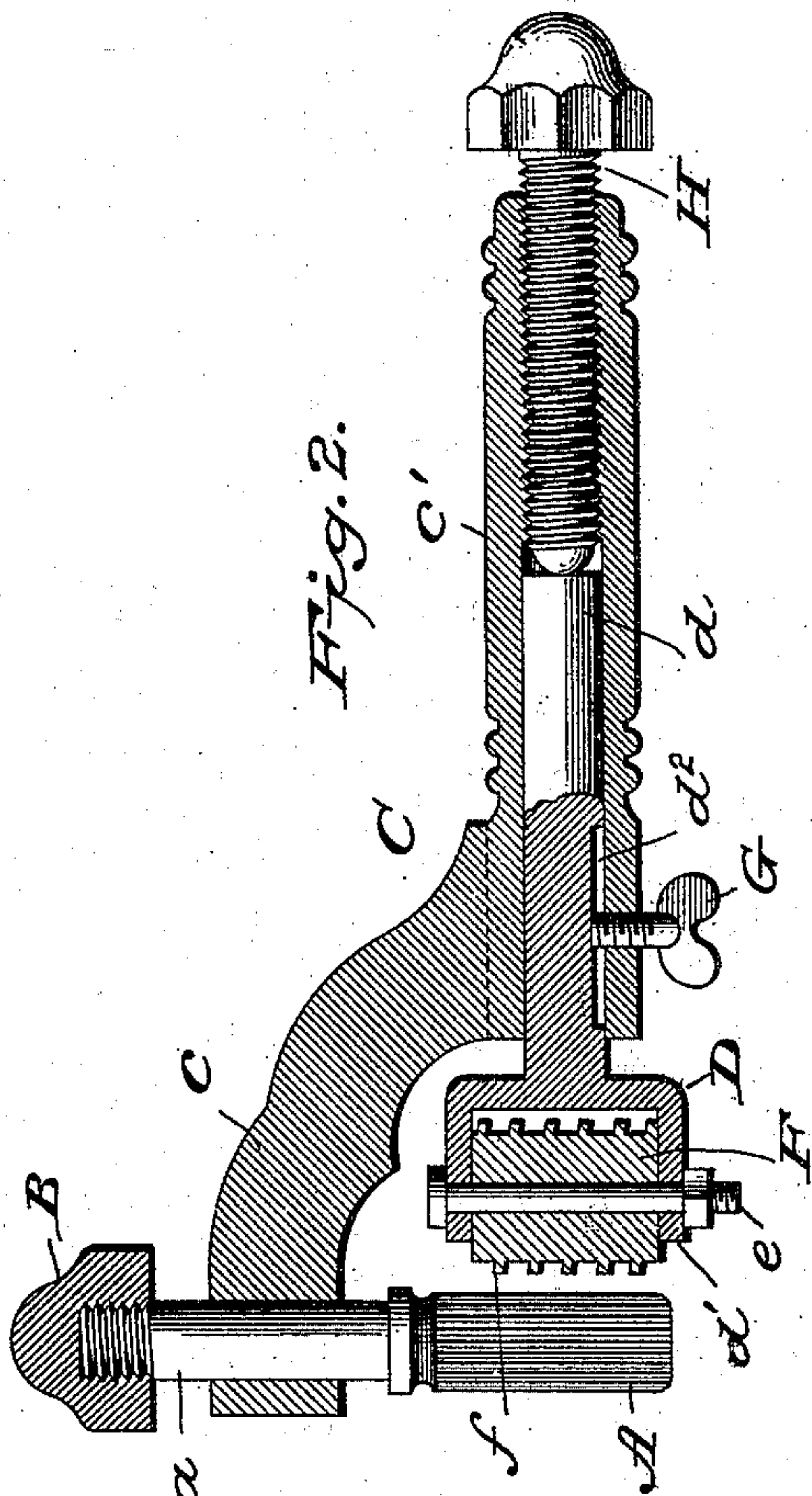
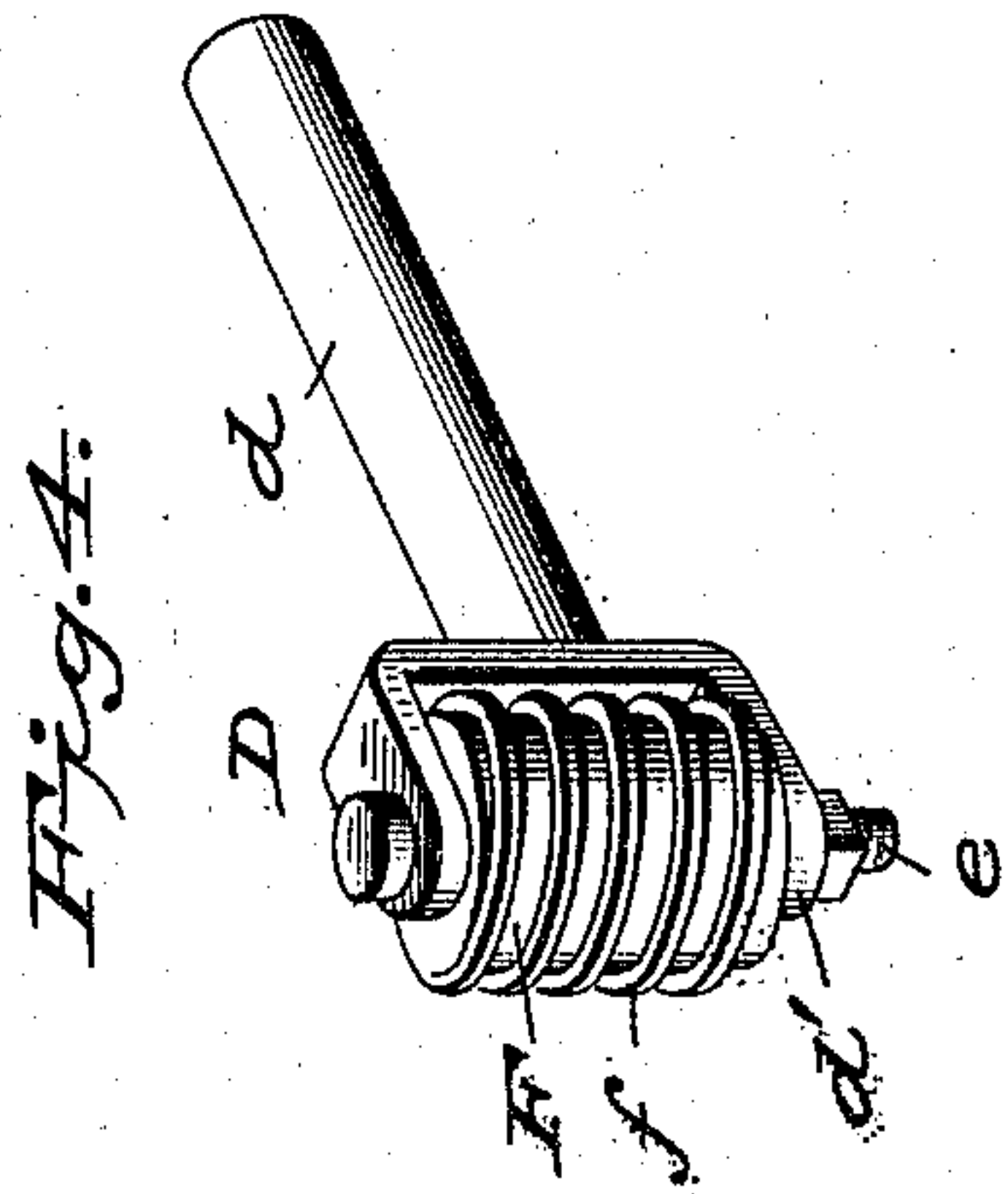
