

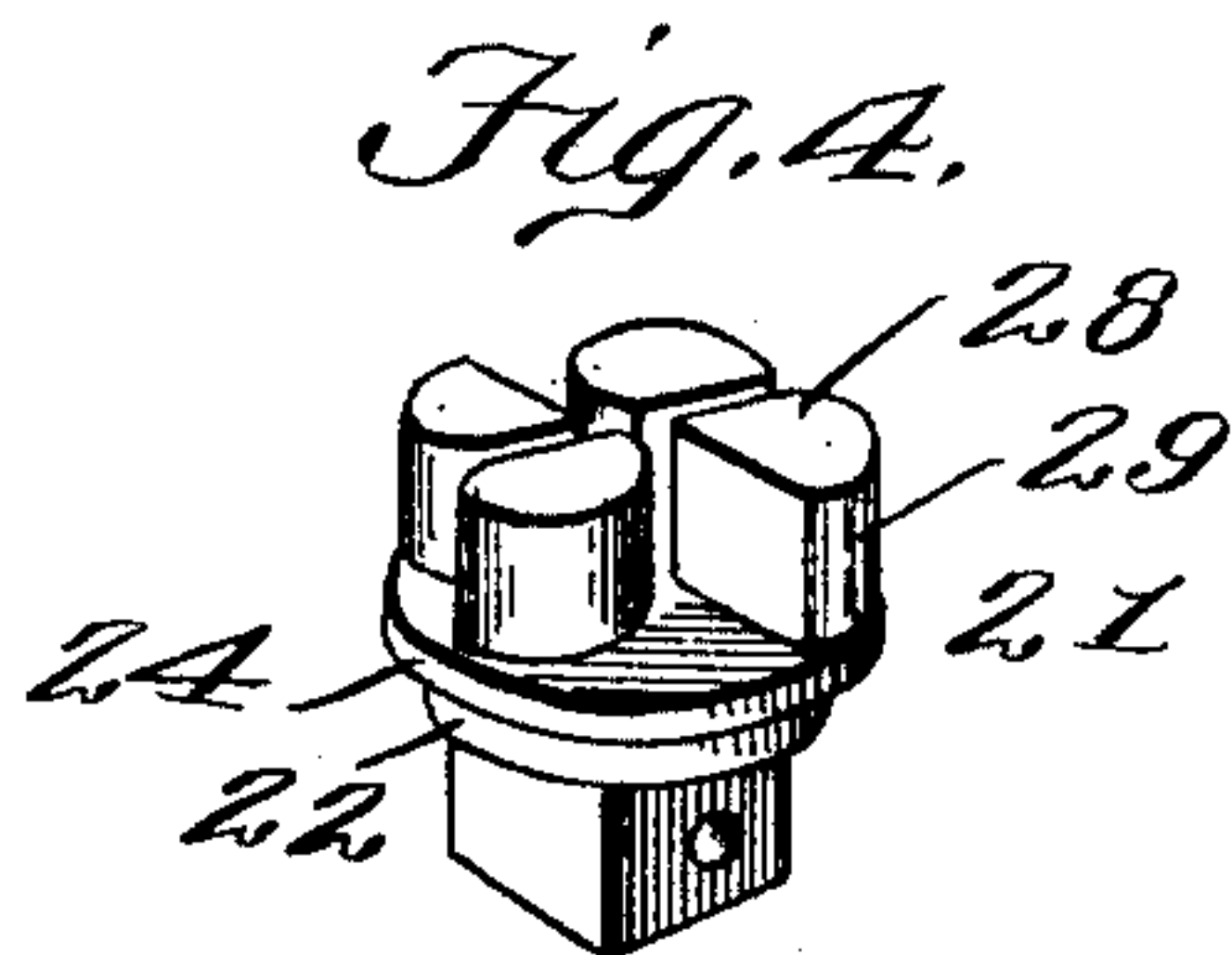
