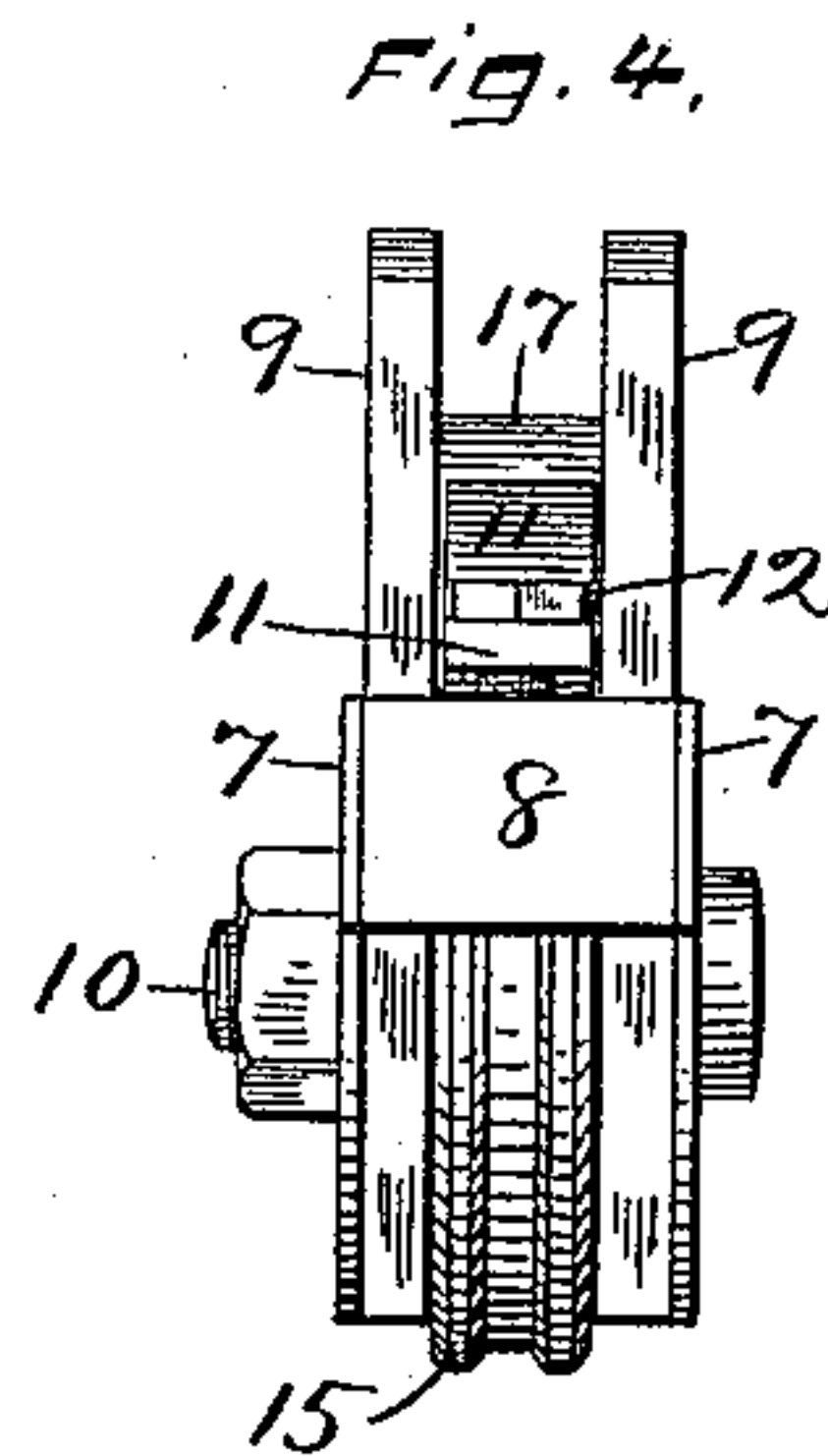