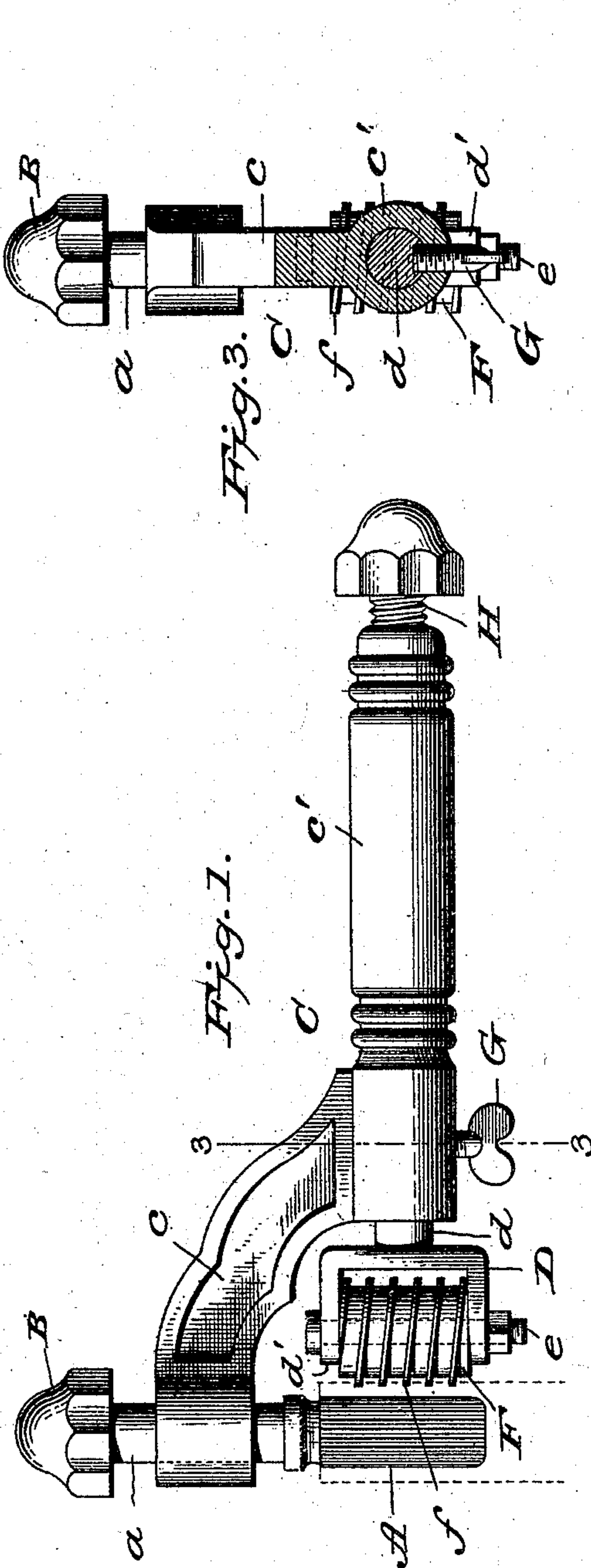


