

(No Model.)

J. P. HUNT.
NUT OR PIPE WRENCH.

No. 487,742.

Patented Dec. 13, 1892.

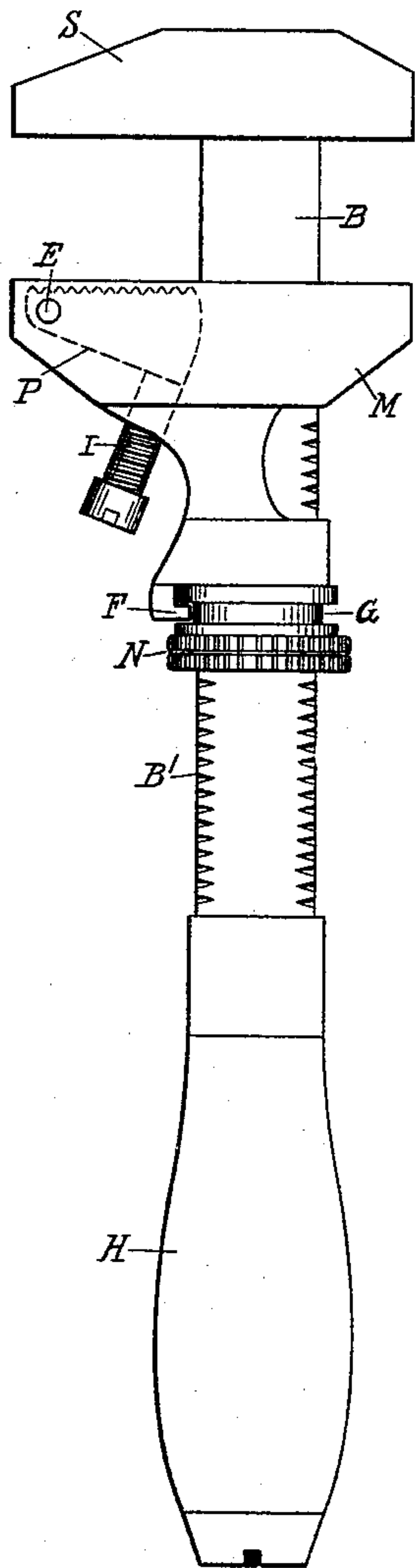


Fig. 1.

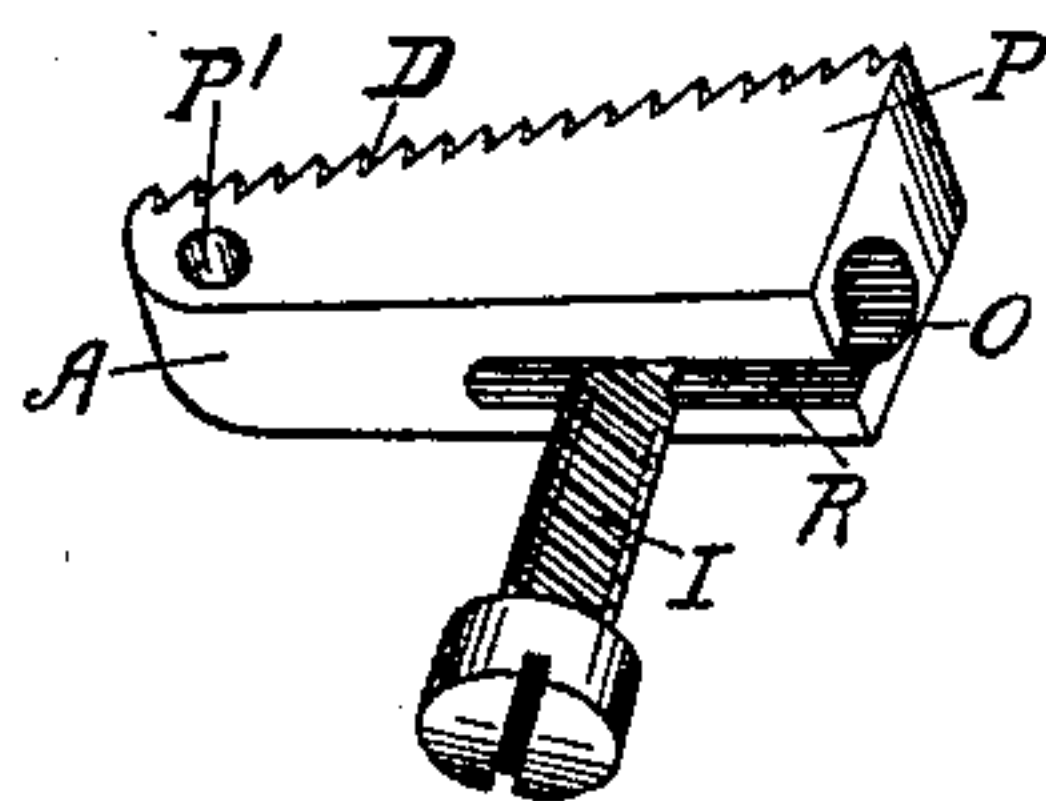


Fig. 3.

