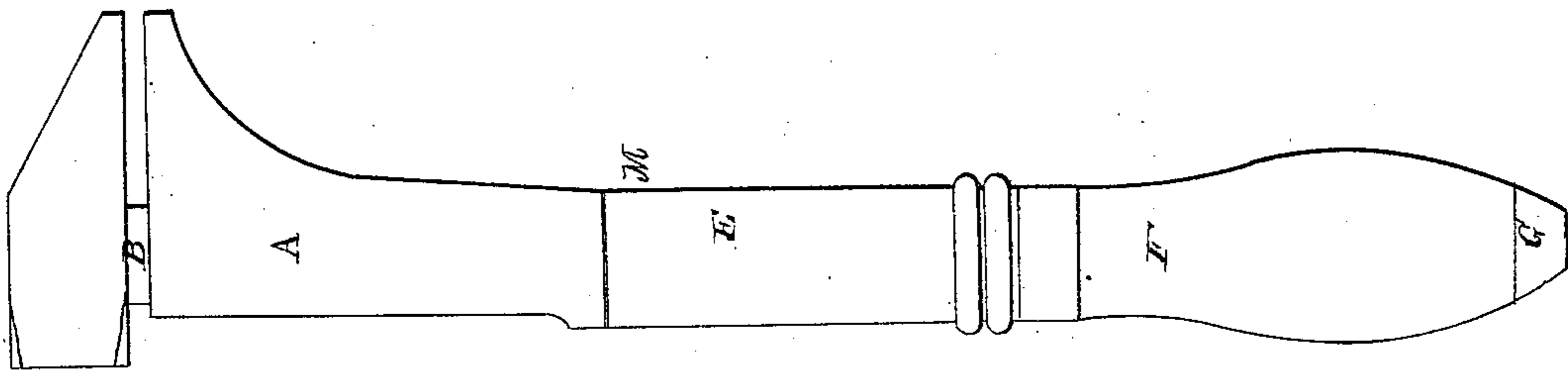
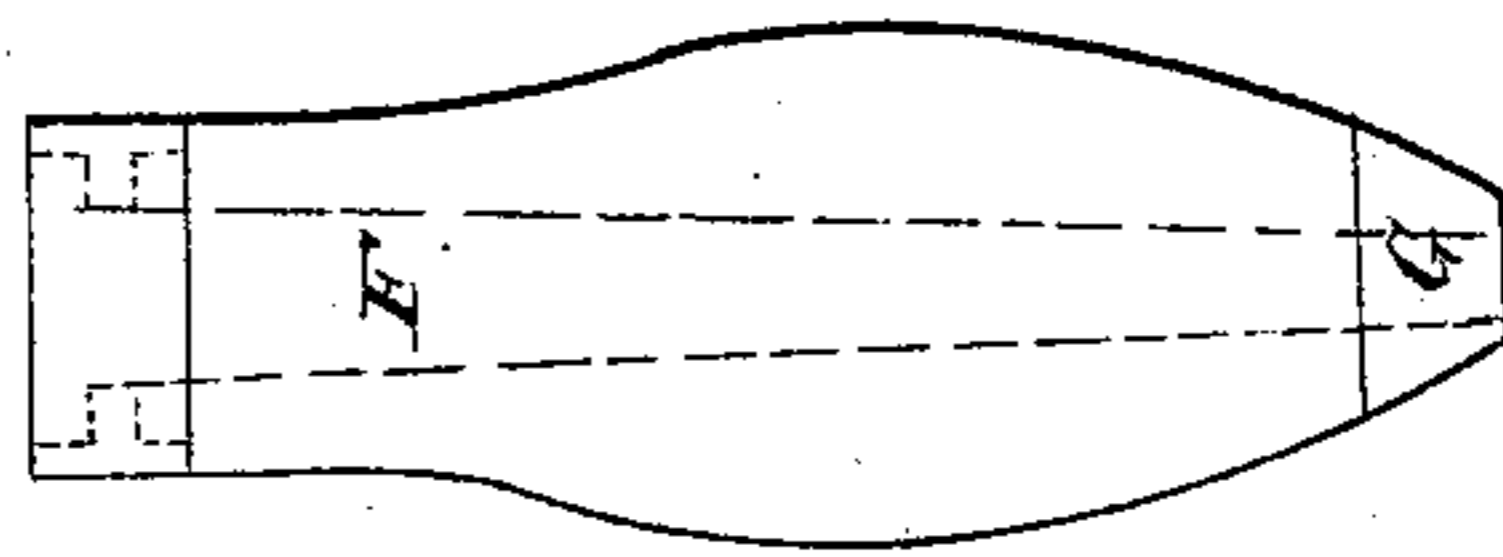
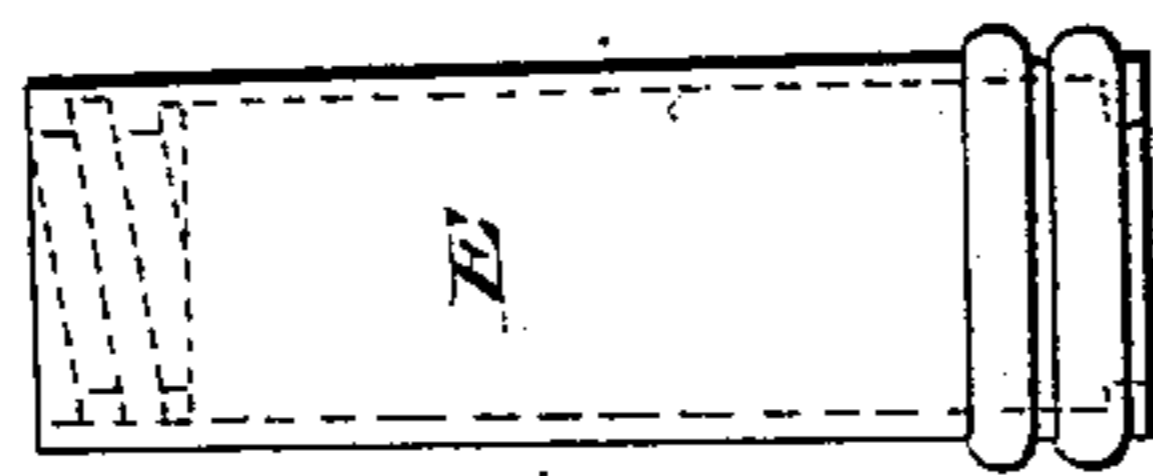
