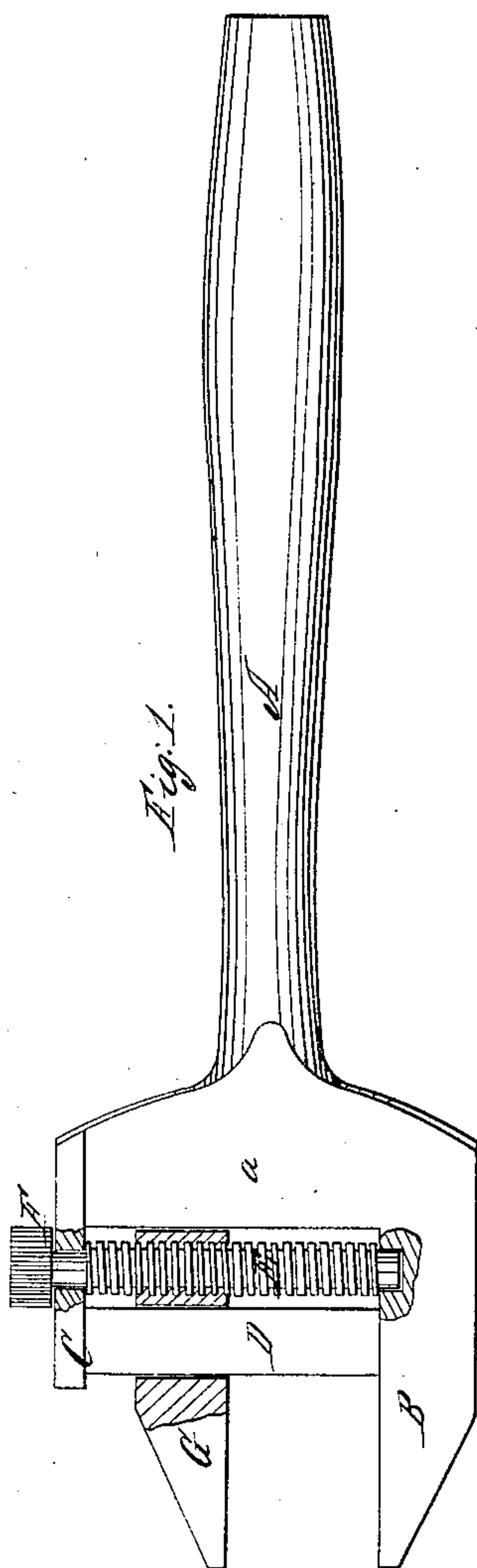
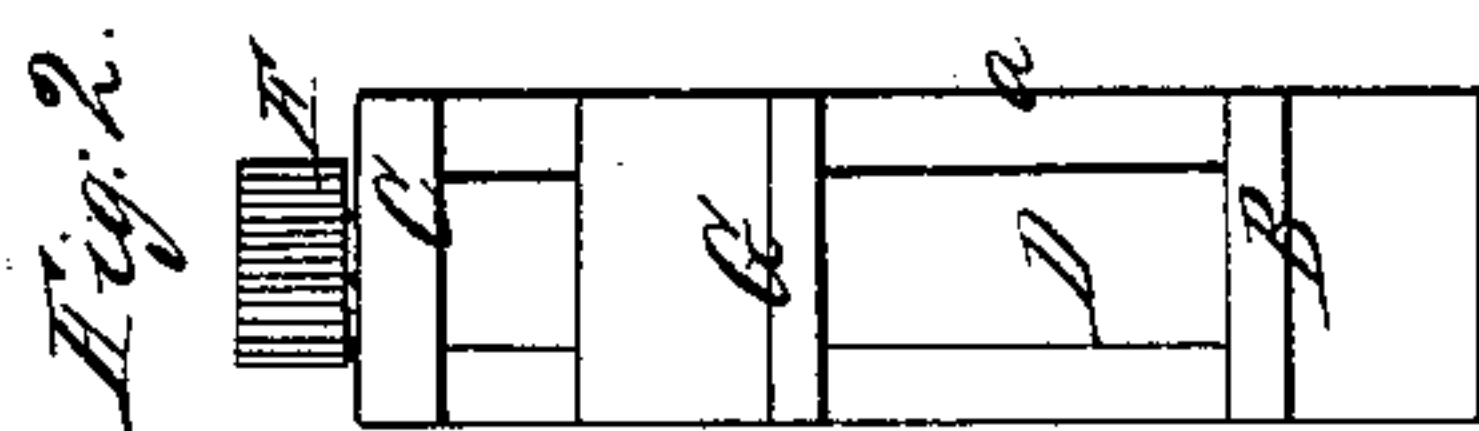


W. C. Noyes,

Wrench.

N^o 42,961.

Patented May 31, 1864.



Witnesses:

Henry Morris
Geo. L. Reed

Inventor:

W. C. Noyes
per Munroe & Co.
Attorneys

UNITED STATES PATENT OFFICE.

W. C. NOYES, OF SEYMOUR, CONNECTICUT.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **42,961**, dated May 31, 1864.

To all whom it may concern:

Be it known that I, W. C. NOYES, of Seymour, in the county of New Haven and State of Connecticut, have invented a new and Improved Screw-Wrench; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention, partly in section; Fig 2, an end view of the same.

Similar letters of reference indicate like parts.

This invention consists in having the two jaws of the wrench at the end of the shank or handle, and the movable jaw arranged in such a manner that it is moved or adjusted in a line at right angles with the shank or handle, as hereinafter set forth, whereby a very strong and durable wrench is obtained, and one in which the leverage-power is not diminished under any adjustment of the movable jaw, or at any point within the scope of its movement.

A represents the shank or handle of the wrench, one end of which is of flat form or spread out, as shown at *a*, with a projection at one side to form a stationary jaw, B, which is in a line parallel with the handle A, and at a suitable distance at one side of it. At the opposite side of *a* there is secured by screws or otherwise a bar, C, which is parallel with the jaw B, and D is a bar the ends of which are connected to the jaw B and bar C, the bar D being at right angles to the handle and parallel with the outer edge of *a*, as shown clearly in Fig. 1.

E is a screw, which has its bearings in the jaw B and bar C, and is between the bar D and the outer edge of *a*, and has a thumb-wheel, F, at one end of it.

G is a sliding jaw, of the same form as the stationary one, B. This jaw G has a hole made in it for the bar D to pass through, the former being allowed to slide freely on the latter, and the inner end of the jaw G rests or bears on the outer edge of *a*, the screw E passing through G and working in a female screw therein, so that by turning the screw E the jaw G may be moved back and forth from B. By this arrangement it will be seen that nuts are grasped between the two jaws B G by moving the latter through the medium of the screw E; and it will further be seen that the leverage-power of the handle will not be diminished under any adjustment of the jaw G, in consequence of the latter being moved in a line at right angles with the handle, and also that the jaw G is firmly supported and not liable to be broken or strained. The ordinary wrenches, in consequence of the movable jaw working on the shank of the wrench, have their leverage-power diminished, as the movable jaw is adjusted toward the point where the handle is grasped by the operator, and the movable jaw is, in consequence of not being firmly supported, liable to become strained or injured.

My wrench, in consequence of the jaws being arranged as shown, may be applied and used in cases where the ordinary wrenches cannot.

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

A screw-wrench having its stationary jaw B at one end of the handle A and parallel with it, and provided with a movable jaw, G, fitted on a bar, D, and operated by a screw, E, all arranged substantially as set forth.

W. C. NOYES.

Witnesses:

SARAH SMITH,
B. W. SMITH.