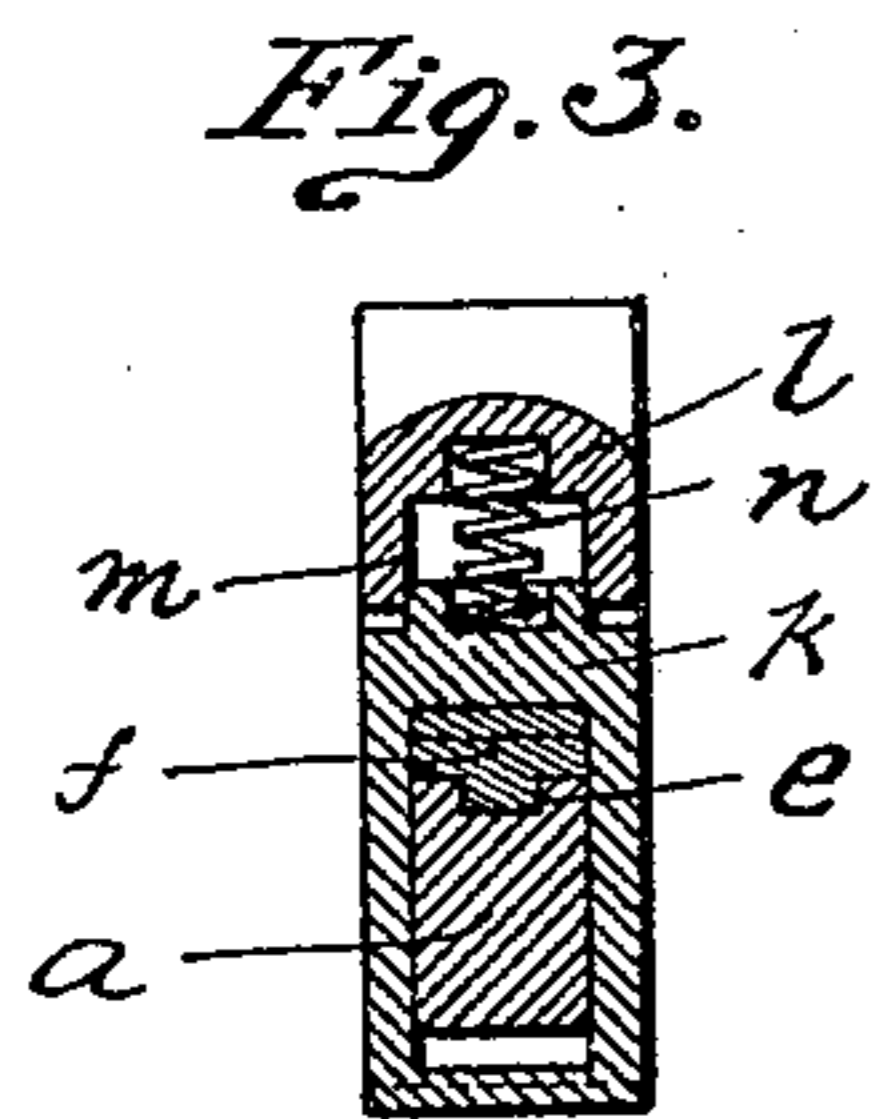
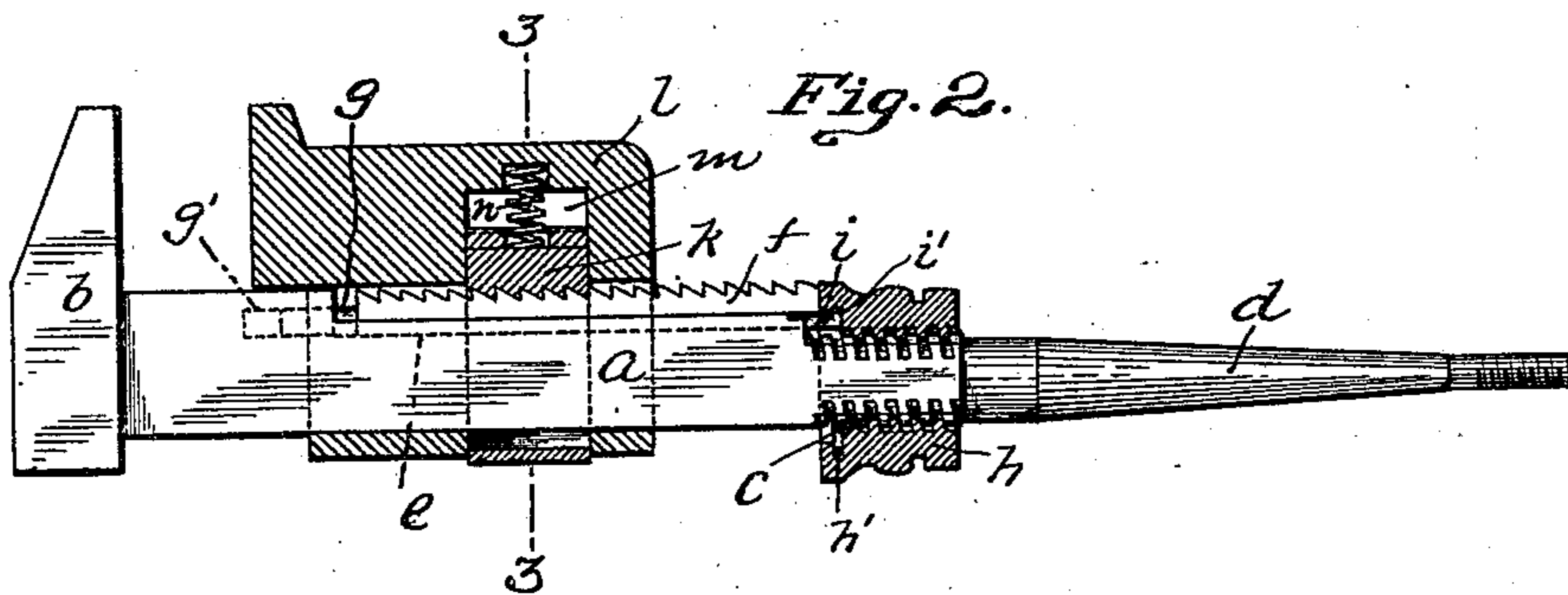
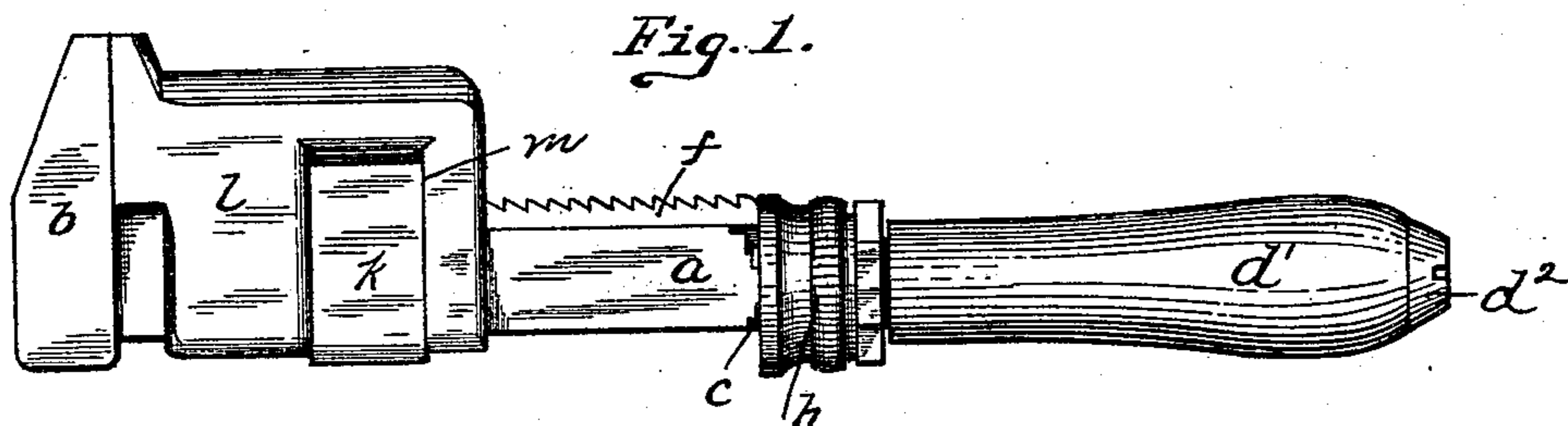
No. 640,831.