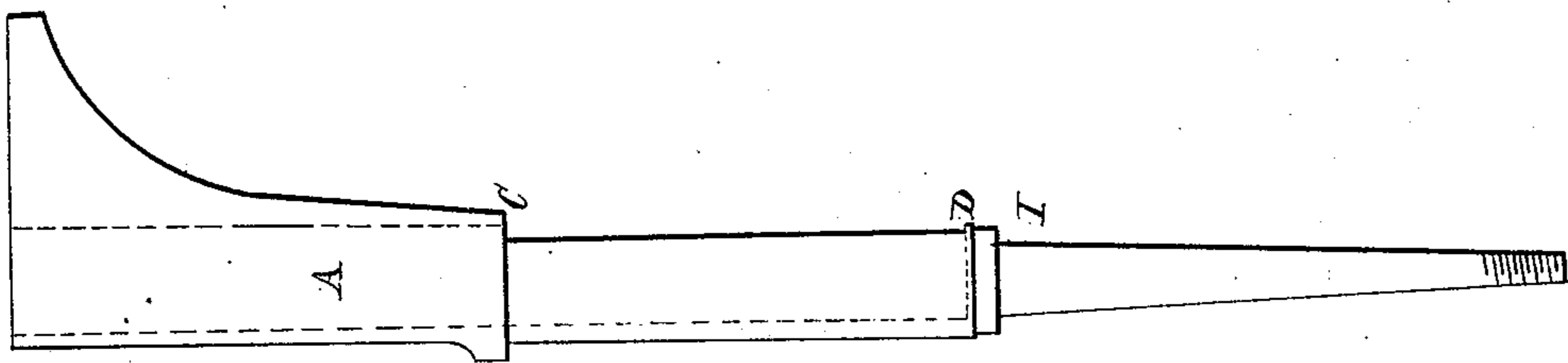
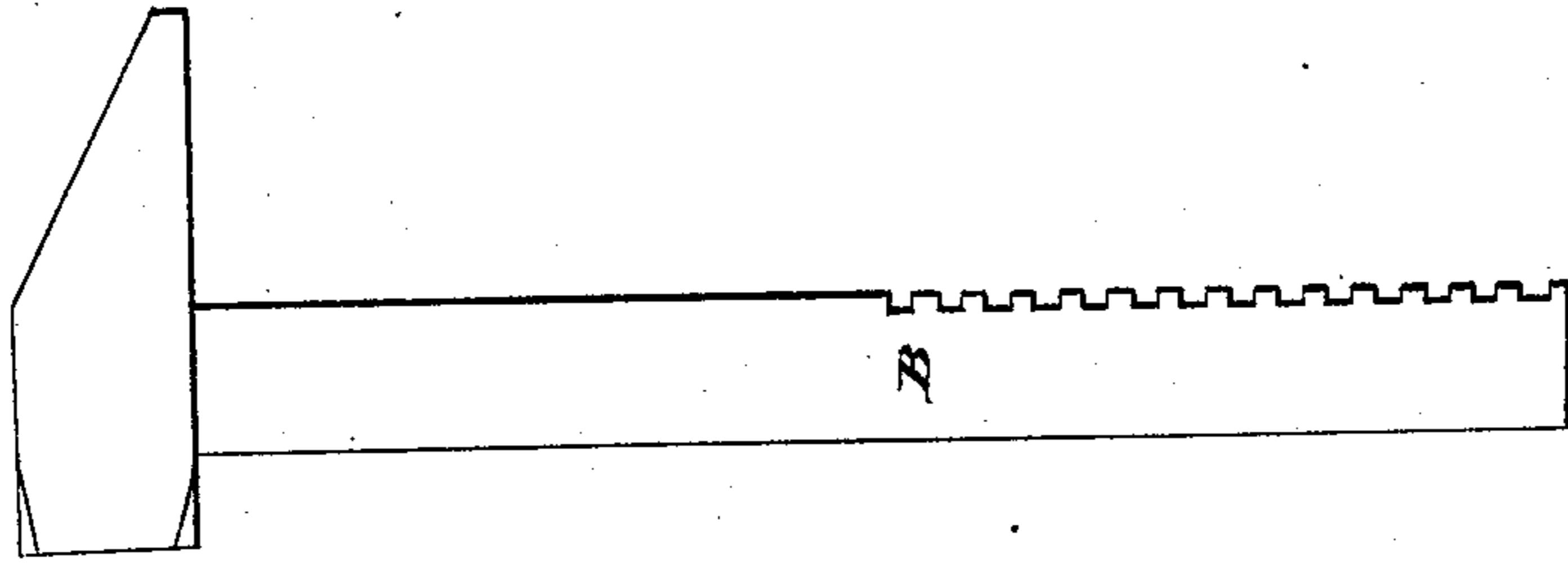


