

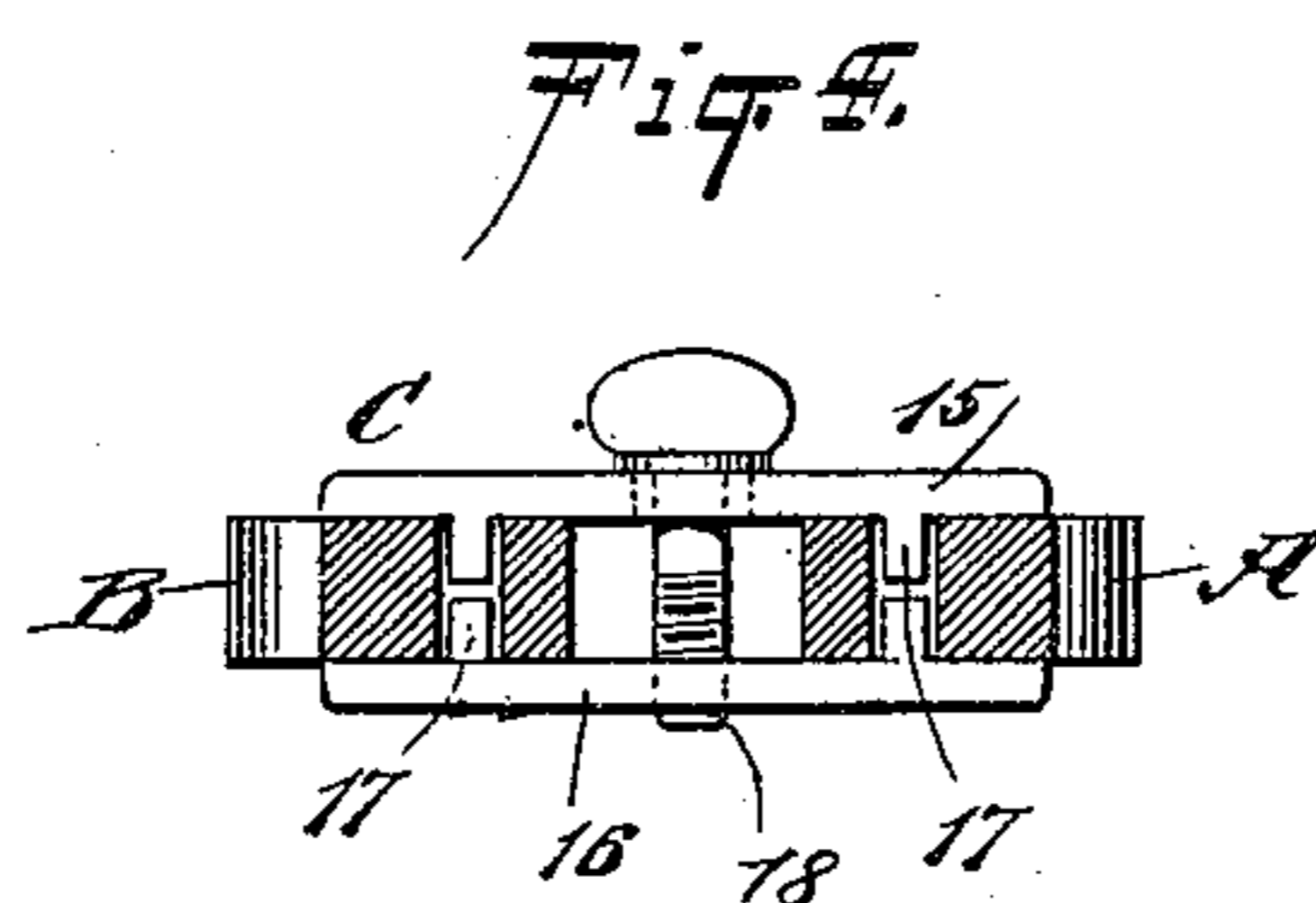