Patented Jan. 9, 1900.

C. H. TEBBETTS.
MONKEY WRENCH.

(Application filed Apr. 19, 1899.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

CLINTON HALE TEBBETTS, OF LEXINGTON, KENTUCKY.

MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 640,831, dated January 9, 1900.

Application filed April 19, 1899. Serial No. 713,642. (No model.)

To all whom it may concern:

Be it known that I, CLINTON HALE TEBBETTS, a resident of Lexington, in the county of Fayette and State of Kentucky, have invented a new and useful Improvement in Monkey-Wrenches; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to monkey-wrenches, its object being to provide a monkey-wrench which will be capable of quick adjustment approximately to the nut or other surface to be engaged thereby and then of accurate adjustment to such surface, so that the necessity for the slow turning of the nut to bring the parts into position is overcome.

The invention comprises, generally stated, a wrench-body having the ordinary head, a rectangular body portion and a threaded surface below the body portion, a ratchet-plate sliding on such body portion, a movable jaw having a pawl engaging with said ratchet-plate, and a nut engaging the threaded face on the body portion and adapted to move the ratchet-plate and so provide for the accurate adjustment of the wrench.

It also consists in certain other improvements, all of which will be more fully described and claimed.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a side view of the wrench. Fig. 2 is a longitudinal section of the movable jaw and threaded nut, the remainder of the wrench being shown in full lines. Fig. 3 is a cross-section on the line 3 3, Fig. 2; and Fig. 4 is a view of a modification of the wrench.