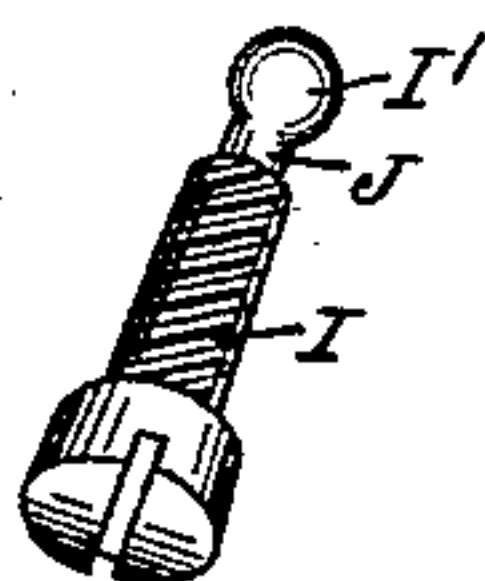


Fig. 4.

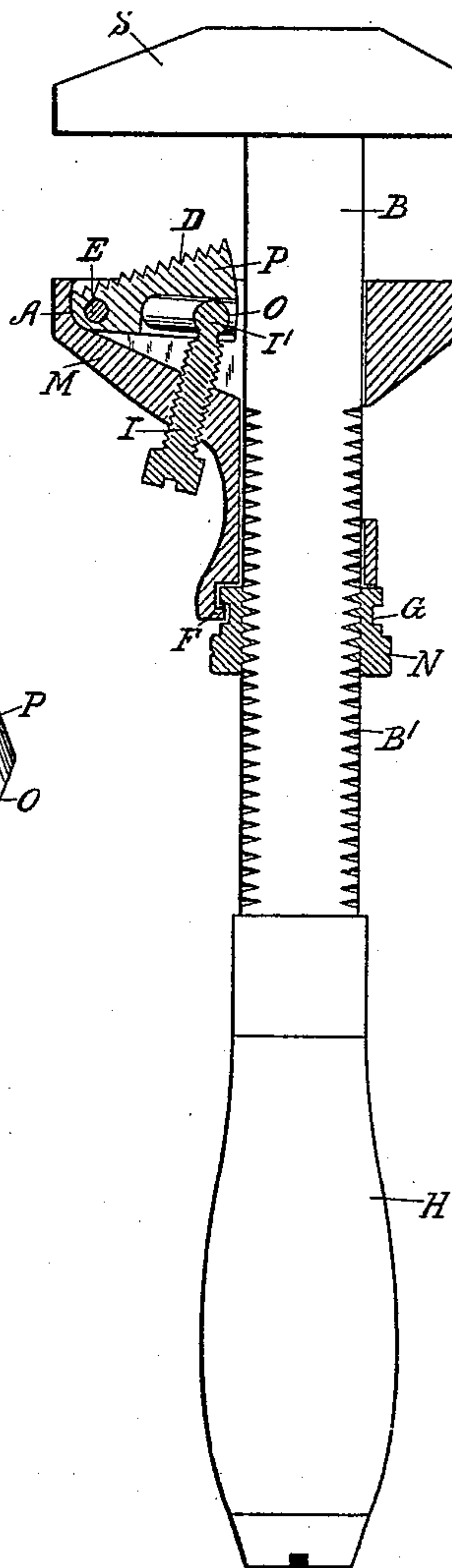


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN P. HUNT, OF LONDON, CANADA, ASSIGNOR OF ONE-HALF TO EDWIN
N. HUNT, OF SAME PLACE.

NUT OR PIPE WRENCH.

SPECIFICATION forming part of Letters Patent No. 487,742, dated December 13, 1892.

Application filed November 4, 1891. Serial No. 410,896. (No model.) Patented in Canada December 2, 1891, No. 37,889.

To all whom it may concern:

Be it known that I, JOHN P. HUNT, a subject of the Queen of Great Britain, and a resident of the city of London, in the Province of Ontario, Canada, have invented certain new and useful Improvements on Nut and Pipe Wrenches, (for which I have obtained Letters Patent in Canada, No. 37,889, bearing date December 2, 1891,) of which the following specification, taken in connection with the accompanying drawings, forms a full, clear, and exact description.

