

J. A. OVERLANDER.
WRENCH.
APPLICATION FILED DEC. 28, 1909.

978,748.

Patented Dec. 13, 1910.

2 SHEETS—SHEET 1.

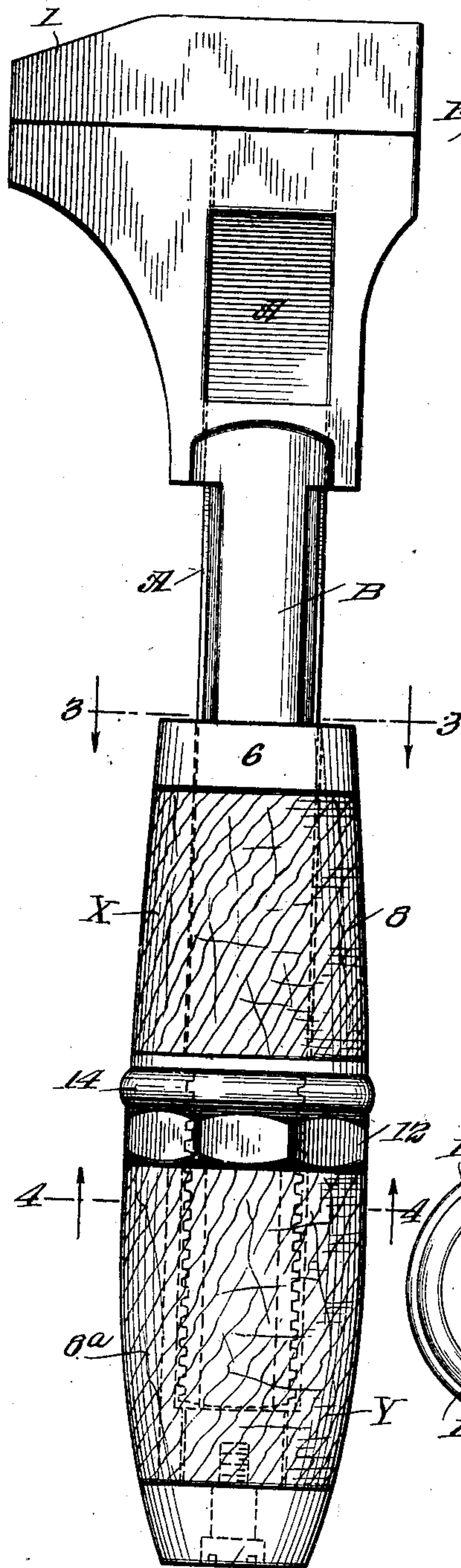


Fig. 1.