(No Model.)

C. A. BAILEY.  
PIPE THREADING IMPLEMENT.

No. 598,279.

Patented Feb. 1, 1898.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES A. BAILEY, OF CROMWELL, CONNECTICUT.

## PIPE-THREADING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 598,279, dated February 1, 1898.

Application filed October 8, 1897. Serial No. 654,566. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. BAILEY, a citizen of the United States of America, residing at Cromwell, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Pipe-  
5 Threading Implements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as  
10 it will enable others skilled in the art to which it appertains to make and use the same.

This invention is an improved implement for threading soft-metal pipe, the object of the same being to provide an implement of  
15 this character which is simple and cheap in construction and also possesses the more important advantage of being quickly and easily operated in forming the threads.

The invention contemplates a construction  
20 and arrangement of parts by which the ribbed swaging-roll can be readily and conveniently removed and another substituted to adapt the device for forming right and left hand threads as well as threads of different sizes.

To the above ends and to such others as the invention may pertain the same consists,  
25 primarily, of a lever revolved around the pipe and a swaging-roll carried by the lever, said swaging-roll having a spiral rib, together with  
30 a plug inserted within the end of the pipe.

The invention further consists in the combination of the plug having a spindle, a lever rotatably mounted on said spindle, and a  
35 swaging-roll carried by the lever, the swaging-roll being provided with a spiral rib that forms the thread upon the pipe.

The invention further consists of a lever revolved around the pipe, a swaging-roll removably attached to the lever, said roll hav-  
40 ing a spiral rib, and means for adjusting the roll to and from the pipe, together with a plug fitting within the end of the pipe.

The invention further consists in the particular construction and combination of the  
45 parts comprising the complete implement, as fully described in the following specification and more specifically set forth in the appended claims.

In the accompanying drawings, which form  
50 a part of this specification, Figure 1 is a side elevation of a pipe-threading implement con-

structed in accordance with my invention, the position of the pipe being shown in dotted lines. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sec-  
55 tional view through the handle of the operating-lever. Fig. 4 is a detail perspective view of the swaging-roll and carrier therefor.

Referring more particularly to said drawings, A designates a plug which is of a size to  
60 fit snugly within a pipe having a bore of a corresponding size, and extending from this plug is a spindle *a*, forming a bearing or axle for the operating-lever hereinafter described, the outer end of said spindle being threaded  
65 to receive a cap-nut B, which limits the movement of the lever upon the spindle and also serves to intimately connect these parts. The plug, with its spindle, provides a support for the operating-lever, and the plug proper  
70 also serves as a core in the end of the pipe to prevent said pipe being crushed in during the operation of forming the threads on the outer side thereof. The surface of the plug  
75 is plain, though, if desired, it may be provided with longitudinal serrations to insure a better engagement with the inner side of the pipe. It is apparent that I contemplate supplying the implement with plugs of different  
80 sizes for use in connection with different sizes of pipes.