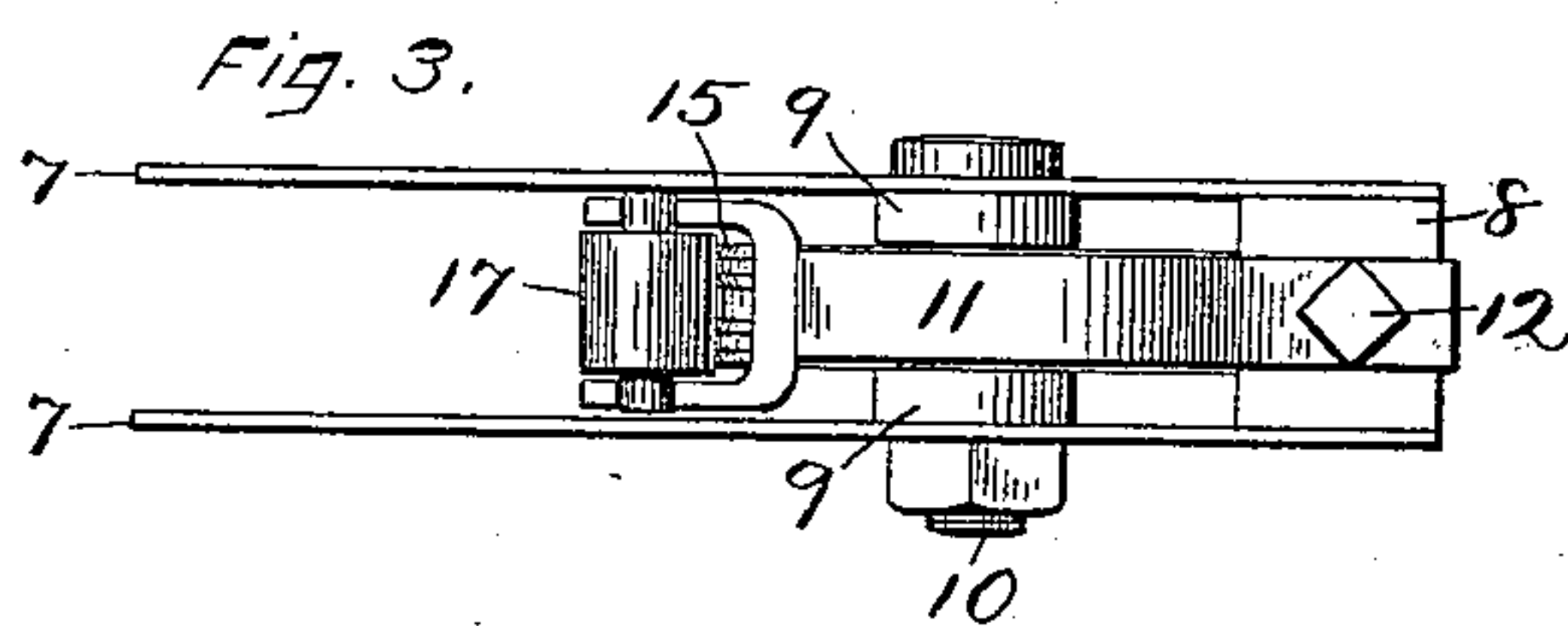
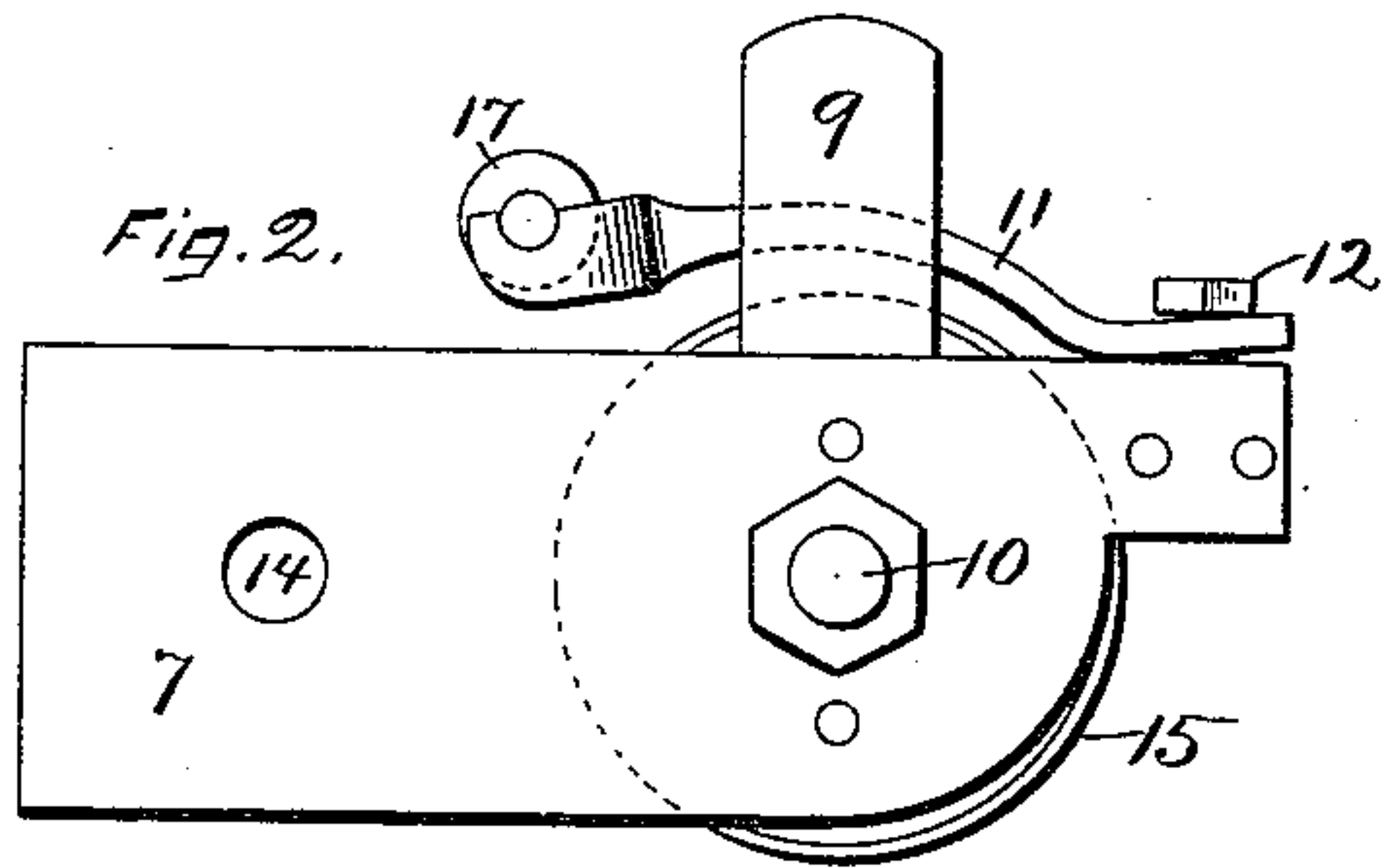