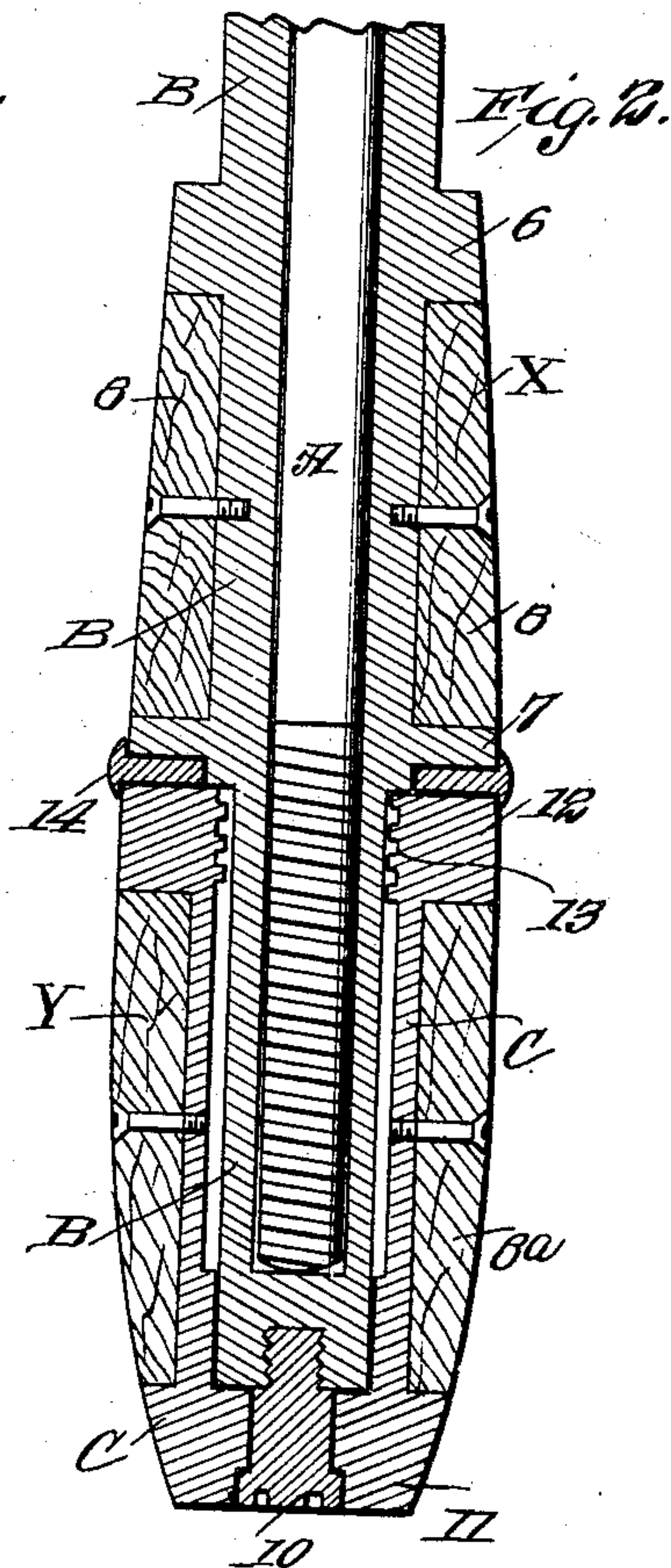


Fig. 2.

