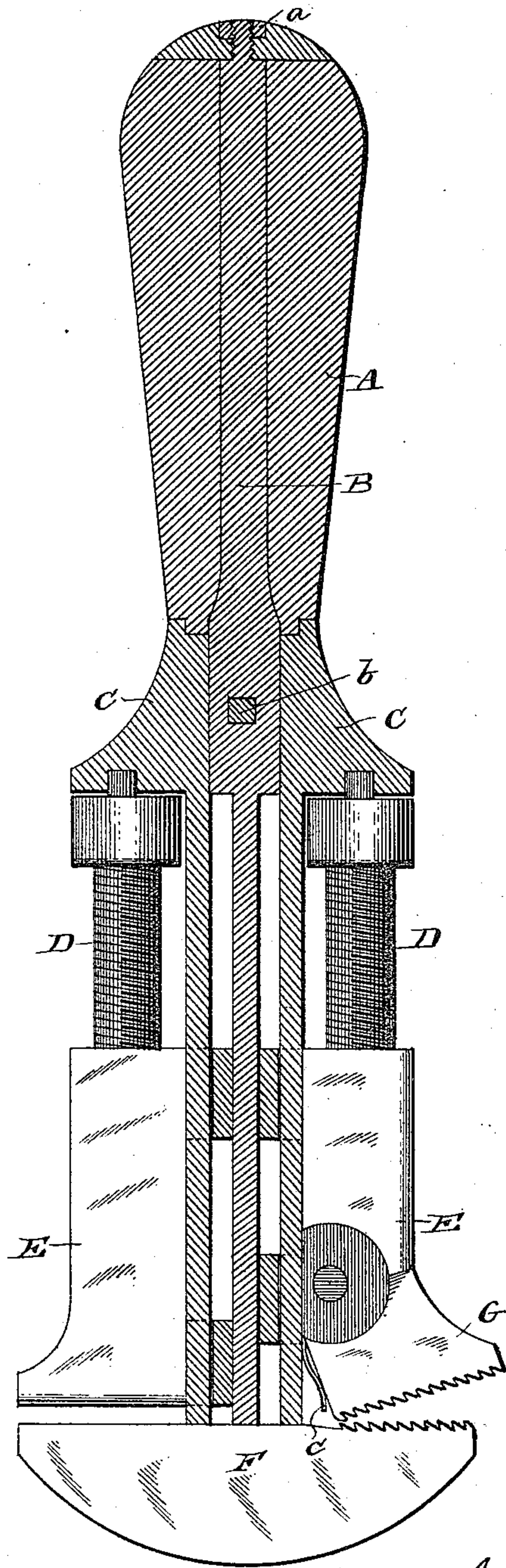


(No Model.)

A. CHAINEY.
WRENCH.

No. 440,889.

Patented Nov. 18, 1890.



Witnesses

Albert B. Blackwood
Jos. H. Blackwood

Inventor

Amédée Chainey

per

E. H. Craigie

Attorney

UNITED STATES PATENT OFFICE.

AMÉDÉ CHAINEY, OF NORTH SHAPLEIGH, MAINE, ASSIGNOR OF TWO-THIRDS
TO ARTHUR C. WATSON AND DANIEL F. MERROW, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 440,889, dated November 18, 1890.

Application filed July 14, 1890. Serial No. 358,668. (No model.)

To all whom it may concern:

Be it known that I, AMÉDÉ CHAINEY, a citizen of the United States, residing at North Shapleigh, in the county of York and State of Maine, have invented certain new and useful Improvements in Wrenches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in wrenches, and the nature of the invention will be understood from the following description, when taken in connection with the accompanying drawing, which shows a view in elevation, partly in vertical section, through the wrench.

In the drawing, A represents the wooden handle of the wrench, which is of well-known form and construction, being bored vertically to receive the upper end of shank B, these parts being held securely, but detachably, by a nut *a*, screwed upon the upper end of the shank and situated in a socket formed in the handle.

C represents a casting bored centrally to allow of the passage therethrough of the shank, the parts being firmly but detachably held together by a pin or screw *b*, passed through the side of the casting and impinging against the shank, said pin being out of the way of the wooden handle entirely, which is not the case with most wrenches. The lower face of casting C serves as the upper bearing for screws D, which at their lower ends are con-

nected with the movable jaws of the wrench, as will be understood.

The movable jaws (marked E) are suitably mounted in guides formed by grooving the shank, as shown.

F represents the head of the wrench or the stationary jaw, one portion of which is formed with a smooth surface which adapts it to use with nuts, and the remaining portion being roughened to adapt it to use as a pipe-wrench.

To the movable jaw, which is arranged to co-operate with the roughened portion of the head or stationary jaw F, I pivot a jaw G, as shown, the lower face of which is roughened, and between which and the shank is situated a spring *c* for keeping the said jaw in place.

By the construction described I obtain a wrench which is simple in construction and strong, and which is adapted to all classes of work. If any part breaks, it can be easily replaced and the wrench will be as good as ever.

What I claim is—

In a wrench, the combination, with the double head and the slotted casting, of the two independently-sliding jaws having lugs for engaging and sliding in the slots of said casting, one of the said jaws having a pivoted pipe-wrench attachment and a spring for holding the same in position, substantially as described.

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

AMÉDÉ CHAINEY.

Witnesses:

GEORGE F. EMERY,
DANIEL F. MERROW.