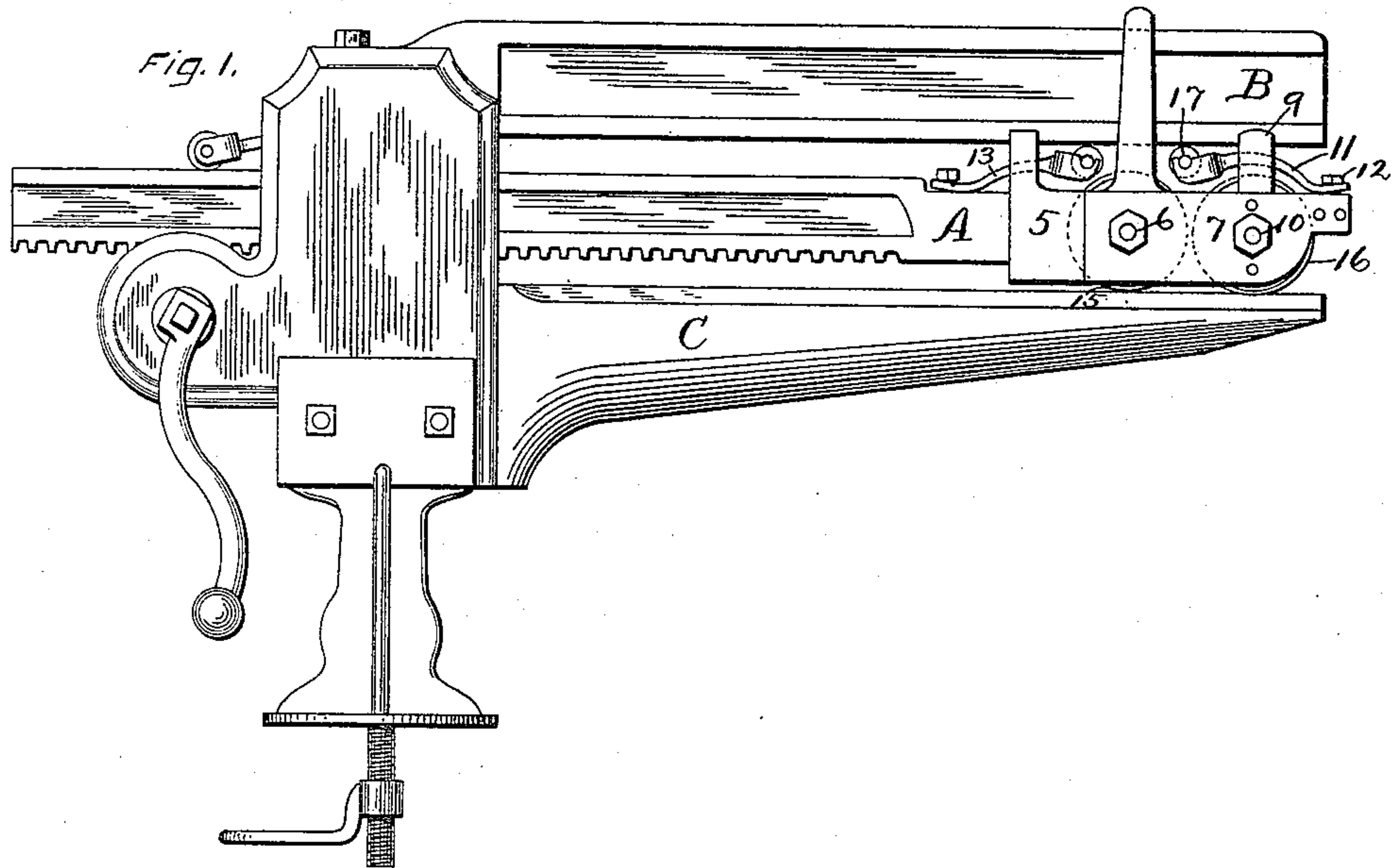