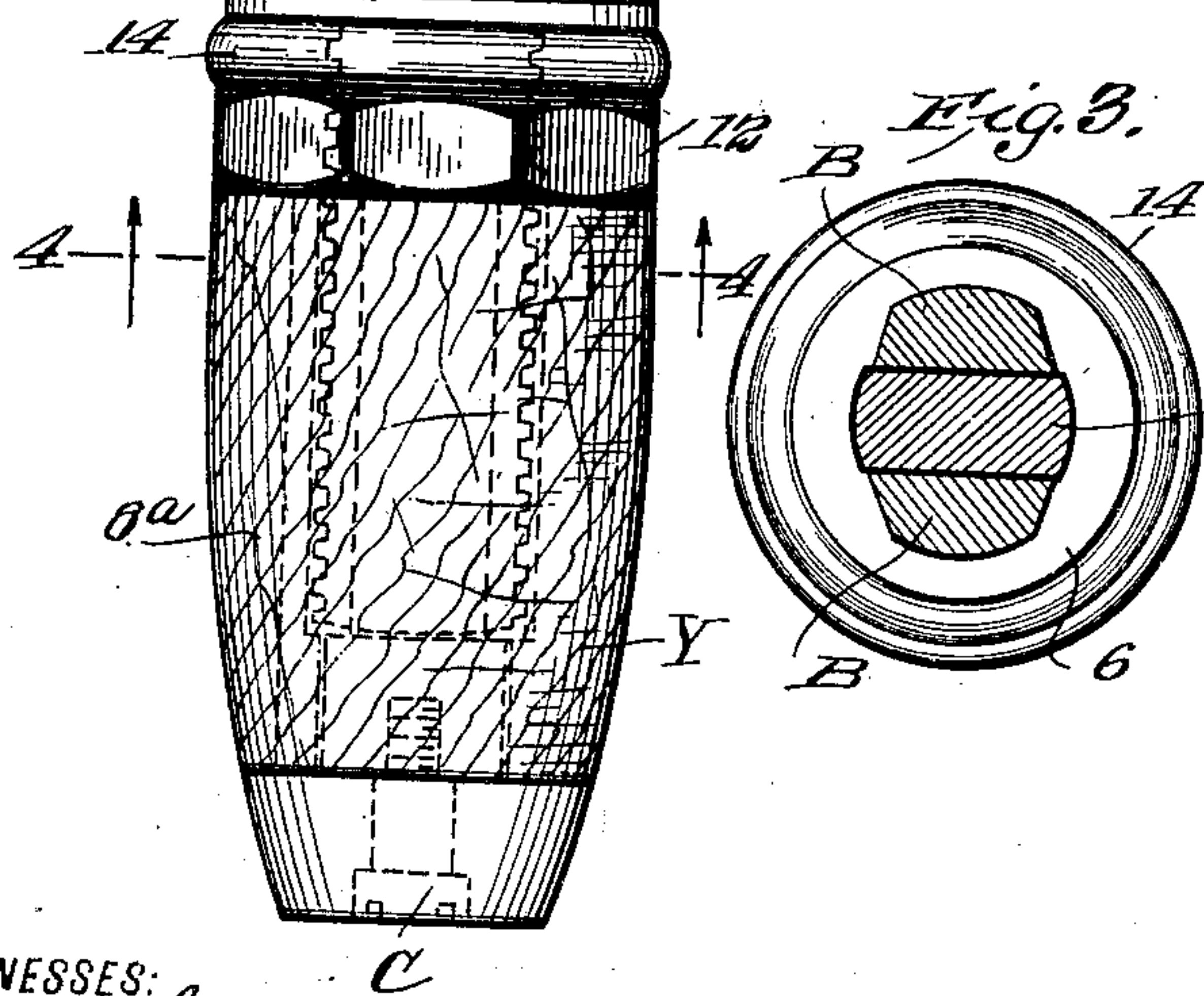


Fig. 3.

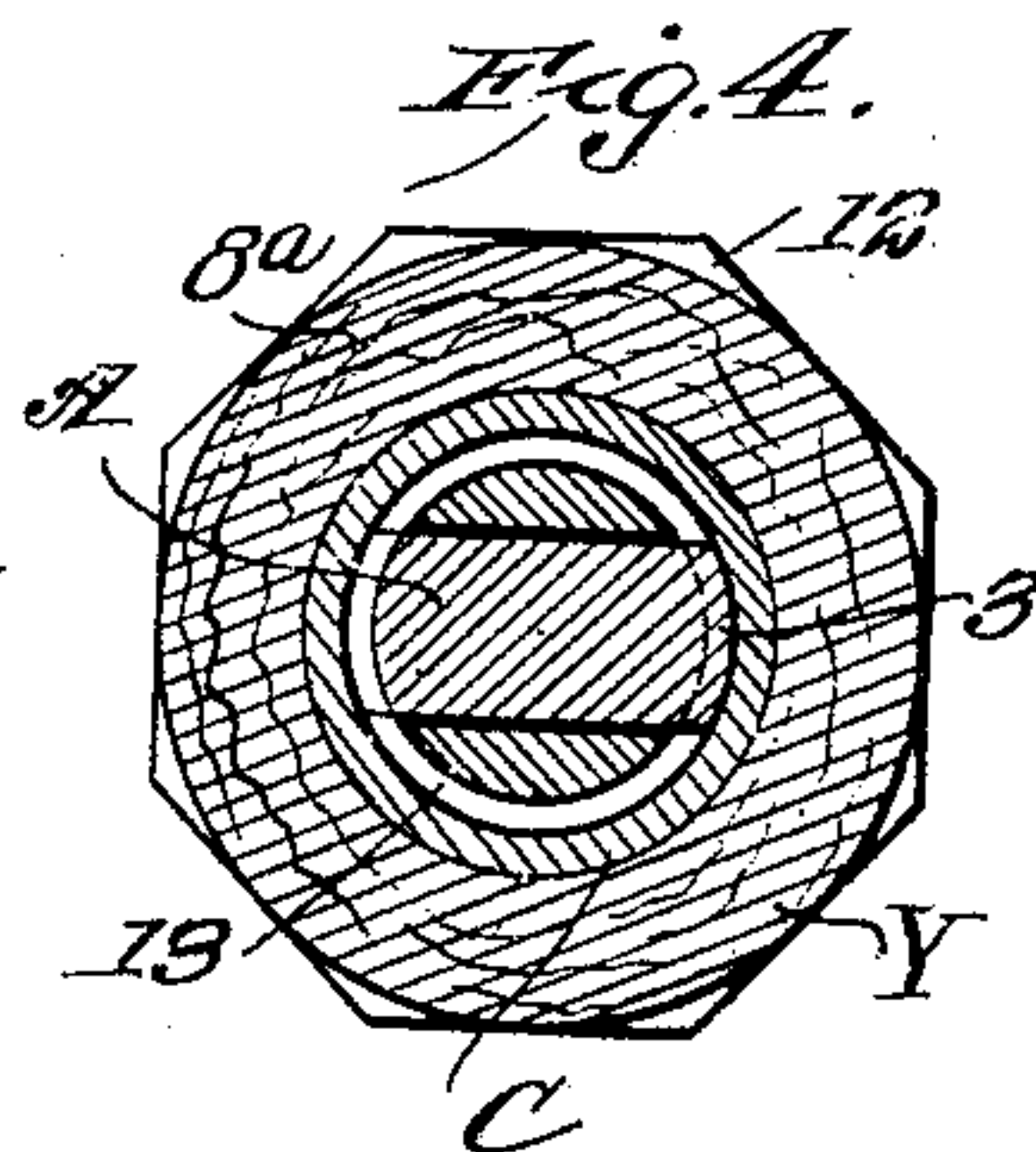


Fig. 4.