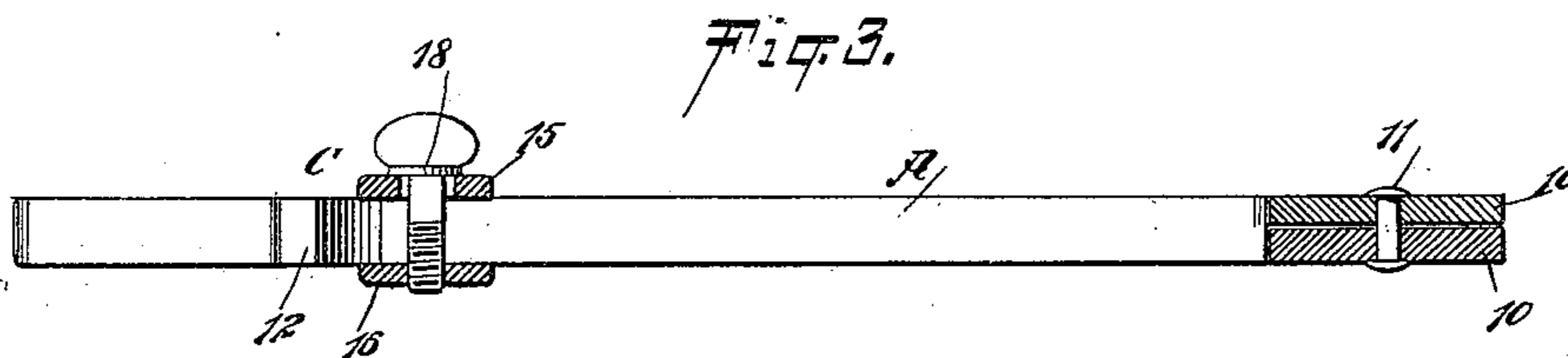
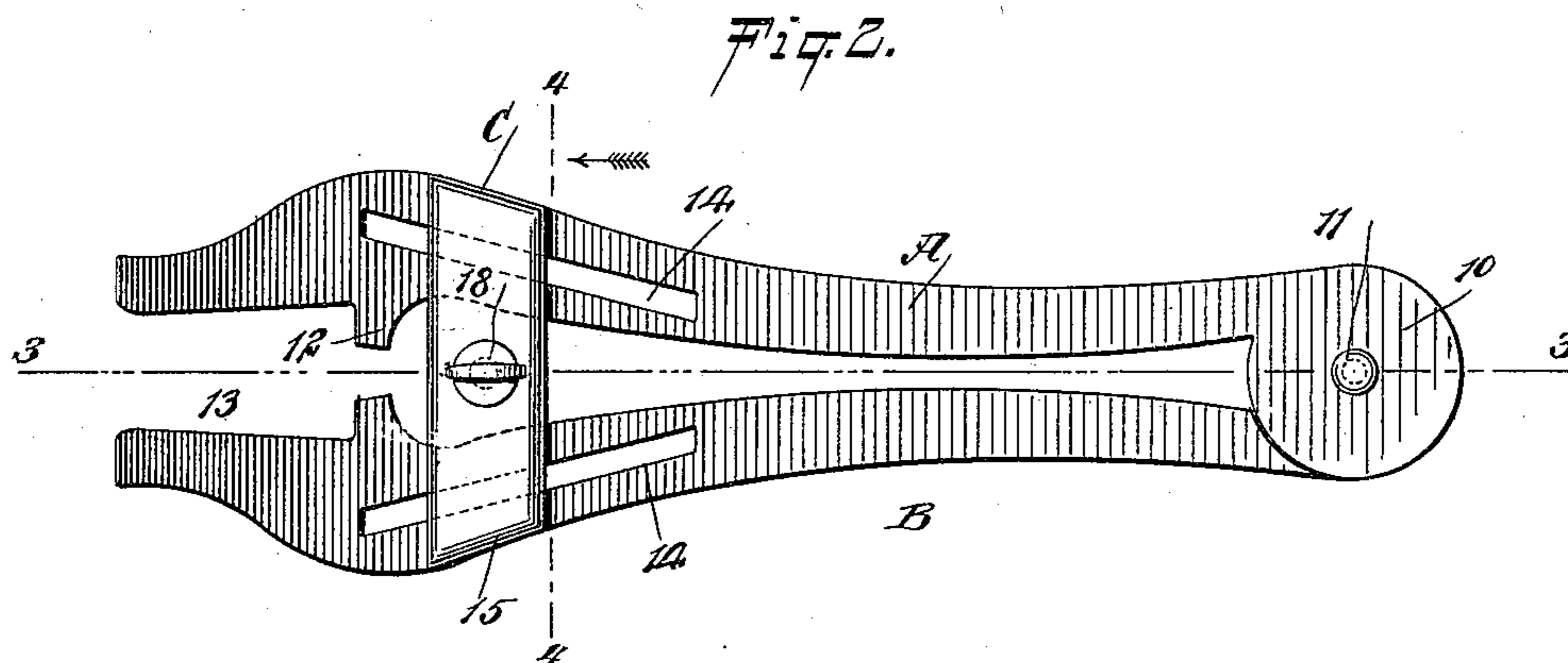
