

(Model.)

E. H. ST. JOHN.

WRENCH.

No. 305,027.

Patented Sept. 9, 1884.

Fig. 1.

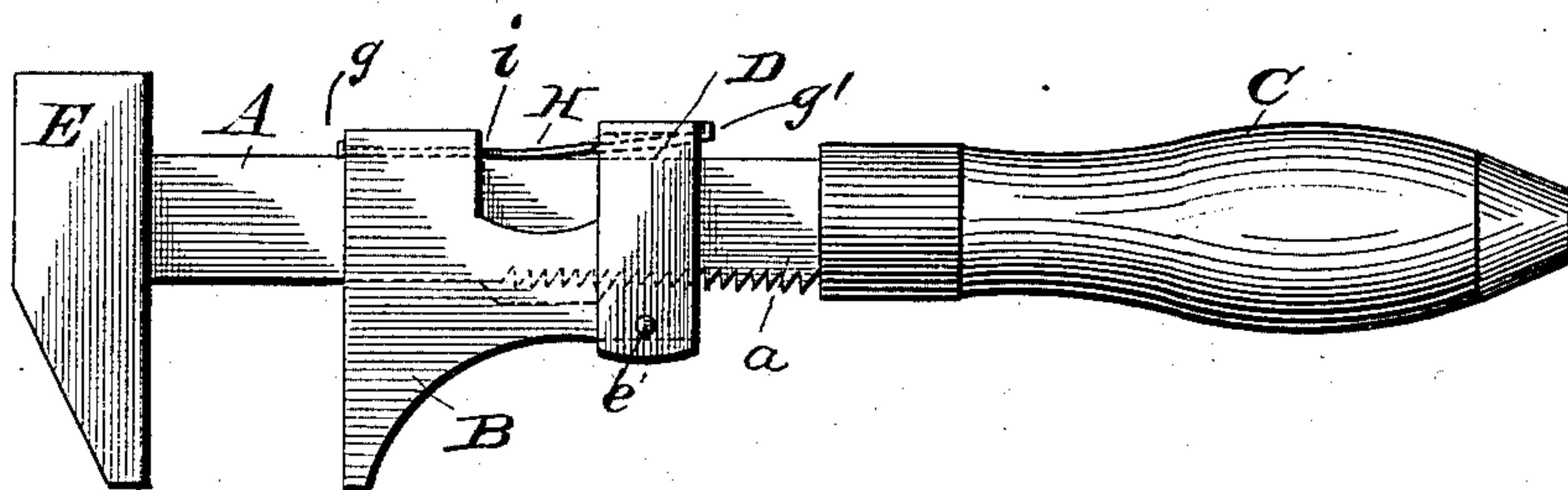


Fig. 2.

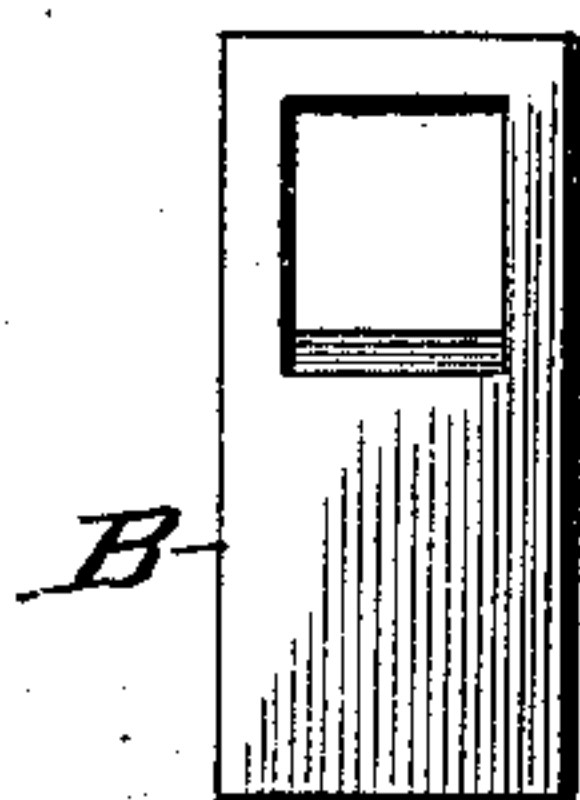


Fig. 3.