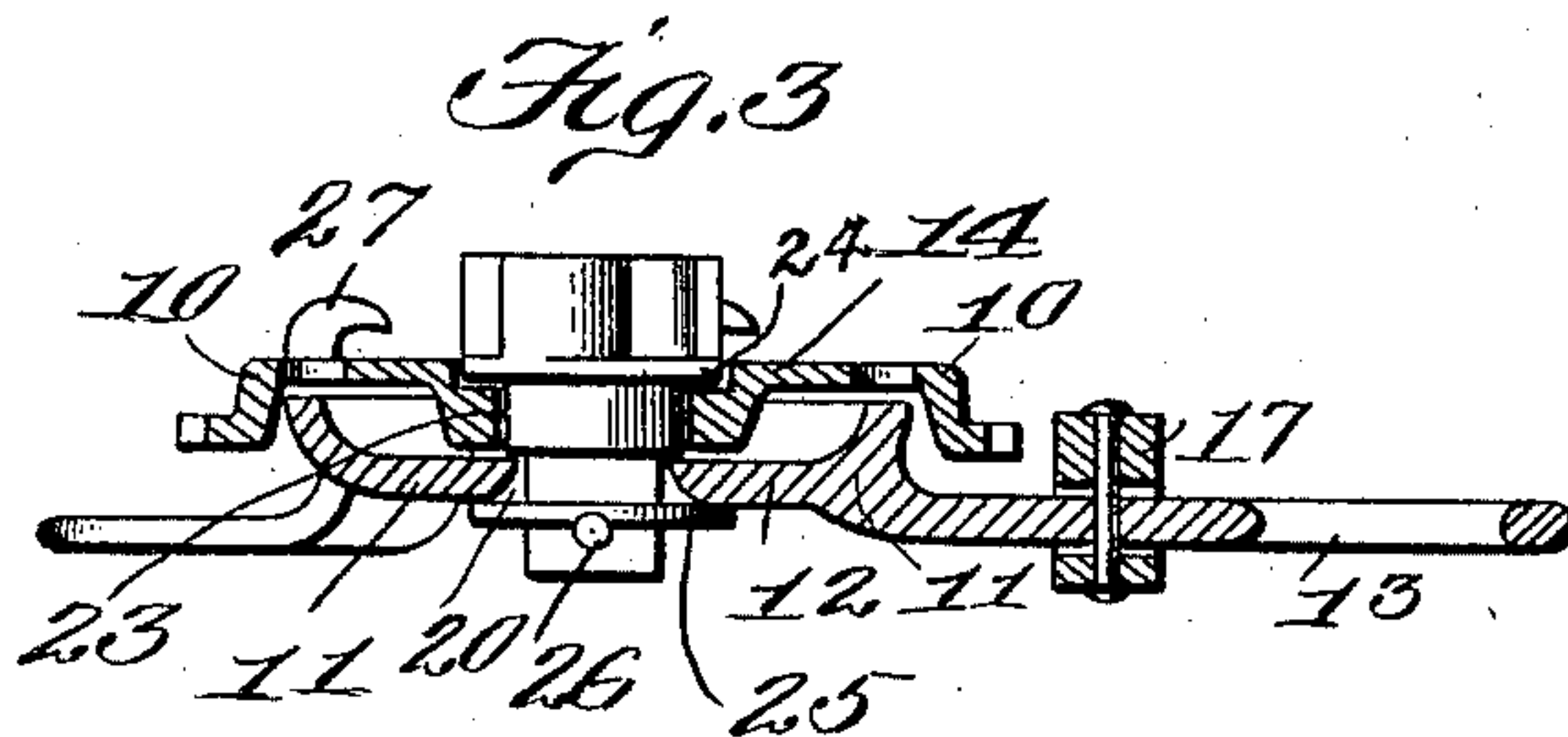
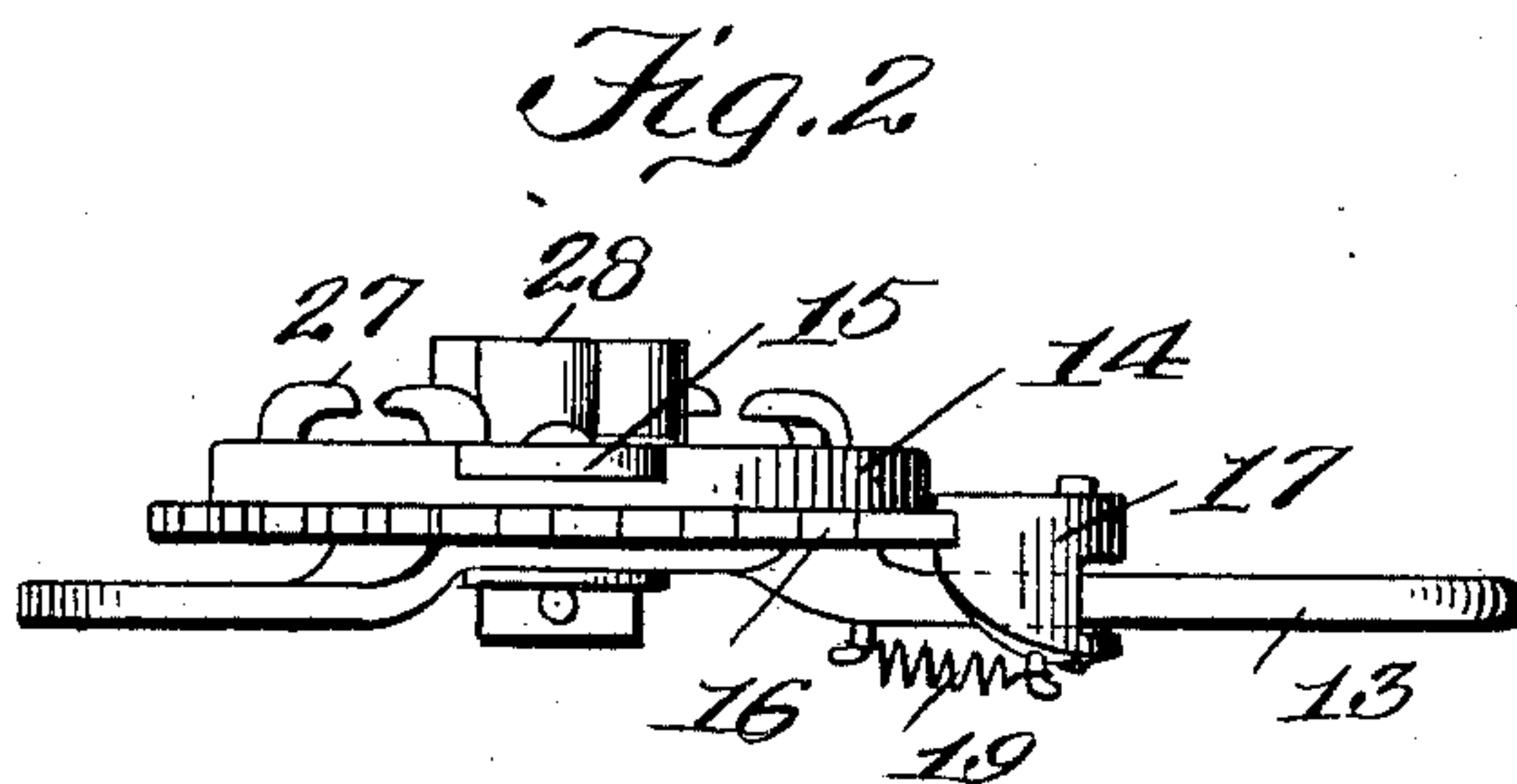
