

(No Model.)

J. HOULEHAN.

WRENCH.

No. 308,561.

Patented Nov. 25, 1884.

Fig. 1.

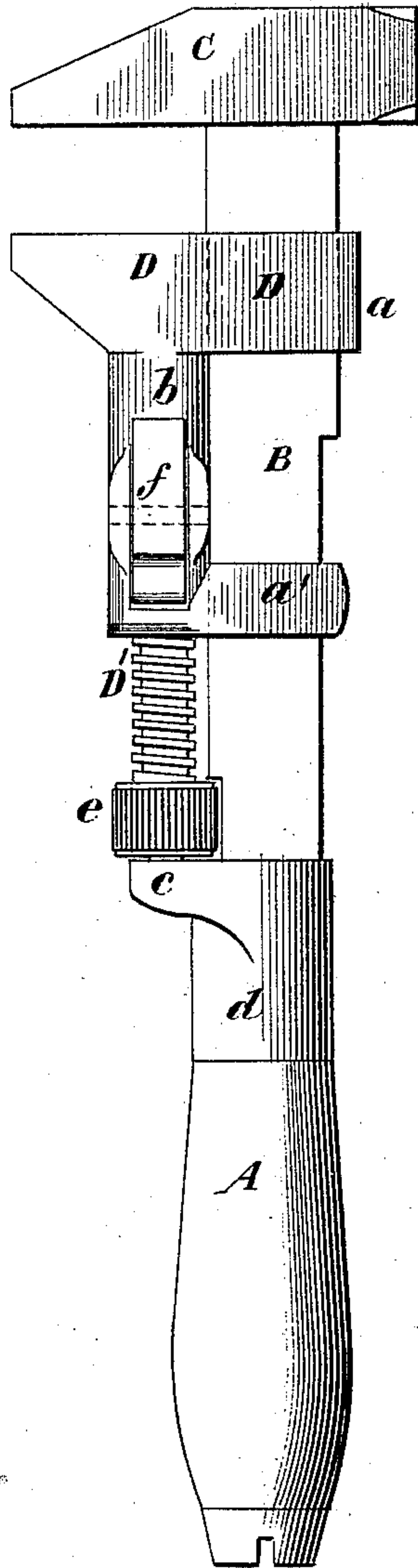


Fig. 2.

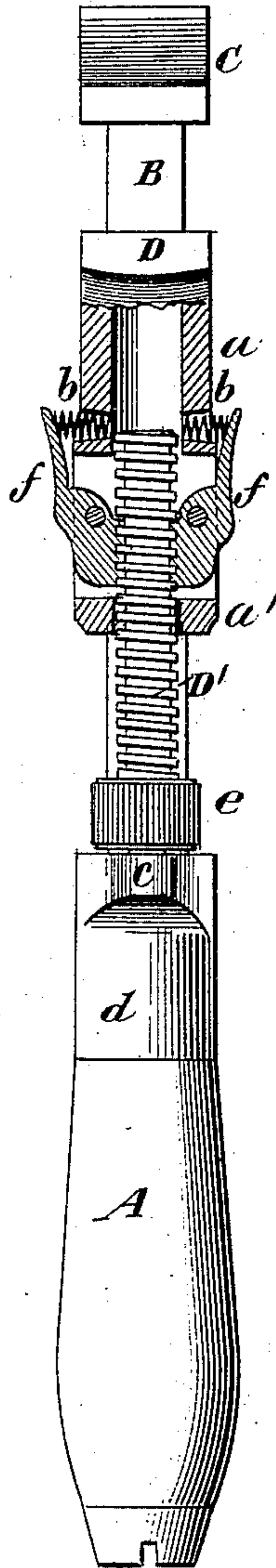
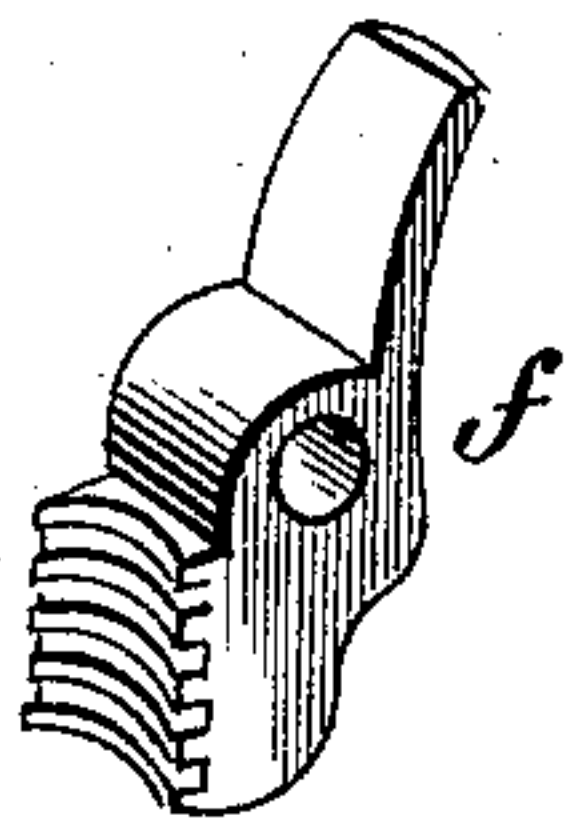