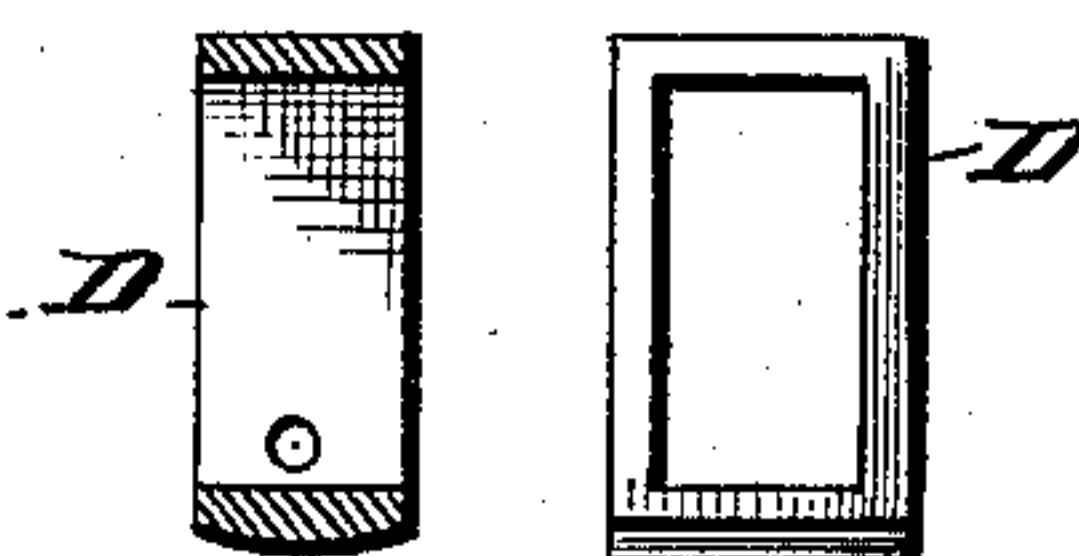
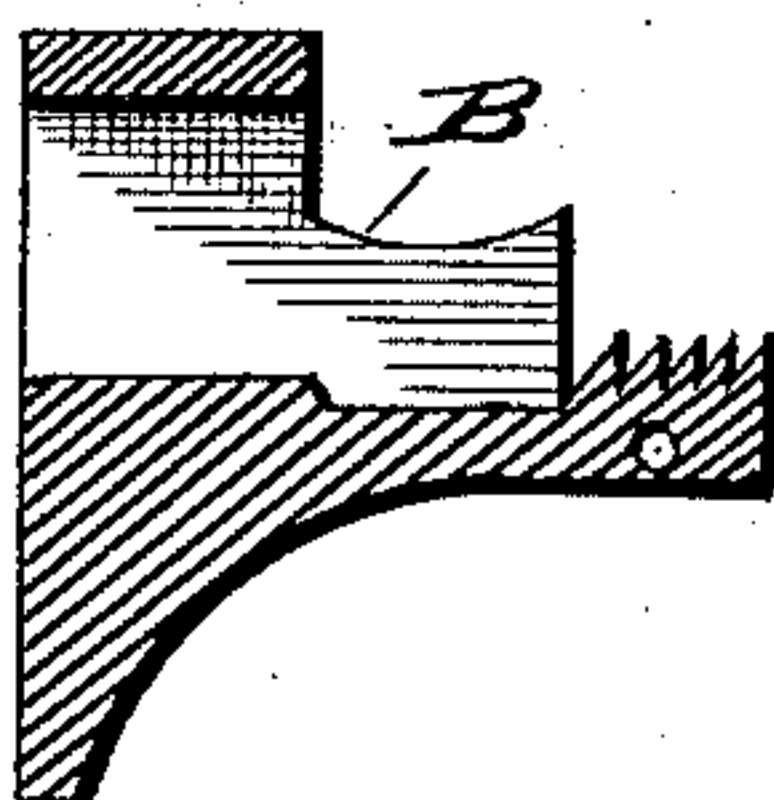


Fig. 4.