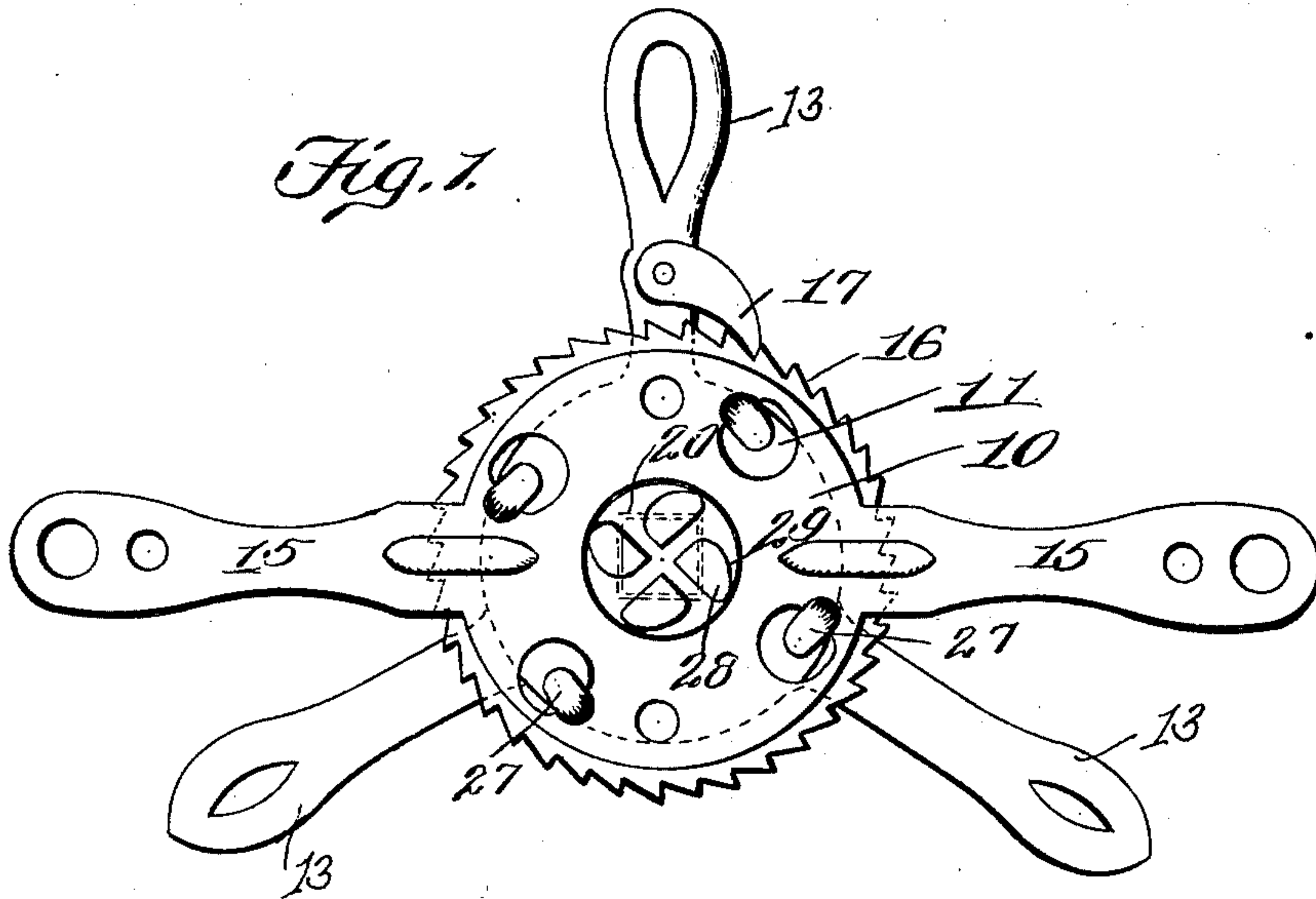
No. 715,062.