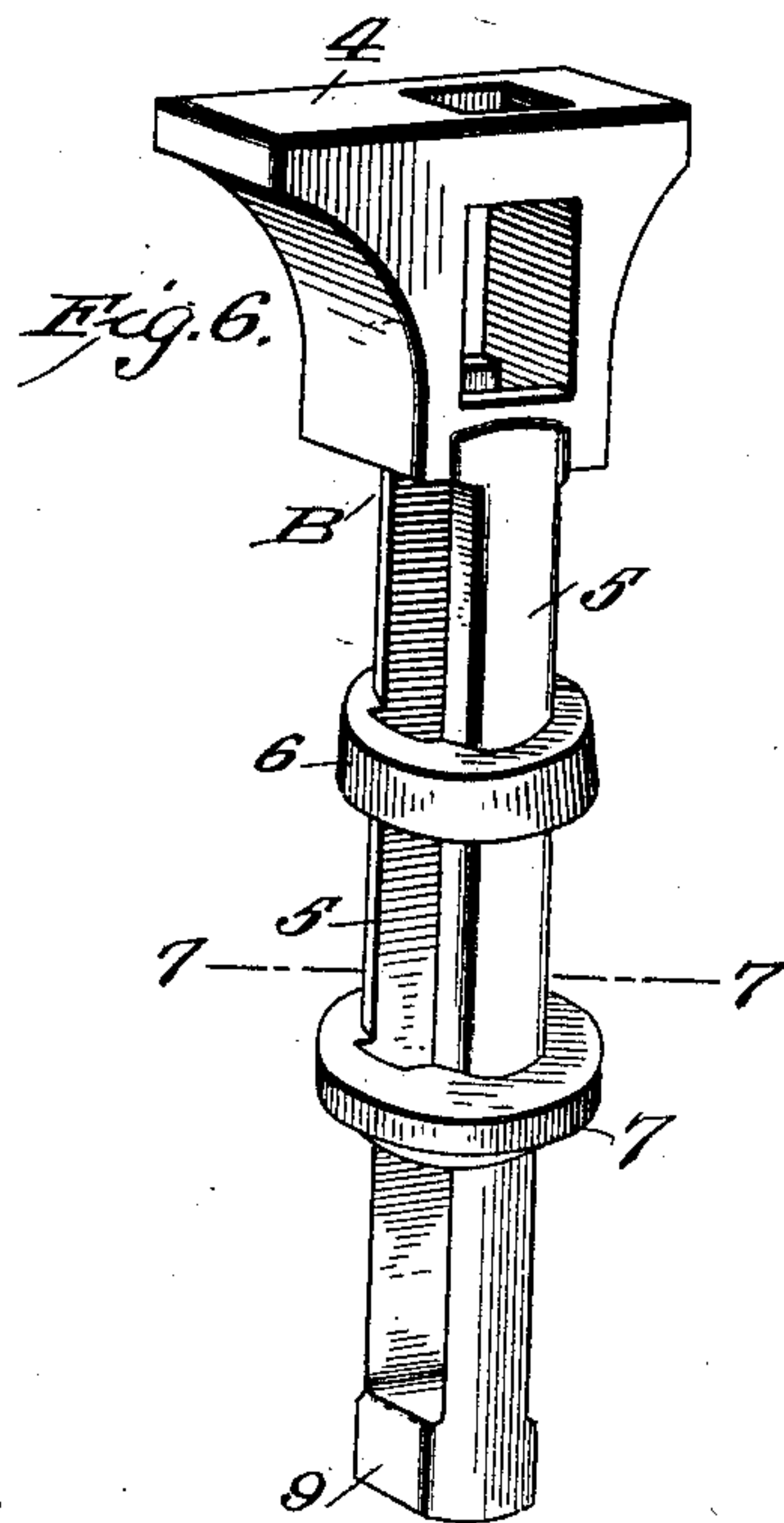
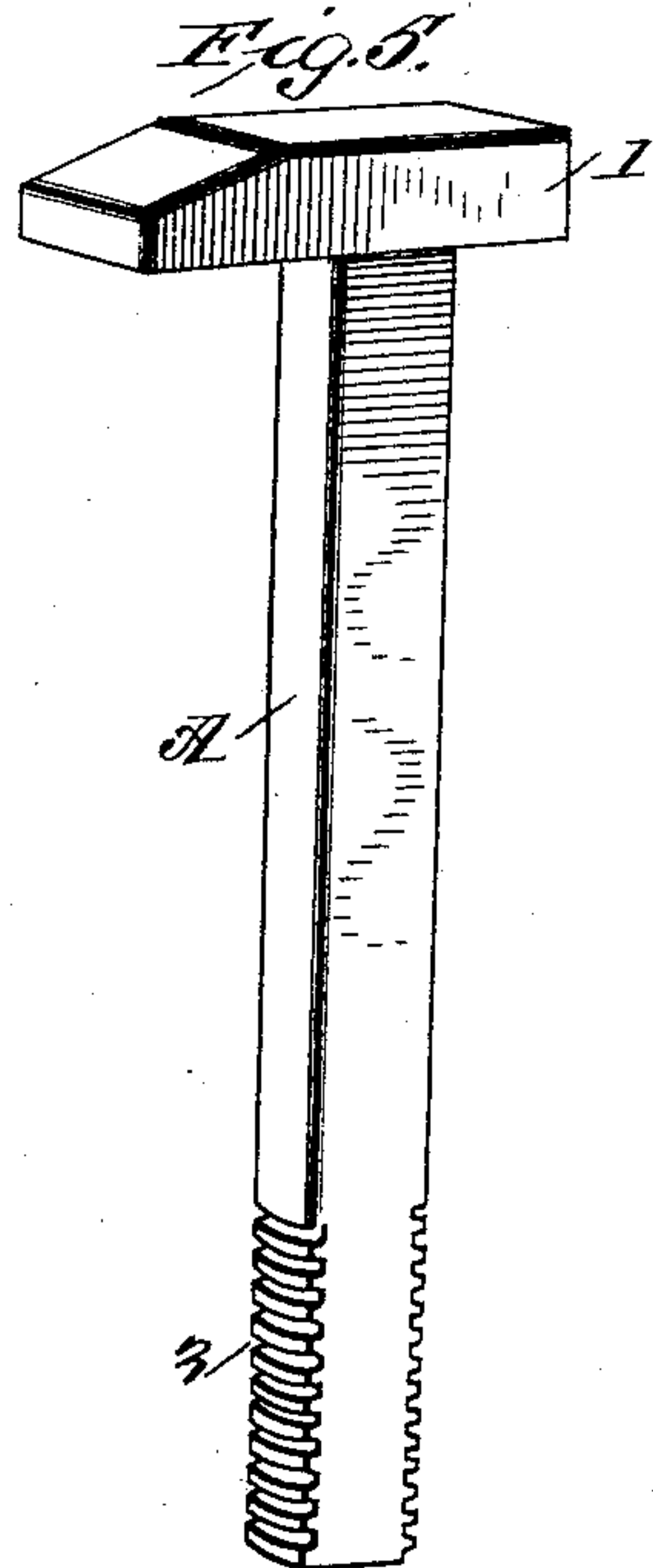