Like letters of reference indicate like parts in each.

The wrench has the regular body formed of the bar portion *a* with its head *b*, the bar portion *a* being generally rectangular in shape and having at the base of such rectangular portion the threaded portion *c*, beyond which is the handle-stem *d*, over which the handle *d'* fits, said handle being held in place by the nut *d²*. Sliding on the body of the wrench is the ratchet-plate *f*, this being mounted to slide in any suitable way. In the construction shown the body has the guideway *e*, on

which the ratchet-plate *f* slides, the ratchet-plate and body being shown as having a tongue-and-groove guide connection. This ratchet-plate is also shown as having a stem *g*, sliding into a seat *g'*, formed for the same above the guideway on the wrench-bar and serving to hold the upper end of the ratchet-plate close to the bar, and in the construction shown in Fig. 4 a spring *g²* is placed within the hole receiving said stem to force the same outwardly and hold its other end in contact with the nut *h*. In the preferred construction this spring is omitted, and the ratchet-plate has at its lower end an extension *i*, with a projecting teat or lug *i'*, which engages within an annular recess *h'*, formed in the nut *h*, so that in screwing the nut upon the threaded portion *c* the ratchet-plate *f* is moved up and down with the nut, the necessity for the spring *g²* being overcome. The ratchet-plate has, as shown, a series of ratchet-teeth which provide for engagement of the pawl-block *k*, mounted in the movable jaw *l*, which slides upon the wrench-bar. Any suitable form of pawl may of course be employed, that shown being a sliding pawl fitting within a recess *m* in the body of the movable jaw, a spring *n* being confined between the pawl and the base of said recess *m*, the sliding pawl fitting around both the body *a* and the sliding plate *f* of the wrench and having on its inner face a series of teeth engaging the teeth of the ratchet-plate, so that a strong union between the movable jaw and the wrench is provided. The spring *n* holds the sliding pawl always in contact with the ratchet-plate except when it is relieved by pressure upon the pawl.

When the wrench is in use, if it is to be applied, say, to a nut the operator simply slips the movable jaw up over the wrench bar or body until it engages with the ratchet-plate in such way as to hold the movable jaw as close to the nut as practicable, though of course on account of the length of the teeth of the ratchet-plate an accurate adjustment cannot always be obtained. In order to obtain such accurate adjustment, however, it is only necessary to give the nut *h* a few turns upon the threaded body portion of the wrench, when it will force the ratchet-plate *f* upwardly and provide for such quick adjustment, the wrench providing in this way for very rapid

and at the same time accurate adjustment to any surface upon which a hold is to be taken. The wrench can be opened of course by pressure upon the pawl, freeing it from the face of the ratchet-plate, though in most cases it is necessary to draw back the ratchet-plate itself by the turning of the nut. When the ratchet-plate is drawn back, if the construction shown in Fig. 2 is used the plate itself is drawn bodily back by means of the nut, while in the construction shown in Fig. 4 as the nut is drawn out of the way the spring g^2 forces back the plate. The operation is the same in either case. I thus provide an extremely simple and efficient wrench having the advantage of quick adjustment combined with accurate adjustment, which is believed to be very desirable in such tools.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a wrench-body having a threaded surface below the rectangular body portion thereof, of a ratchet-plate sliding on said body portion, a movable jaw having a pawl engaging said ratchet-plate, and a nut engaging the threaded face on the body portion and adapted to move the ratchet-plate, substantially as set forth.

2. The combination with a wrench-body having a threaded surface below the rectangular body portion thereof, of a ratchet-plate sliding on said body portion, a movable jaw having a pawl engaging said ratchet-plate and a nut engaging the threaded face of the body portion and adapted to move the ratchet-

plate, the ratchet-plate having a projecting lug engaging with an annular recess of the nut so as to impart motion in either direction to the ratchet-plate, substantially as set forth.

3. The combination with a wrench-body having a rectangular body portion provided with a guideway along one face, of a ratchet-plate fitting and sliding in said guideway, a projection at one end of said ratchet-plate entering a longitudinal recess in the wrench-body and a nut engaging the threaded face of the body and engaging with the ratchet-plate, substantially as set forth.

4. The combination with a wrench-body having a ratchet-plate sliding thereon, of a movable jaw fitting around the body and ratchet-plate and having a recess therein, and a sliding pawl fitting within said recess and around the wrench-body and ratchet-plate, substantially as set forth.

5. The combination with a wrench-body having a ratchet-plate sliding thereon, of a movable jaw fitting around the body and ratchet-plate and having a recess therein, and a sliding pawl fitting within said recess and around the wrench-body and ratchet-plate, and a spring confined between the sliding pawl and the base of the recess of the movable pawl, substantially as set forth.

In testimony whereof I, the said CLINTON HALE TEBBETTS, have hereunto set my hand.

CLINTON HALE TEBBETTS.

Witnesses:

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