G. J. CAPEWELL.

WRENCH.

No. 98,847. Patented Jan. 18, 1870.

Fig. 1.

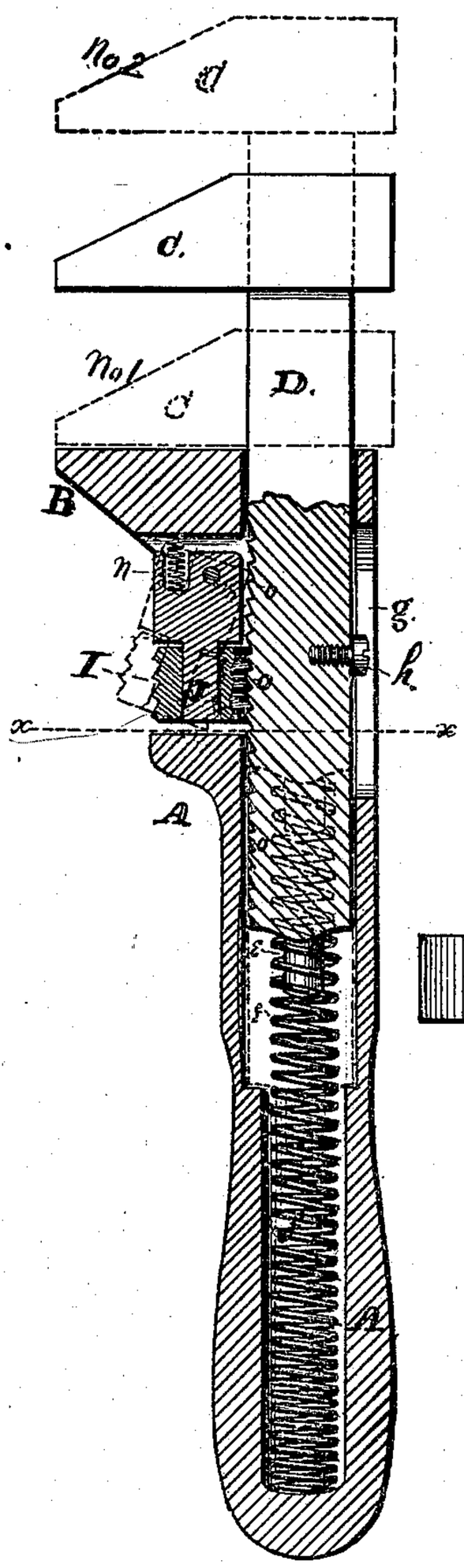


Fig. 3.

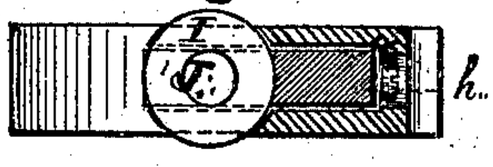
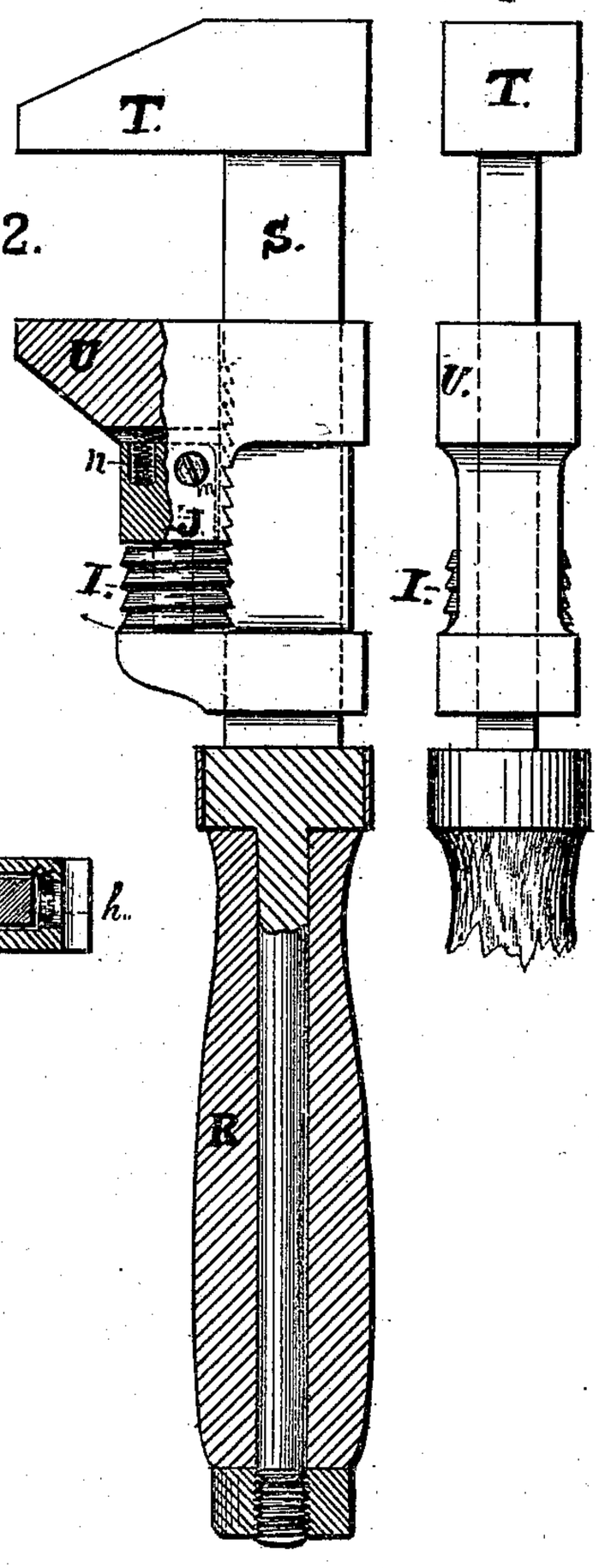


Fig. 4.