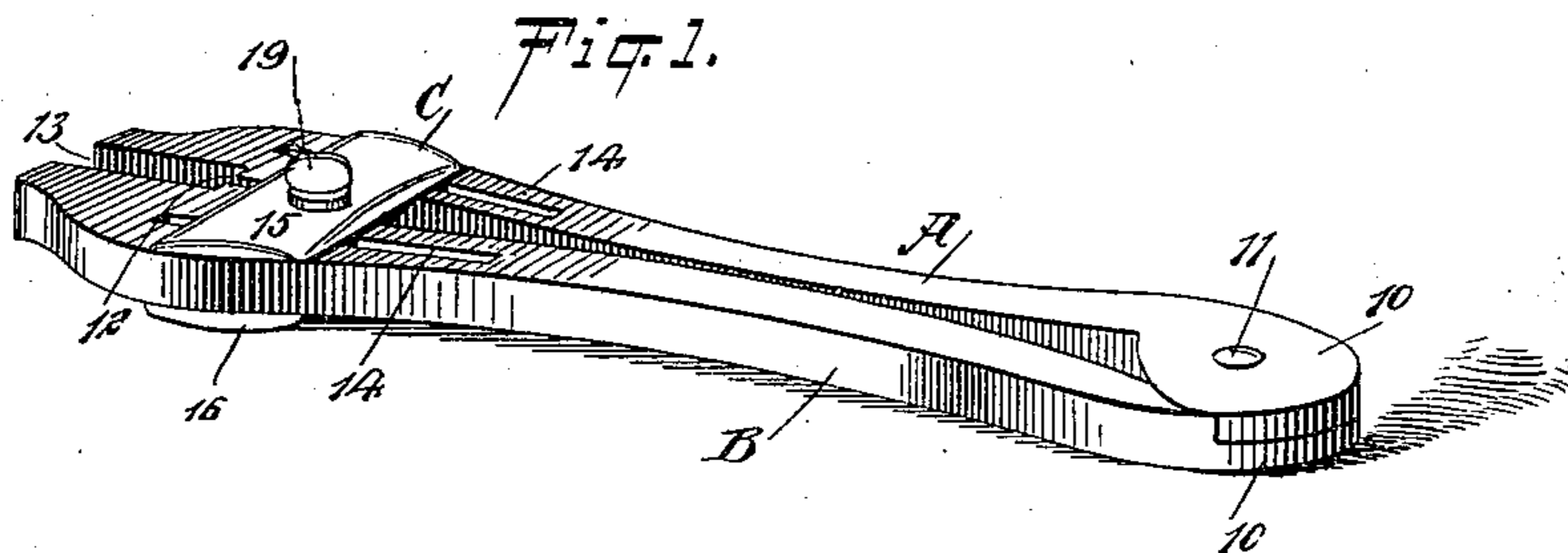
No. 646,263.