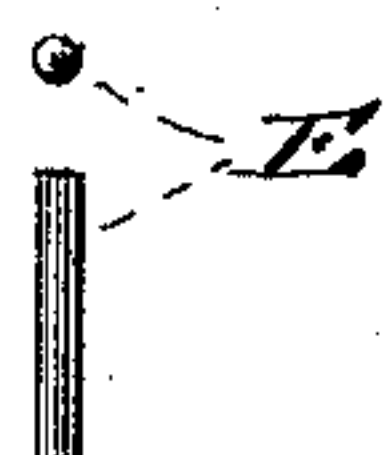
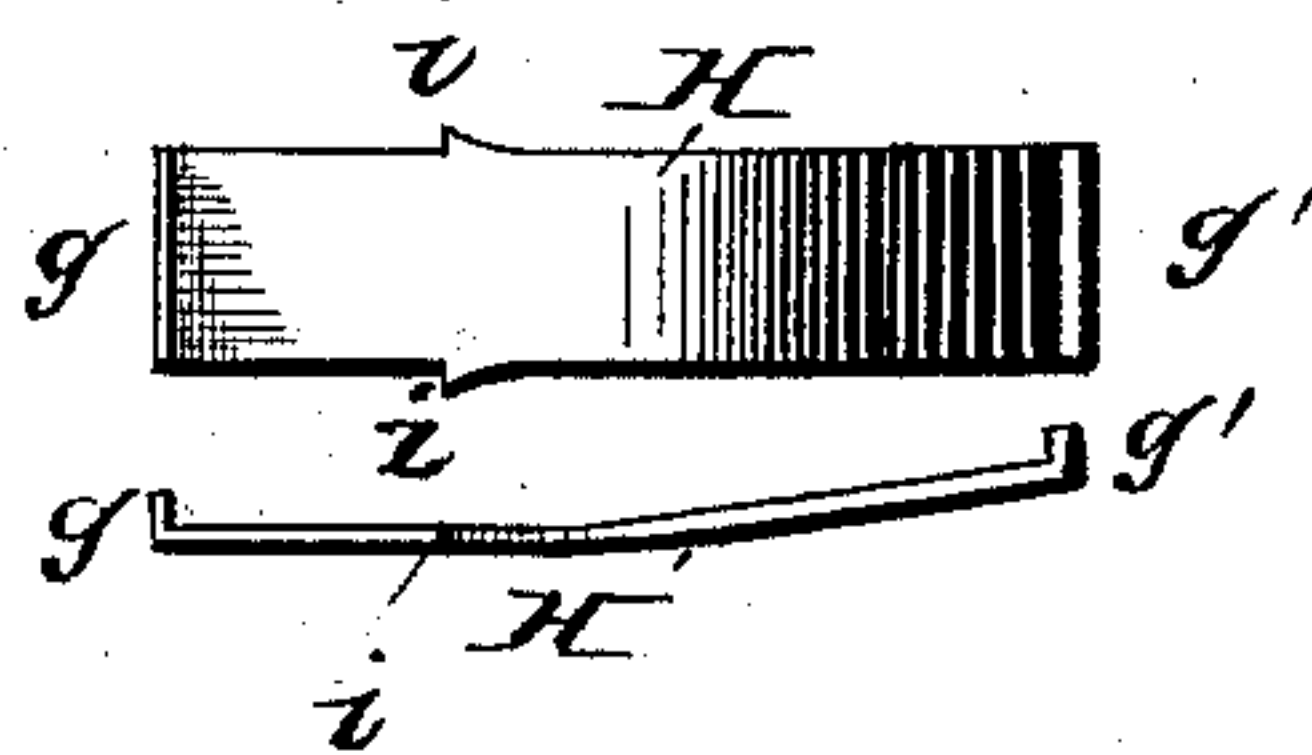


Fig. 5.



WITNESSES

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# UNITED STATES PATENT OFFICE.

EDMOND H. ST. JOHN, OF TOLEDO, OHIO.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 305,027, dated September 9, 1884.

Application filed May 10, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, EDMOND H. ST. JOHN, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a longitudinal side view of my wrench. Fig. 2 shows an end and sectional view of the movable jaw; Fig. 3, the same views of the ring; Fig. 4, a view of the pin, and Fig. 5 a plan and side view of the spring.

Similar letters of reference refer to corresponding parts in the drawings.

A represents the main bar, which is supplied with handle C and fixed or stationary jaw E in the usual manner. The bar A is also provided or constructed on its under side with serrations or rack *a*.

B represents the movable jaw, the head of which slides on the main bar A, its shank being also provided with serrations, which engage with those above referred to on the under side of the main bar.

D is a ring, secured to the movable jaw B by means of pin *e*. The aperture of this ring is made somewhat larger than the vertical diameter of the main bar, and slides thereon, as fully shown in Fig. 1 of the drawings.

H designates a flat spring, the rear part of which is slightly bowed. The forward part of this spring lies between bar A and the back of the movable jaw B, and the forward end, *g*,

is turned up so as to hold against this jaw. The rear part of spring H is bowed up free from the bar A, so as to bear against the inner side of the ring or loop D, and the rear end, *g'*, of this spring is turned up to hold against the said ring or loop, as shown in Fig. 1. At *i i* shoulders are formed on the edges of the spring H, which, with the lips *g g'*, effectually keep the spring in its place without the use of rivets, screws, or other fastenings. The forward part of the spring affords a solid steel bearing between the loop of the jaw B and the smooth back of the bar A. It is only necessary to press upon the top of ring D, which disengages or separates the racks. The movable jaw is then free to be set at any desired distance from the stationary jaw. The wrench being properly adjusted, pressure is removed from the ring, when the spring automatically causes the racks to engage, and the movable jaw is firmly held in place.

Having described my invention, I claim—

In a wrench, the combination, with the main serrated bar A and its fixed jaw, of the movable jaw having teeth on its rear extension, the ring or loop D, secured to the latter, and a spring having lips *g g'* applied between the back of the bar A and the jaw and ring, all substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

EDMOND H. ST. JOHN.

Witnesses:

WM. CUMMINGS,  
FITCH DEWEY.