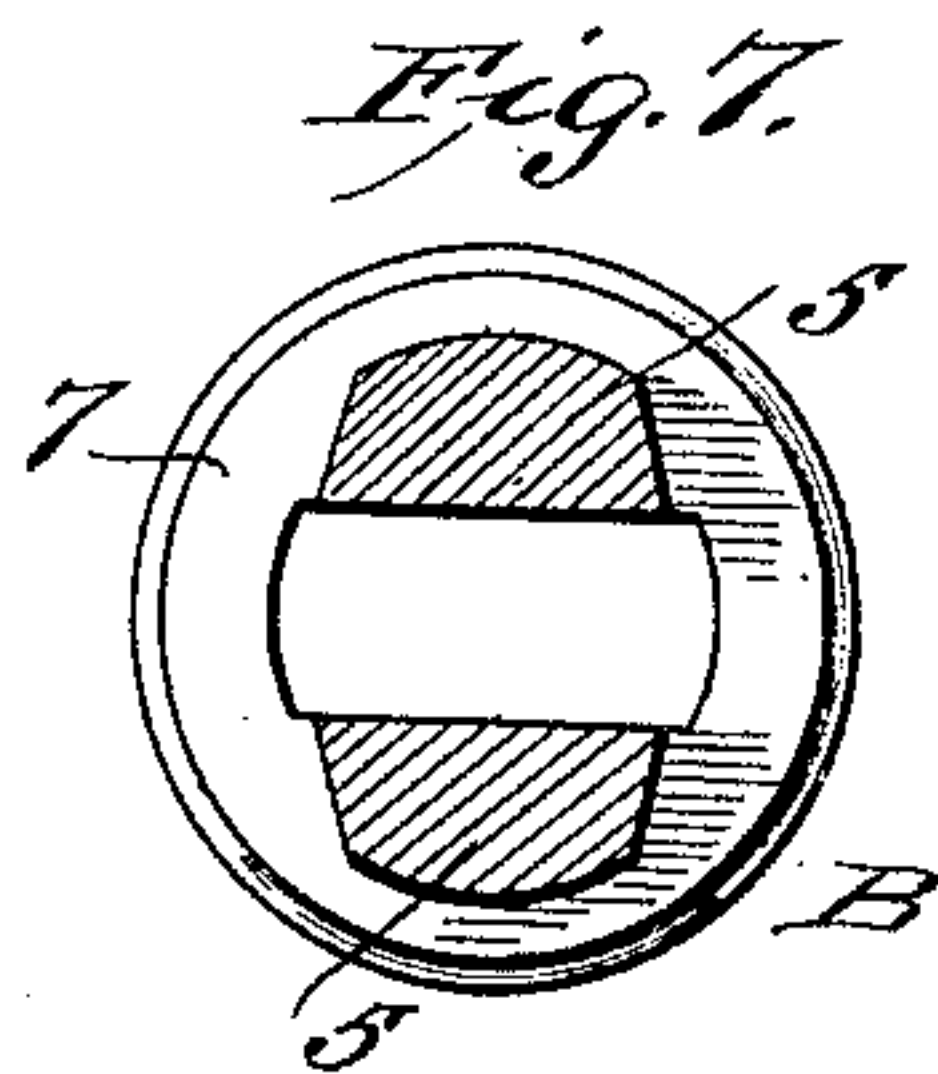