Patented Mar. 27, 1900.

P. R. COLEMAN.  
WRENCH.

(Application filed Jan. 15, 1900.)

(No Model.)



WITNESSES:

William T. Gaebel.  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

PHINEAS R. COLEMAN, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF TO THOMAS DUNN ENGLISH, OF SAME PLACE.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 646,263, dated March 27, 1900.

Application filed January 15, 1900. Serial No. 1,468. (No model.)

*To all whom it may concern:*

Be it known that I, PHINEAS R. COLEMAN, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

The object of the invention is to provide a wrench comprising pivotally-connected jaws and means whereby through the medium of a slide the jaws may be quickly adjusted to and from each other by the use of one hand and locked in adjusted position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved wrench. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal section on the line 3 3 of Fig. 2, and Fig. 4 is a transverse section on the line 4 4 of Fig. 2.

The wrench comprises two clamping members A and B and an adjusting member C. A disk extension 10 is located at one end of each of the clamping members A and B, and these disk extensions are so formed that one disk extension will turn in the other around a common pivot 11, and also preferably the sides of the projected disk portions of the jaws are flush with each other. At the clamping end or jaw of each clamping member A and B opposing offsets 12 are produced upon the inner face, and the space between the opposing inner surfaces of the clamping members above or beyond the offsets 12 is more or less rectangular, and such space 13 is adapted to receive the nut or other object to be operated by the wrench. This space 13 is enlarged or rendered smaller by moving the clamping members A and B toward or from each other, and this movement is effected through the medium of the adjustable member C.

A longitudinal slot 14 is produced in each of the clamping members A and B, and these

slots extend in direction of the recess or space 13 between the jaws and to a point at or near the outer edges of the offsets 12, as is best shown in Fig. 2. The slots 14 converge at their inner or rear ends and diverge at their outer or forward ends, as shown in Fig. 2.

The adjusting member C preferably consists of an upper plate 15 and a lower plate 16. These plates extend, respectively, across the upper sides and the lower sides of the clamping members A and B, transversely of such members, and each plate is provided with a tongue 17, adapted to enter one of the slots 14, the tongues 17 having a corresponding inclination to that of the slots 14. The plates 15 and 16 are connected together and are made to closely engage or hug the clamping members A and B through the medium of a set-screw 18, which is passed loosely through the upper plate 15 and through the space between the clamping members A and B into a threaded aperture in the lower plate 16, as shown in Fig. 3. When the set-screw is loosened and the adjusting member C is drawn inward or in direction of the pivot ends of the clamping members, the space between the jaws of the clamping members will be enlarged, and the said space between said jaws will be diminished proportionately to the inward or outward movement of the adjusting member C. After the jaws have been made to engage with the nut or other object the adjusting member is held tight to the clamping members by means of the set-screw 18.

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

1. A wrench consisting of two pivotally-connected clamping members terminating in jaws at their free ends, each clamping member at its jaw-section having an inclined longitudinal slot, the slots diverging at the jaws and converging at a point between the jaws and the pivot of the clamping members, plates located at opposite sides of the clamping members, a locking device for the plates, and ribs formed upon the plates, conforming to and entering the slots in the clamping members of the wrench, for the purpose described.

2. A wrench, comprising two jaws pivotally connected with each other and movable toward and from each other on such pivot, each jaw having a diagonally-disposed slot  
5 therein, and an adjusting device comprising a transversely-disposed plate mounted on the wrench and extending from one jaw to the other, such plate having ribs formed at its ends and respectively fitting loosely in the  
10 said diagonal slots of the jaws so that the

movement of the locking device longitudinally of the wrench will cause the jaws to move toward or from each other.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

PHINEAS R. COLEMAN.

Witnesses:

A. W. DUNN,

G. J. KELLER.