B. F. Joslyn,

Wrench.

N^o 13,221.

Patented July 10, 1855.



UNITED STATES PATENT OFFICE.

BENJ. F. JOSLYN, OF WORCESTER, MASSACHUSETTS.

SLIDE-WRENCH.

Specification of Letters Patent No. 13,221, dated July 10, 1855.

To all whom it may concern:

Be it known that I, BENJ'N F. JOSLYN, of the city and county of Worcester and State of Massachusetts, have invented a new and
5 Improved Slide-Wrench; 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 drawings herewith presented and to
10 the letters of reference marked thereon.

To construct my improved wrench make a jaw A (hollow as indicated by the dotted lines to receive the part B) the part from C to D being round on the outside and having
15 a slot for the edge of B to project through A, and whole on the other three sides to give the necessary strength; at C and D make square shoulders for the nut E to play against, leaving a short space from D to I straight;
20 make a small shoulder at I for the ferrule of the handle F which is fitted on and secured by the tip G; the jaw B is made to slide freely in A and on the edge that projects through the slot is cut a thread, to play
25 in nut E which is fitted on the sound part of A and is long enough to give the required opening to the jaws before releasing the jaw B, and is made small at the back end to fit against the shoulder D, and is provided
30 with milled rings around it or any of the usual means to facilitate seeing it.

The operator after putting the parts together as at M by turning the nut E moves the slide jaw B with ease and facility while all parts of the screw are protected from
35 bruising or filling, with dirt or becoming disarranged, and leaving the points of the jaws clear with a good projection to insert where the nut or head to be turned is let in as a carriage hub, etc. 40

I do not claim making a slide wrench with one part or jaw sliding in the other and surrounded by a nut as such, but

What I do claim as new and desire to secure by Letters Patent is— 45

I claim the nut E surrounding both parts of the jaws and long enough to give the required motion with a thread on its inside working in the edge of part B, the part A surrounding the part B with the slot from
50 C to D as described, and the part B sliding in A with a thread on its projecting edge to receive the nut E, the whole arranged as above described for the purposes above set forth. 55

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

BENJ. F. JOSLYN.

Witnesses:

JOHN P. MARSHALL,
JAS. G. ARNOLD.