Fig. 3.



Witnesses:
A. Ruppert,
E. Cruise.

Inventor:
John Houlehan,
by G. W. J. Howard
att'y

UNITED STATES PATENT OFFICE.

JOHN HOULEHAN, OF TOLEDO, OHIO, ASSIGNOR TO RATHBUN FULLER, OF
SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 308,561, dated November 25, 1884.

Application filed May 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN HOULEHAN, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful
5 Improvements in Wrenches, of which the following is a specification.

My invention relates to that class of tools known as "monkey-wrenches," and has for its object the production of a device in which
10 the sliding jaw shall be capable of convenient and nice adjustment to the different positions it is intended to occupy.

In the accompanying drawings, Figure 1 is a side elevation showing my improvements.
15 Fig. 2 is a front view, partly in section.

Similar letters of reference indicate similar parts in both views.

A is the handle, to which is attached, in the usual manner, the shank B, carrying the fixed
20 jaw C. D is the sliding jaw, which is adjustably connected to the shank B by means of the straps *a a'*. At the lower part of the sliding jaw is formed the sleeve *b*, the lower end of the sleeve connecting with the strap *a'*.

25 The sleeve is provided with a chamber or opening running parallel to the shank, to receive the upper portion of the operating-screw D. The pin at the lower end of the screw turns within the shoulder *c* of the ferrule *d*.

30 The lower end of the screw is furnished with a milled button, *e*. The sleeve *b* is slotted at each side to receive a pawl or catch, *f*, pivoted to the sleeve, as shown. The lower end of each pawl or catch is shaped to engage with
35 the thread of the screw D, and the other end of each pawl or catch forms a lever-arm adapted to receive the pressure of the finger and thumb of the operator, for detaching the lower end from the thread of the screw. The lower ends

40 of the pawls or catches are kept depressed or forced in contact with or against the screw by means of springs, spiral or otherwise, placed under the opposite ends of the catches or pawls.

45 The operation is as follows: The operator, desiring to change the distance between the fixed and sliding jaws, raises the ends of the

catches or pawls which engage with the screw by pressing with the finger and thumb upon their opposite ends, and moves the sliding jaw 50 to substantially the required point. He then releases the pressure upon the catches or pawls, whereupon their ends engage with the thread of the screw D, and together constitute in effect a nut for the screw. The operator now 55 revolves the screw D by means of the milled button *e*, moving the sliding jaw to the exact adjustment required.

It will be seen from the foregoing that my invention permits of the convenient and nice 60 adjustment of the sliding jaw to any required point; that the strength of the tool is not impaired, and that a strong and reliable implement is produced. It will also be seen that by the use of a spring pawl or catch at each 65 side of the sliding jaw, instead of the employment of one in front, the pawls or catches are removed from the line of strain exerted upon the wrench when in use.

I do not claim the combination, in a monkey- 70 wrench, of an adjusting-screw, a sliding jaw, and a spring pawl or catch pivoted to the front of the sliding jaw and adapted to constitute a nut for the adjusting-screw when engaged therewith; but,

75 Having described my invention, I claim—

In a monkey-wrench, the combination of a shank carrying a fixed jaw, a jaw sliding upon said shank, an adjusting-screw, and a spring 80 pawl or catch pivoted to each side of the sliding jaw, said pawls or catches being adapted to engage with the screw and act as a nut thereto and to be disengaged therefrom, the pawls or catches being placed out of the line of strain 85 exerted upon the wrench when in use, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal this 21st day of April, A. D. 1884.

JOHN HOULEHAN. [L. S.]

Witnesses:

HENRY E. LEE,

ASHTON H. COLDHAM.