Patented Dec. 2, 1902.

J. W. HEADLEY.
WIRE TIGHTENER.

(Application filed Apr. 22, 1902.)

(No Model.)



Witnesses:
C. D. Kessler,
Bernie Cumber.

Inventor
Joseph W. Headley
By
James L. Norris
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH W. HEADLEY, OF COOPER, ALABAMA.

WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 715,062, dated December 2, 1902.

Application filed April 22, 1902. Serial No. 104,181. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. HEADLEY, a citizen of the United States, residing at Cooper, in the county of Chilton and State of Alabama, have invented new and useful Improvements in Wire-Tighteners, of which the following is a specification.

This invention relates to a wire-tightener, and though capable of different uses it has been found to be of peculiar adaptability in conjunction with bedstead-braces, in which use it serves to place the wires of the braces under proper tension; and the objects of the invention are to provide a thoroughly strong and efficient device of this character which can be readily operated, if necessary, by one hand.

The invention will be hereinafter described in detail, and the novelty thereof will form the basis of the claims succeeding such description, and said invention is clearly illustrated in the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a top plan view of a wire-tightener including my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a cross-section thereof, and Fig. 4 a detail view in perspective of a hub.

Referring now to the drawings, the numerals 10 and 11, respectively, indicate the upper and lower parts of the wire-tightener. The lower part of the device includes in its construction a body 12, which is shown as being circular and which has a series of rigid arms 13 extending radially therefrom, three of such arms being shown and as being equidistantly disposed. While in the present case the arms are shown as being integral with the body, this of course is not essential, for they may be otherwise formed, and such parts may be made of any suitable material. The lower part 10 is in the nature of a wrench, and it carries a pawl, as will hereinafter appear, adapted to cooperate with a ratchet upon the upper part. The upper part 10 also includes in its construction a body 14, which is provided with the arms 15, extending radially therefrom at diametrically opposite sides of the body, and these parts, as in the case of the lower member of the device, may, if desired, be made integral. The body 14 of

