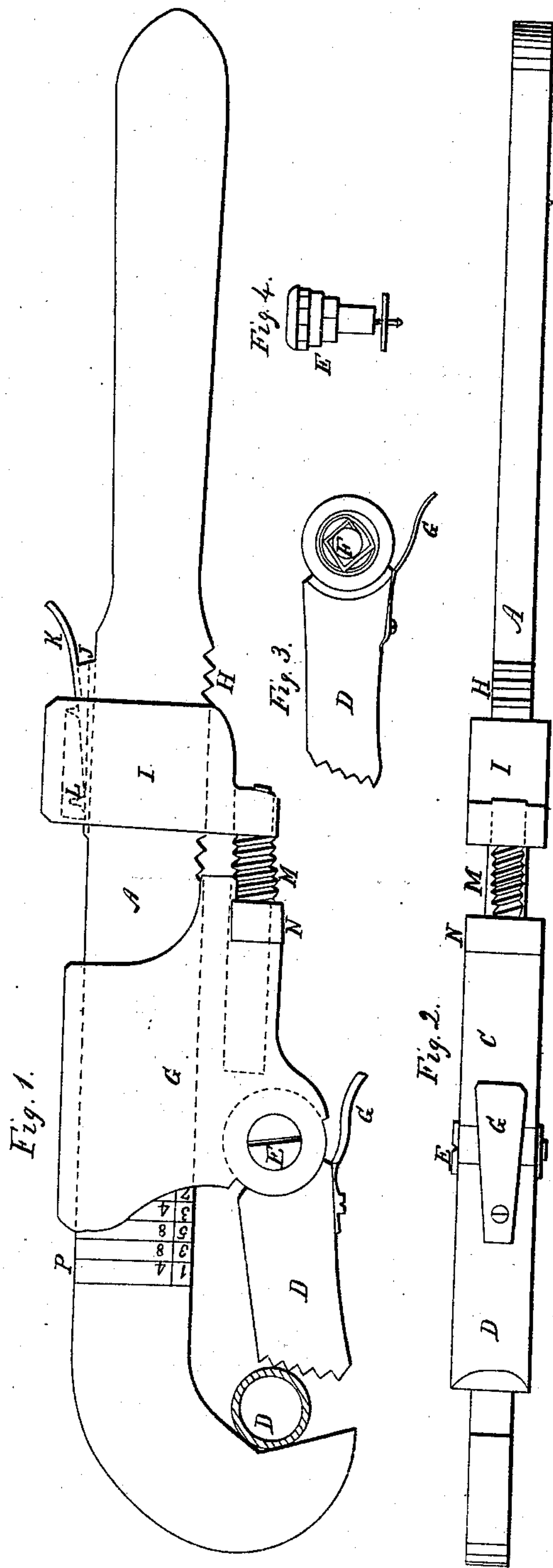


G. B. Phillips,

Pipe Wrench.

N^o 32,453.

Patented May 28, 1861.



UNITED STATES PATENT OFFICE.

GEORGE B. PHILLIPS, OF NEWARK, NEW JERSEY, ASSIGNOR TO JNO. S. LITTELL.

WRENCH.

Specification of Letters Patent No. 32,453, dated May 28, 1861.

To all whom it may concern:

Be it known that I, GEORGE B. PHILLIPS, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvements I will proceed to describe their construction and operation referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a plan view of my pipe wrench. Fig. 2, is an elevation of same.

The nature of my invention consists in the construction and arrangements of the improvements hereinafter described.

In the accompanying drawings A, is the main bar of the wrench made in the form shown that is with the end bent around so as to form an angle for the pipe B, which is to be turned by the wrench.

C, is a slide made in the form shown, arranged to traverse freely on the bar A, and has the vibrating jaw D, hinged to it by the pin E, which jaw is made in the form shown and provided with a series of teeth to catch and hold the pipe B, when it is turned by the wrench. The joint of the jaw D, is countersunk as shown in Fig. 3, for the spiral spring F, which is coiled in the countersink and one end is fastened to the jaw and the other end is fitted to the square part of the pin E, and the pin is inserted in the spring and turned until there is proper pressure on the jaw when the six sided part of the pin is pressed in to the side of the slide to which it is fitted and a washer applied to the opposite end with a screw to hold the pin in its place all of which are shown in Fig. 4.

G, is a thumb piece extending back from

the jaw D, so that the operator by bearing upon it can raise the jaw to apply it to or release it from the pipe.

One edge of the bar A, is notched as shown at H; and I, is a second slide with notches on the inside to correspond with those on the bar A. This slide is made to traverse freely on the bar when the notches in the slide are raised out of those in the bar; and the wedge J, is fitted to the slide so that when the slide is adjusted in the position desired the wedge is pressed in, which draws the notches together and holds the slide I firmly in its place on the bar. The top of the wedge is grooved for the spring K, which spring has a spur on it, which catches into a recess in the slide to hold the wedge in, when the slide is fastened. The recess in the slide shown by dotted lines in Fig. 1, extends nearly across it, so that the spur L, can traverse in it, which prevents the wedge J, from being drawn out of the slide when it is drawn back. The screw M, is fastened firmly into the projection on the slide I, and traverses freely in a hole in the slide C. This screw is provided with a round nut N, which is grooved on its surface so as to be turned with the thumb and finger and fitted to a recess in the rear end of the slide C, so that after the slide I, is fastened the slide C, may be more definitely adjusted by turning the nut on the screw.

I believe I have described and represented my improvements in pipe wrenches, so as to enable any person skilled in the art to make and use them.

I will now state what I desire to secure by Letters Patent to wit:

As a new article of manufacture the pipe wrench described in the foregoing specification.

GEORGE B. PHILLIPS.

Witnesses:

G. A. MEEKER,
WM. BRADSHAW.