

J. H. Hathaway,

Nut Wrench.

N^o 17,737.

Patented July 7, 1857.

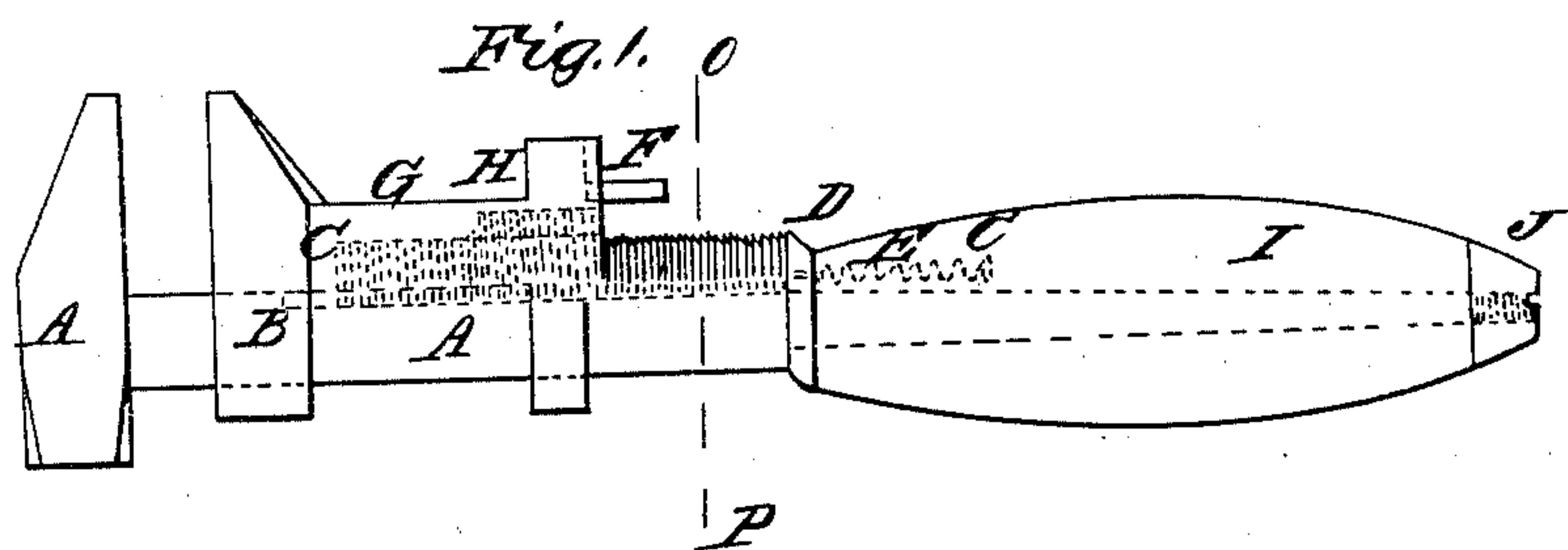


Fig. 2.

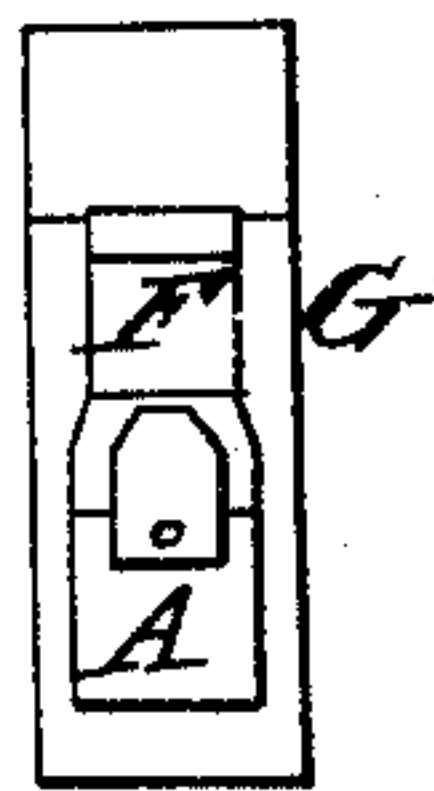


Fig. 3.



UNITED STATES PATENT OFFICE.

JOHN H. HATHAWAY, OF MILLBURY, MASSACHUSETTS.

WRENCH.

Specification of Letters Patent No. 17,737, dated July 7, 1857.

To all whom it may concern:

Be it known that I, JOHN H. HATHAWAY, of Millbury, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Slide-Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 shows the wrench complete. Fig. 2 shows a cross section at the line O, P. Fig. 3 shows two views of the slide catch, the same letters indicating the same parts in all.

In constructing my invention the hammer shank A is made of the usual form except that from B to the handle I make a groove or slot as seen in Fig. 2, in which I place a series of slips, beveled to an edge at their outer ends and having a hole near the other through which a rod C passes, said rod having a head at one end to press against the slips and after passing them passes through the collar or ferrule D and has a spring E so applied as to keep the slips pressed close together and against D except when separated by the catch F.

G is the sliding jaw made with a cavity to pass over the slips and with a slide in which is fitted the catch F two views of which show its form in Fig. 3. Behind said catch is placed a small spring H to hold it steady when out or in the slips. The handle I is of the usual form with a cavity to pass over the rod C and its spring and allow them free play, the handle being held by the nut J in the common way.

The operation of adjusting my wrench to the different sizes is to raise or draw the catch from the slips as shown in Fig. 2 when

the sliding jaw is free to move either way with facility and to secure it in place the catch is pressed toward the slips and its beveled edge entering between the edges of the slips slides in between them separating those nearest the part from the others which form a firm support and brace to the sliding jaw, the spring yielding to allow the slips to be separated. The slips may be of any thickness though the thinner they are the finer will be the adjustability of the wrench. This and the other parts of my invention admit of some variations, as the slips might be placed in the sliding jaw and the catch in the other, or they might be arranged around the bar A, and avoid the use of the rod C, or the catch may be made stationary and the slips movable to press on to it. Therefore I do not wish to be understood as claiming the particular forms or arrangements shown and described, neither do I claim a sliding jaw when held by a catch as such principle of holding it is not new, but

What I claim as my invention and desire to secure by Letters Patent is—

1. Making the ratchet or part corresponding thereto of separate pieces between which the catch enters, substantially as above set forth and described.

2. I also claim the aforesaid ratchet or series of slips in combination with the stationary and sliding jaws or their equivalents when constructed and operating substantially in the manner and for the purposes above set forth and described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOHN H. HATHAWAY.

Witnesses:

N. JANE GOODELL,
JAS. G. ARNOLD.