the upper part has upon its periphery a ratchet 16, with which the point of the pawl 17 is adapted to cooperate. The pawl is made for strength very thick and is slotted at its butt-end, thereby producing a bifurcation which is adapted to straddle one of the radial arms 13 near the inner end thereof, a pivot of some suitable kind connecting the pawl with the arm which sustains the same. The working end of the pawl is normally held in engagement with the teeth by a coiled spring 19, the ends of which have eyes connected to pins or studs on the pawl and its carrying-arm, respectively, and it will be seen that the spring is connected with the under side of the pawl and extends inward from the same, so as to be out of the way of the hands when the device is being operated. The body 12 of the lower part has a central and square opening 20 to receive the lower square end of the hub or plug 21. Upon said hub is formed an annular shoulder 22, which is adapted to fit into the reduced portion of the central opening 23 in the body 14, said hub having a second annular shoulder or flange 24 above the other annular shoulder, which fits in the upper part of the central opening 23, which, it will be seen, is of greater diameter than the lower part of said central opening. The upper face of the hub or plug 21, it will be seen, is flush, or substantially so, with the upper face of the body 14. The squared lower end of the hub 21 is surrounded by a washer 25, of some suitable material, and is perforated below the washer to receive the pin 26, whereby the hub is held in place, and as the annular shoulder or flange fits against the body 14 the parts will be held assembled when the pin referred to is in place. By removing such pin the parts can be quickly separated.

Upon the upper side of the body 14 are situated the hook-shaped lugs 27, which are adapted to overhang the brace-wires when the wire-tightener is in place within the bedstead-frame or otherwise set up for use.

Upon the upper side of the hub 21 are situated the jaws 28, having beveled faces 29, four of such jaws being shown, and between which the brace-wires (not shown) of a bed are adapted to be passed, and by virtue of the

beveling of the jaws the power necessary to tighten such wires is decreased, such beveled faces acting in the nature of cams.

In using the device in connection with the wire braces of a bedstead such wires (four in number) are passed under the free ends of the hook-shaped lugs and between the jaws 28. Then the operator by grasping one of the arms 13 of the lower part 11 and an arm 15 of the upper part can operate such arms so as to place the wires under tension, the pawl 17 serving to rotate the ratchet, and thereby the upper part 10.

While, as set forth hereinbefore, my device is adapted for tightening the wires of a bedstead-brace, it is obvious, of course, that it can be employed with equal facility for other purposes—for example, for tightening wires in bridge and other construction. Therefore it will be understood that the invention is not limited to any particular use of the appliance.

Having described the invention, what I claim is—

1. In a wire-tightener, a lower part having arms and a squared central opening, and an upper part also having arms and a central circular opening of two diameters, the upper part of said circular opening being of greater diameter than the lower part, and a hub having a squared lower end fitted in said squared opening and superposed shoulders of different diameters fitted in the respective portions of the circular opening, said hub also having jaws and the upper part having guide-lugs, a pawl on an arm of the lower part, and a ratchet on the upper part adapted to be engaged by the pawl.

2. In a wire-tightener, a lower part having

arms and a squared central opening, and an upper part also having arms and a central circular opening of two diameters, the upper part of said circular opening being of greater diameter than the lower part, a hub having a squared lower end fitted in said squared opening and superposed shoulders of different diameters fitted in the respective portions of the circular opening, said hub also having jaws and the upper part having guide-lugs, a slotted pawl, the slot of which is adapted to receive an arm of the lower part, and a pivot passing through said arm and pawl and a spring connected respectively to the under side of the pawl and to the arm which carries the same.

3. In a wire-tightener, a lower part having an arm and a central squared opening, an upper part also having an arm and a central circular opening of different diameters, the portion of greater diameter being located above the portion of less diameter, a hub having a squared lower end fitted in said squared opening and having superposed shoulders above said square portion fitted in the respective portions of said central opening and having beveled jaws upon its upper end, a pin passing through the lower end of the hub, guide-lugs upon the upper side of the upper part, a ratchet carried by the upper part, and a pawl on the lower part adapted to cooperate with said ratchet.

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

JOSEPH W. HEADLEY.

Witnesses:

JULIUS T. RICE,
J. SMYLY CATTS.