

(No Model.)

C. E. PICKENS.  
WRENCH.

No. 453,820.

Patented June 9, 1891.

Fig. 1.

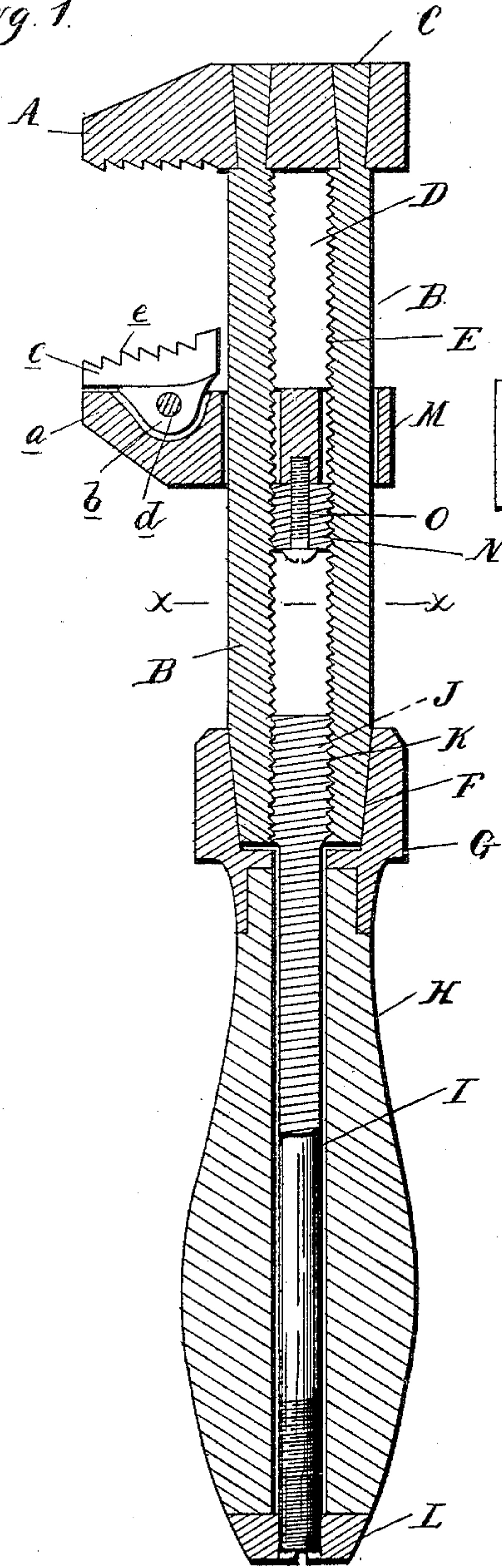
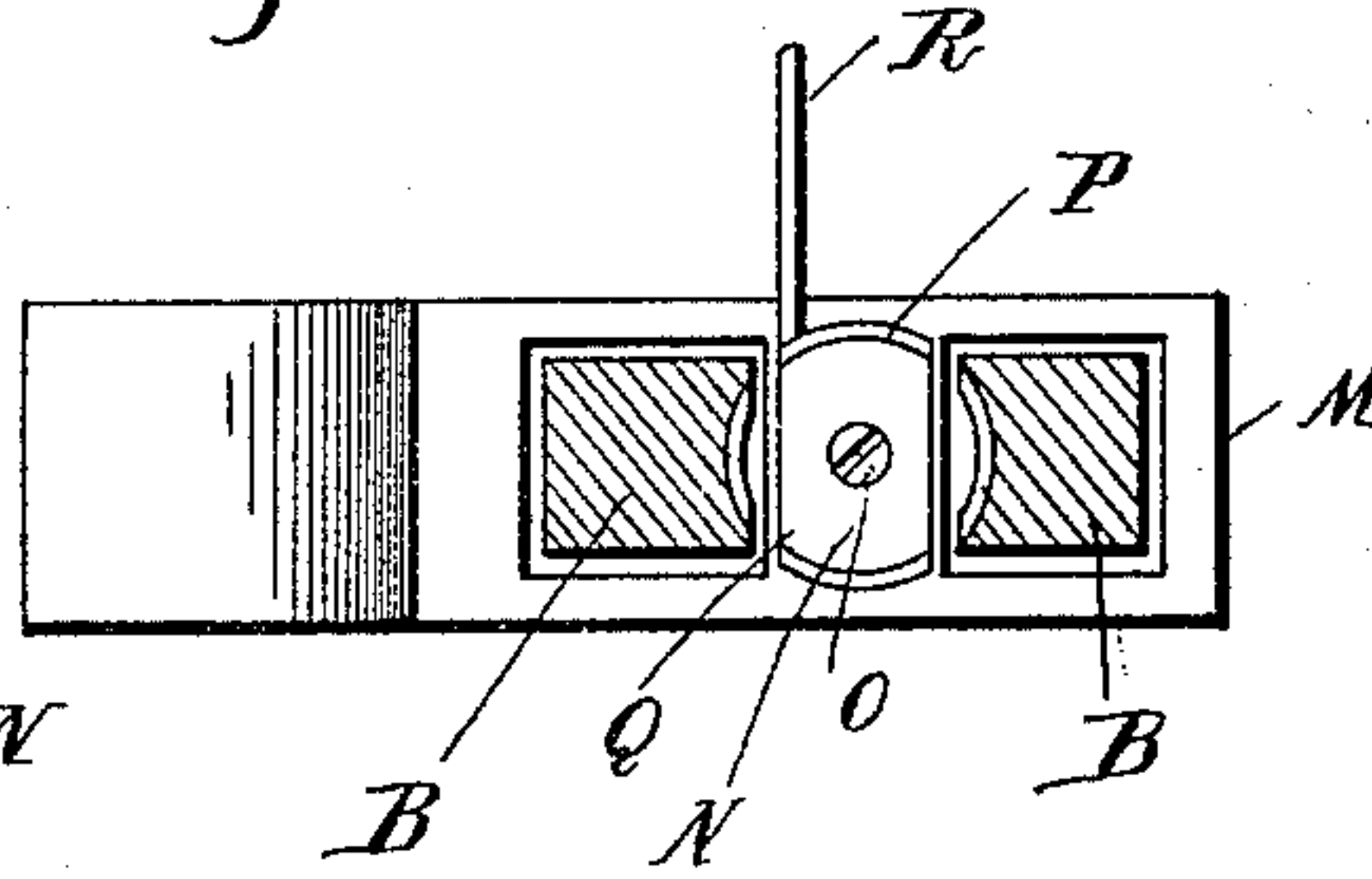