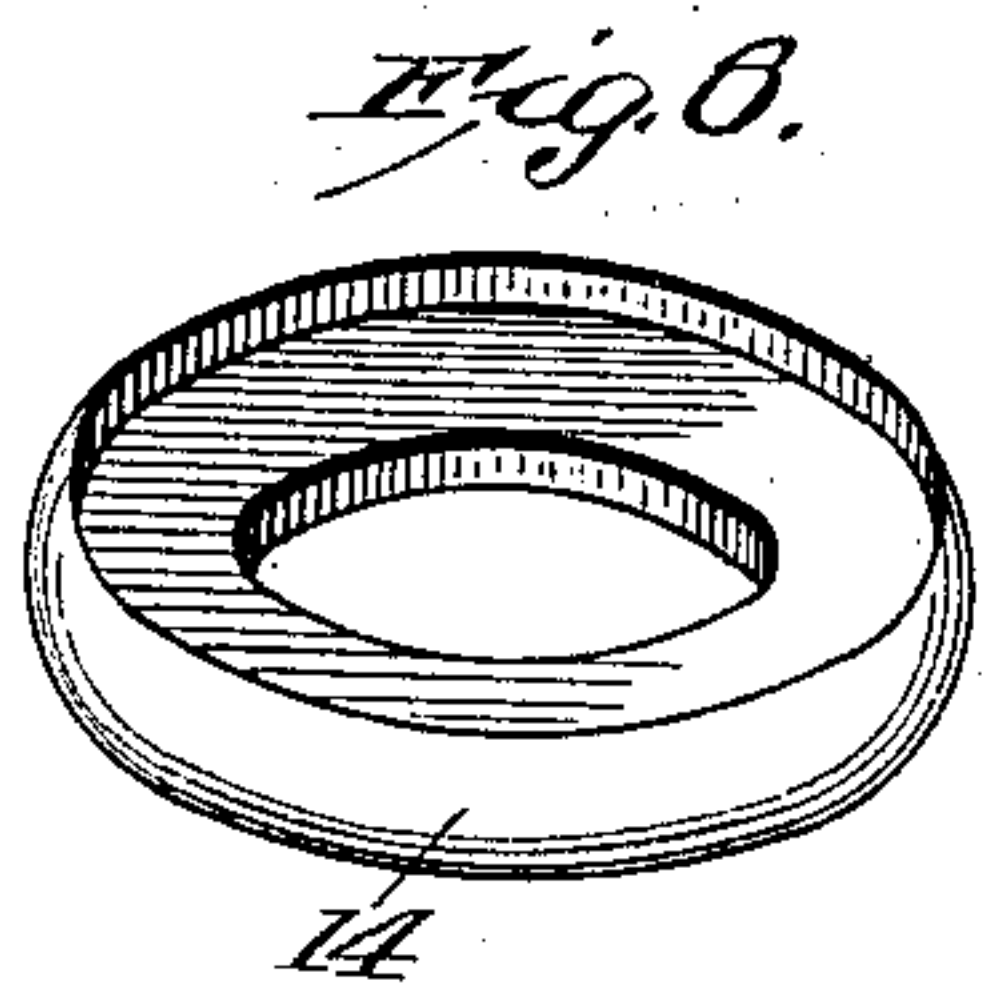
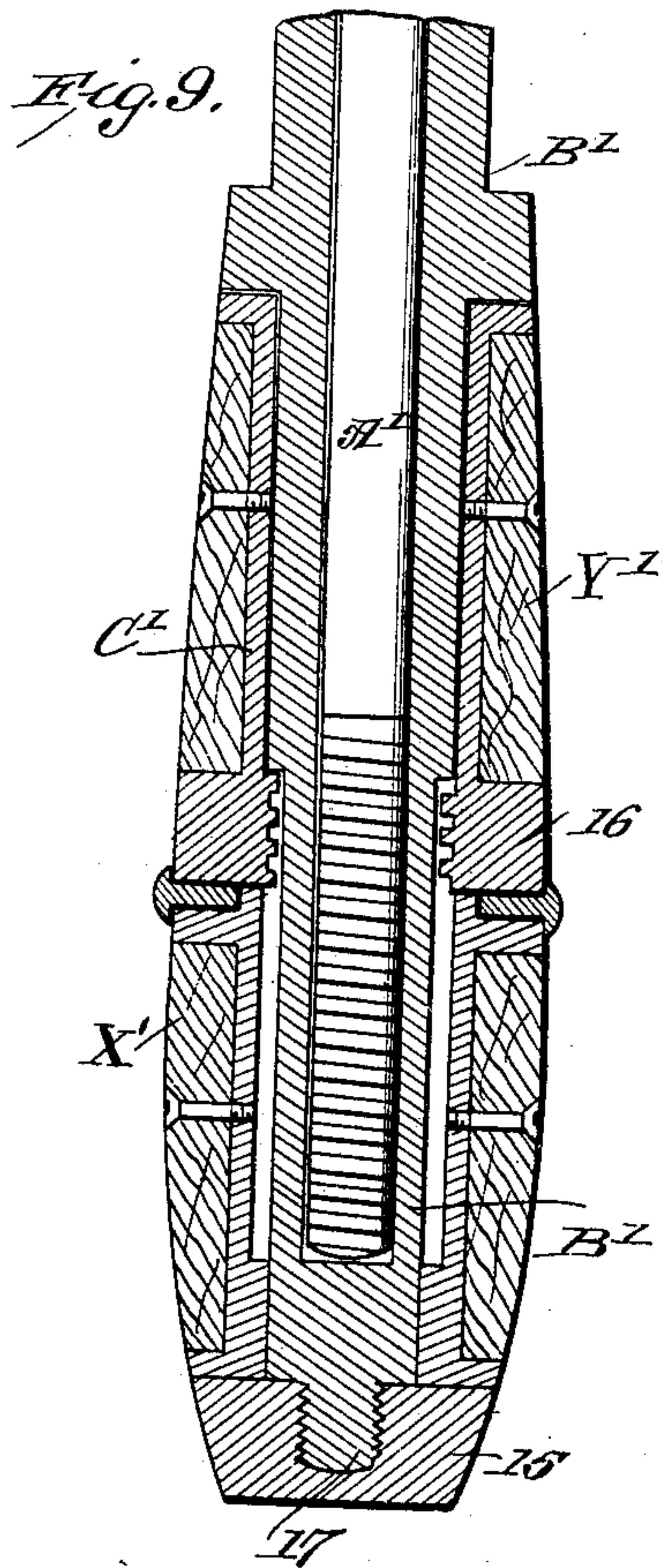
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ATTORNEYS