The operating-lever (designated by the letter C) presents a curved arm *c*, extending from a handle *c'*, the latter having a longitudinal bore through the same, while the arm  
85 is provided with an opening through which passes the spindle *a*, hereinbefore referred to. The bore is threaded a suitable distance beginning at the outer end of the handle *c'*, the other portion being smooth to receive the  
90 shank *d* of a carrier D, presenting a yoke *d'*, within which is mounted a swaging roll or cylinder F upon an axle *e*, bearing at its ends in said yoke. Upon the surface of said roll or cylinder is formed a spiral rib *f*, present-  
95 ing a rotary die adapted when moved around a pipe to form a thread thereon of a certain size and pitch. To form a thread of a different size, said swaging-roll is removed and another substituted either by withdrawing  
100 the axle *e* or the carrier with its roll. The shank of the carrier D is provided with a lon-



longitudinal groove  $d^2$ , into which projects the  
 end of a set-screw G, that is passed through  
 a threaded opening therefor in the handle of  
 the operating-lever, the screw serving to pre-  
 5 vent a rotary movement of the carrier, while  
 the groove permits of a longitudinal feed, this  
 feeding movement being provided for by an  
 adjusting-screw H, let into the threaded por-  
 10 tion of the bore of the handle and preferably  
 provided with a milled head. It will be un-  
 derstood that the set-screw G does not engage  
 the shank of the carrier to the extent of inter-  
 fering with the proper feed of the latter dur-  
 15 ing the operation of forming a thread, but  
 merely serves to prevent rotation of said car-  
 rier. It will also be understood that this  
 could be provided for by forming that part of  
 the bore with which the shank of the carrier  
 20 engages rectangular in shape, with the shank  
 to correspond.

From the foregoing description, in connec-  
 tion with the accompanying drawings, the  
 construction and operation of my improved  
 pipe-threading implement will be readily un-  
 25 derstood, for after driving the plug A into  
 the end of the pipe the lever C is moved along  
 the spindle and the adjusting-screw H turned  
 to bring the swaging-roll against the pipe,  
 embedding the rib therein. The lever being  
 30 then turned around the pipe will cause said  
 swaging-roll to rotate and impress or rule the  
 thread. It is apparent that a swaging-roll  
 having a right-hand thread or rib thereon will  
 form a left-hand thread on the pipe, and vice  
 35 versa. Therefore either style of thread can  
 be formed by inserting the proper swaging-  
 roll into the implement.

It is obvious that modifications could be  
 made in the implement and parts thereof in  
 40 addition to those hereinbefore mentioned, and  
 I therefore declare that I do not wish to con-  
 fine my protection by patent to what is herein  
 precisely shown and described, but desire to  
 reserve the right to change the construction  
 45 and arrangement of parts within the spirit  
 and scope of my claims.

Having thus described my invention, what  
 I claim as new, and desire to secure by Letters  
 Patent, is—

50 1. An implement for threading pipe, com-  
 prising a lever revolved around the pipe, and  
 a swaging-roll carried by the lever, said swag-

ing-roll having a spiral rib thereon; together  
 with a plug or core fitting within the pipe.

2. In an implement for threading pipe, the 55  
 combination of a plug or core fitting within  
 the pipe and presenting a spindle, a lever ro-  
 tatably mounted on said spindle, and a swag-  
 ing-roll carried by said lever, the swaging-  
 roll having a spiral rib thereon, substantially 60  
 as shown and described.

3. In an implement for threading pipe, the  
 combination of a plug, a spindle extending  
 therefrom, a cap-nut screwed on the end of  
 the spindle, and a lever mounted on the spin- 65  
 dle below the nut; together with a swaging-  
 roll carried by the lever and provided with  
 a spiral rib, substantially as shown and de-  
 scribed.

4. In an implement for threading pipe, the 70  
 combination of a plug, a spindle extending  
 therefrom, a lever mounted on the spindle, a  
 carrier detachably connected to the lever,  
 and means for setting said carrier; together  
 with a swaging-roll mounted within the car- 75  
 rier and provided with a spiral rib thereon,  
 substantially as shown and for the purpose  
 set forth.

5. In an implement for threading pipe, the  
 combination of a plug, a spindle extending 80  
 therefrom, a lever mounted on the spindle, a  
 carrier having a movement within the lever,  
 a screw engaging a threaded opening in the  
 lever and bearing against said carrier; to-  
 gether with a swaging-roll mounted within 85  
 the carrier and provided with a spiral rib,  
 substantially as shown and described.

6. In an implement for threading pipe, the  
 combination of a plug having a spindle, a  
 lever mounted to rotate thereon and present- 90  
 ing a curved arm and hollow handle, a yoked  
 carrier let into the hollow handle at one end  
 thereof, a screw let into the other end of said  
 handle to bear against said carrier, means  
 for preventing a rotary movement of the car- 95  
 rier, and a swaging-roll mounted within the  
 carrier and provided with a spiral rib, sub-  
 stantially as shown and described.

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

CHAS. A. BAILEY.

Witnesses:

WILLIAM E. FRASIER,  
 ARTHUR BOARDMAN.