This invention relates to improvements on a device having jaws adapted to catch on the head of a bolt or upon a nut or pipe to turn it or prevent it from turning; and it consists of a pivotal jaw formed with a socket and a narrow opening leading from said socket to the outside of said jaw and of a screw formed with a spherical head and a neck adapted to fit perfectly free in said socket and opening, respectively, as well as of the improved construction and combination of parts of the same, as will be hereinafter first fully set forth and described, and then pointed out in the claims.

Reference is had to the accompanying drawings, wherein—

Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is another view of same, showing a central sectional view of the movable jaw and connections. Fig. 3 is an enlarged detail perspective view of the pivotal jaw and its operating-screw. Fig. 4 is an enlarged detail perspective view of the screw which operates the pivotal jaw.

H designates the handle of the wrench, and B the bar formed with the notches B'.

N designates a nut, which is tapped and fitted to engage with the notches B' of the bar B.

G designates a groove formed in the outer face of the nut N.

S designates the stationary jaw.

M designates the movable jaw, through which the bar B extends, and this movable jaw is formed with a flange F, which is fitted to and when placed in position engages with the groove G of the nut N, as shown in Figs. 1 and 2 of accompanying drawings.

P designates a jaw pivotally secured in the movable jaw M, as shown in Fig. 2. The face D of this pivotal jaw P is formed serrated,

and the face A of said jaw is formed rounding and fitted to the adjacent face of the movable jaw M, and the socket in the pivotal jaw P, through which the pivot-pin E passes, is formed larger in cross-section than said pivot-pin, so that the portion A of the pivotal jaw will impinge on the adjacent curved portion of the movable jaw M. This will relieve the pivot-pin E from strain when the pivotal jaw P is in operation.

O designates a socket formed in the pivotal jaw P, as shown in Figs. 2 and 3 of the accompanying drawings, and R is a narrow opening extending from the socket O to the outside of the pivotal jaw P, as shown in Fig. 3 of the accompanying drawings.

I designates a screw formed with the neck J and the spherical head I'. This spherical head I' and the neck J are fitted to and rest perfectly free in the socket O and opening R, respectively. This screw I is screwed into the movable jaw M from the under side and engages with the pivotal jaw P, and when the pivotal jaw and screw I are placed in position in the movable jaw they will engage, as shown in Fig. 2 of the accompanying drawings. The movable jaw M carries the pivotal jaw P and is adjusted and adapted to engage with any nut, bolt, or pipe by turning the nut N. The pivotal jaw P may be lowered below the face of the jaw M, as shown in Fig. 1, when required, or it may be adjusted to the position shown in Fig. 2 by turning the screw I. The former position is the best when this tool engages with flat surfaces; but the latter is the adjustment best adapted and most suitable for binding on or turning circular objects—such as pipes—because the space between the jaws is gradually decreased, and as the object moves toward the bar B the space it occupies becomes smaller and the more firm and better will be the engagement of the tool with the circular object. This screw I not only adjusts the pivotal jaw P to any position or elevation required in relation to the jaw M, but holds it in this position. This is accomplished by constructing the pivotal jaw P with a socket O and opening R and the screw I with the shank J and spherical end I', so that by this construction a strong and durable combined nut and pipe wrench is provided.

Having thus described my invention, I claim—

1. In a wrench, the combination of a pivotal wrench-jaw P, formed with the serrated face D, a socket O, and opening R, with a screw I, formed with a shank J and a spherical end I', a bar B, jaw S, and movable jaw M, and means for operating the latter, substantially as shown and described, and for the purpose specified.

2. The combination of a pivotal wrench-jaw P, in which a socket P' is formed larger in cross-section than the pivot-pin E, extending therethrough, said jaw P being also formed with a serrated face D, socket O, opening R, and curved face A, with a screw I, formed with a shank J and spherical end I', a bar B, jaw S, and movable jaw M, formed with the curved face, to which the curved face A of the

pivotal jaw P is fitted, and means for operating the jaw M, substantially as shown and described, and for the purpose specified.

3. In a wrench, the pivotal jaw P, formed with a socket O and opening R, a screw I, formed with a shank J and spherical end I', in combination with a movable jaw M, formed with a flange F, a nut N, formed with a groove G, a stationary jaw S, a bar B, formed with notches B', and the handle H, substantially as shown and described, and for the purpose specified.

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

JOHN P. HUNT.

Witnesses:

P. J. EDMUNDS,
S. MCBAIN.