Fig. 2.



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GEORGE J. CAPEWELL, OF WEST CHESHIRE, CONNECTICUT.

Letters Patent No. 98,847, *dated January* 18, 1870.

IMPROVEMENT IN WRENCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, GEORGE J. CAPEWELL, of West Cheshire, in the county of New Haven, and State of Connecticut, have, as I believe, invented new and useful Improvements in Wrenches; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications.

Figure 1, view of wrench laid open, exhibiting some parts in section.

Figure 2, a view of wrench, differing in structure from that represented in fig. 1, in that the outer jaw is stationary, while the inner one is movable back and forth.

Figure 3, a section from fig. 1, cut on line *x x*.

Figure 4, hammer-face side of the wrench presented by fig. 2.

Letter A represents the handle, and is of metal.

Letter B, outer end of said handle A, and in such form as to constitute one of the jaws of the wrench.

Letter C, the other jaw for clasping the nut to be turned.

Letter D, a plane-sided bar sliding into an opening made longitudinally within the handle A, and just fitting thereto.

Letter *e*, a spindle extending from the inner end of D, entering the coil of spring *f*.

Letter *f*, a coil spring lying in the hollow or opening of handle A.

Letter *g*, a small slot in one side of this said handle.

Letter *h*, a pin or screw to limit the extent to which the spring *f* shall force out the jaw C.

Letter I, a thumb-nut with ratchet-cut threads, and hung upon spindle J.

Letter J, a spindle with an enlarged base for the pintle *m*, and keeping coil-spring *n*.

Letter *m*, a pintle keeping the spindle J, but allowing it to be swung out, as indicated by the dotted lines in fig. 1.

Letter *n*, a small spiral spring, whose legitimate object is to keep the nut I in the position exhibited in figs. 1 and 2, that is, with its threads meshing into the teeth on the bars D and S.

Letter *o*, ratchet-like notches upon the bar D, and on the bar S, which receive the threads of the nut I.

In fig. 2, R is the handle of the wrench, and may be of wood, and any desired length.

S, a metal bar attached to and extending from the handle R, with the outer end formed for service, as one of the jaws of the wrench, and is the fixed one of the two; and

T designated by the letter T.

U, the movable jaw sliding upon the bar S.

The thumb-nut is indicated by the letter I; the supporting-spindle by letter J; and the keeping-spring by letter *n*, the same as in fig 1, these parts, both in structure and functions, being common to both patterns of wrench.

Parties familiar with this class of goods will not require any further description, as to the material used, or the proportion of parts adapted to secure strength and comeliness in my device.

In the operation of the style or pattern presented by fig. 1, the nut I is moved to the position indicated by dotted lines, when the outer jaw C is, by force of spring *f*, promptly carried to its outermost position, as represented by dotted lines No. 2, in fig. 1; hence a very quick transfer from the closed position of dotted lines No. 1, and complete adaptedness to different sides of nuts readily secured.

The nut I, by the connection of its screw-threads with the ratchet-teeth *o*, holds the bar D, and thus the jaw C, for the time fixed, as may be seen in black full lines in fig. 1.

Furthermore, any nice or slight adjustment of the jaws to size of the nut to be turned, is effected by rotating the thumb-nut I upon its spindle J.

In the form given in fig. 2, the outer jaw T is the fixed one, and the inner one, U, the movable one, and may be slipped at once from one extreme to the other, on bar S, or to any extent desired, simply by bringing the nut I to the position indicated by dotted lines in fig. 1, as in that position the threads of this said nut and the teeth on the bar S do not engage each other.

For moving the jaw U but slightly at any one time, the nut I should be rotated by thumb and finger, either to open or close, as the case may require.

My invention consists in certain improvements in the methods or devices adapted for opening and closing, and also of adjusting the jaws of a wrench to the object it engages, and is formed in the device, described and illustrated, for the prompt transfer of the movable jaw from one extreme to another, not waiting the slow process of screw-threads, but nevertheless retaining the threaded nut for slight adjustments, and to hold to fixed position, as in this specification fully described and set forth.

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

1. The keeping and adjusting-nut I, when attached to either the fixed part B, in fig. 1, or the movable jaw U, in fig. 2, by the supporting-spindle J, and arranged to operate as specified.

2. The hollow handle A, when provided with the fixed jaw B, the swinging spindle J, and spiral spring *f*, in combination with the movable part D, as described and set forth.

3. The movable jaw U, in combination with the spring *n*, the spindle J, the nut I and fixed part S, as and for the purposes herein described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE J. CAPEWELL.

Witnesses:

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