Fig. 2.



Witnesses  
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Att'y

# UNITED STATES PATENT OFFICE.

CHARLES E. PICKENS, OF GRAND LEDGE, MICHIGAN.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 453,820, dated June 9, 1891.

Application filed February 26, 1891. Serial No. 382,887. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. PICKENS, a citizen of the United States, residing at Grand Ledge, in the county of Eaton and State of Michigan, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in wrenches; and the invention consists in the peculiar construction of the various parts, and especially in the construction of the movable jaw and the means for holding the same at any of its adjusted positions, and, further, in the peculiar means employed to secure the body and handle of the wrench together, all as more fully hereinafter described.

In the drawings, Figure 1 is a vertical central section through my improved wrench, and Fig. 2 is a cross-section thereof on line *xx*.

A is the stationary jaw, to which are secured in any suitable manner two vertical bars B. This I preferably accomplish by forming a head C upon the bars B and casting a movable jaw around such head. The bars B are separated a small distance, forming between the slot D. The inner faces E of the bars D, I screw-thread. The lower ends are provided with a tapering bearing F.

G is the ferrule provided with a socket having a correspondingly-tapered bearing with which the bearing F upon the bars is adapted to engage.

H is the handle.

I is the shank passing through the handle and having a head J, which is provided with notches or a screw-threaded portion K, adapted to engage in the screw-threaded portion E of the bars.

L is a nut upon the end of the shank I for drawing the shank with the bars tightly into the socket in the spindle G, where it is held against movement by means of the tapering engagement of the parts.

M is a movable jaw suitably apertured to slide upon the bars B. Between these bars is a block N, which is pivotally secured to the movable jaw by means of the screw O or in any other suitable manner. This block is provided upon two opposite edges with a screw-threaded bearing P, and is cut away upon the sides Q, and is also provided with a handle or lever R, by means of which it may be turned upon its axis to engage the screw-threaded portions P with the screw bearing on the inner sides of the bars or to disengage them therefrom. The movable jaw is provided on its front side with a recess *a*, in which a lug *b* of the plate *c* is adapted to engage, and by means of a pivot *d*, passing through the lug, said lug is pivotally secured to the movable jaw.

*e* are serrations or notches on this plate inclining upwardly from the front to the rear, all so arranged that the plate will rock on the movement of the wrench and tend to more tightly clamp a pipe or round object between the jaws.

What I claim as my invention is—

1. In a wrench, the combination, with the stationary jaw A, separated bars B, screw-threaded at E, the movable jaw M, the block N, pivotally secured thereto between the bars, having the screw-threaded portions P, the squared portions Q, and the lever R, substantially as described.

2. In a wrench, the combination of the bars B, separated and screw-threaded on their inner faces, the inclined bearing F at the lower end thereof, the shank I, having the screw-thread, the notched head J, the ferrule G, having corresponding inclined faces, the handle H, and the nut L, substantially as described,

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. PICKENS.

Witnesses:

M. B. O'DOHERTY,  
N. L. LINDOP.