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UNITED STATES PATENT OFFICE.

JACOB ALPHEUS OVERLANDER, OF WHITE PLAINS, NEW YORK.

WRENCH.

978,748.

Specification of Letters Patent. Patented Dec. 13, 1910.

Application filed December 28, 1909. Serial No. 535,329.

To all whom it may concern:

Be it known that I, JACOB A. OVERLANDER, a citizen of the United States, and a resident of White Plains, in the county of Westchester and State of New York, have invented an Improvement in Wrenches, of which the following is a specification.

My invention is an improvement in nut, pipe, or so-called "monkey," wrenches which comprise opposing jaws attached to different shanks that are adapted to slide to open or close the jaws.

The details of construction, combination, and operation of parts are as hereinafter described, and illustrated in the accompanying drawings in which—

Figure 1 is a side view of my improved wrench. Fig. 2 is a central longitudinal section of the body of the wrench. Figs. 3 and 4 are cross sections, respectively on the lines 3—3 and 4—4 of Fig. 1. Fig. 5 is a perspective view of the slidable jaw and its shank. Fig. 6 is a perspective view of the fixed jaw and its shank. Fig. 7 is a cross section on the line 7—7 of Fig. 6. Fig. 8 is a perspective view of a guard ring forming an attachment of the body of the wrench. Fig. 9 is a central longitudinal section representing a modification.

I will first describe the invention as illustrated in Figs. 1 to 8. Referring in the first instance to Figs. 1 and 5, A indicates the shank of the movable jaw 1, said shank having two rounded sides, the latter being screw-threaded at 3, that is to say, at the inner end of the shank. The screw thread may be right or left as preferred. The shank B of the fixed jaw 4—see Figs. 1, 2 and 6—is slotted lengthwise, forming two opposite parallel portions 5 between which the shank A of the slidable jaw 1 is held loosely and is adapted to slide freely. The said shank B of the fixed jaw is provided with an annular, beveled collar 6 and a circular collar 7, which are spaced apart and cast integrally with the slotted shank proper 5. In the space surrounding the shank and between the two collars 6 and 7 I apply a wood filling 8—see especially Figs. 1 and 2. The inner end 9 of the shank B has a tapped hole that receives the reduced threaded end of a pivot screw 10, as shown in Fig. 2. The body of the screw is cylindrical and adapted to rotate in the solid head 11. The parts here described, more especially the shank B with its collars 6 and 7, and wood

filling 8 constitute what may be termed the fixed section of the wrench, indicated by X, which is gripped by the operator with one hand while the other hand is applied to the outer section Y—see Figs. 1 and 2. This section is chiefly composed of a metal socket C having at its inner end a circular collar 12 which is threaded internally as indicated at 13, Fig. 2, and its lower end is formed integrally with the head 11 before referred to. In the space between the collar 12 and the head 11, a wood filling 8^a is applied the same as in the fixed section X before described. In both cases the wood filling may be secured by radial screws that enter the respective parts B and C as shown in Fig. 2. It will now be seen that when the operator seizes the section X with one hand and the rotatable or outer section Y with the other, the section Y may be rotated, and, by engagement of its screw 13 with the threads 3 of the slidable jaw shank A, the said jaw will be moved away from or toward the fixed jaw 4, as required for applying the wrench to a nut or releasing it therefrom.

For the purpose of avoiding injury to the hands of the operator, a guard ring 14, see Figs. 2 and 8, is applied between the collars 7 and 12 of the respective fixed and rotatable sections X, Y. This ring is T-shaped in cross section, the outer portion being rounded so that it forms a smooth annular projection on the body of the wrench.

It will be seen that the part C, more particularly its internally threaded collar 12, constitutes in effect a nut by which the shank A of the movable jaw may be adjusted, that is, slid in the shank B of the fixed jaw. In some cases it may be desirable to apply a wrench to this nut, and to facilitate this the collar 12 is made octagonal in form as indicated in Fig. 1. It is apparent that by removal of the pivot screw 10, the main portions, that is to say, those comprising the fixed and movable sections together with the respective jaws of the wrench, may be detached from each other. The metal parts may be cheaply cast and quickly secured together simply by means of the screw 10.

In Fig. 9 I show a modification in which the front section Y' is rotatable and the outer section X' is fixed. For this purpose the fixed jaw shank B' has a screw-threaded tennon 17 at its outer end which screws into a nut 15 forming the end of the handle. The collar 16 of the part C' is threaded inter-

nally and engages the threaded portion of the movable jaw shank A'. It will be seen that in this construction the rotatable and fixed sections of the handle are merely in-
5 terchanged in position as compared with the form of the wrench first described.

What I claim is:—

The improved wrench comprising a movable jaw having a slidable threaded shank,
10 a fixed jaw having a shank adapted to receive the shank of the movable jaw and constructed with circular radially projecting collars and having a wooden filling arranged between said collars to adapt this portion

of the handle to serve as a grip section, and 15
a rotatable section which is provided with circular radially projecting collars with a wooden filling arranged between them to adapt it to serve as a radial grip section, the
20 inner collar being internally threaded to engage the slidable shank, and a pivot screw passing through the head of the rotatable section and securing it to the shank of the fixed jaw, as shown and described.

JACOB ALPHEUS OVERLANDER.

Witnesses:

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