(No Model.)

G. A. KENNEDY.  
GROOVING MACHINE ATTACHMENT.

No. 450,463.

Patented Apr. 14, 1891.



WITNESSES.  
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# UNITED STATES PATENT OFFICE

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## GROOVING-MACHINE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 450,463, dated April 14, 1891.

Application filed October 17, 1890. Serial No. 368,400. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. KENNEDY, a citizen of Canada, residing at Coaticook, in the Province of Quebec and Dominion of Canada, have invented certain new and useful Improvements in Attachments for Tinsmiths' Grooving-Machines, of which the following is a specification.

My invention relates to improvements in attachments for tinsmiths' grooving-machines; and the object of my improvement is to provide a roller for flattening the seam simultaneously with the operation of grooving.

In the accompanying drawings, Figure 1 is a side elevation of an ordinary grooving-machine with my attachment applied thereto. Fig. 2 is an enlarged side elevation of my attachment as detached from the machine. Fig. 3 is a plan view of the same, and Fig. 4 is a front end view thereof.

A designates the rack-bar of the grooving-machine, having the roller-carriage 5 at its head or front end within which to secure any desired form of roller upon the axle-bolt 6. In the ordinary grooving-machine this carriage bears what is known as the "grooving-roller" for running over the longitudinal seam in a pipe or cylinder in a manner well-known in the art. This bolt is detached for the purpose of putting in rollers with grooves of different widths. I provide an additional roller-carriage, which is formed of two thin side plates 7 7, a front end piece 8, and two up-rights 9, placed inside the side pieces 7. Extending through these side pieces and up-rights is an axle-bolt 10, that is substantially a duplicate of the axle-bolt 6 in the regular roller-carriage. I also attach to the front end piece 8 a spring roller-frame 11, carrying the roller 17, by means of the bolt 12, for pressing upon the under side of the bar B and holding the roller within the carriage firmly down upon the bed C of the grooving-machine, said spring-roller frame being substantially the same as the ordinary spring-roller frame 13. The space between the side pieces 7 7 is equal to the thickness of the roller-carriage 5, and the space between the up-rights 9 9 is about the same as the thickness of the grooving-roller and the bar B.

The side pieces 7 7 are perforated at their left-hand end, as shown at 14, Fig. 2, and when the attachment is detached from the machine I generally place a flattening-roller 15 on its axle-bolt 10, as shown in Figs. 2, 3, and 4. This roller differs from the ordinary grooving-roller by having a flat bottom and shallow groove adapted to press upon the top of the seam and flatten it down.

When the attachment is to be used, the axle-bolt 6 is removed and the flattening-roller 15 is substituted for the ordinary grooving-roller. The side pieces 7 7 are then slipped over the sides of the roller-carriage 5 and the bolt 6 passed through said sides, roller-carriage, and roller, so as to secure the attachment, as shown in Fig. 1. The ordinary grooving-roller 16 is then placed on the axle-bolt 10 of the attachment. The rack A is drawn backward, the work placed upon the horn C, when the rack is run forward over the seam, the grooving-roller 16 performing its usual work and the flattening-roller 15 immediately following it to flatten down the seam.

The main portion of the attachment and the roller 16 may be carried forward beyond the end of the bar B and horn C of the grooving-machine, so that the flattening-roller can travel to the end of the horn, if desired. Upon drawing the rack back again the parts will again come into position, as shown in Fig. 1.

I claim as my invention—

1. The herein-described attachment for grooving-machines, consisting of a roller and a supplementary roller-carriage having connected side pieces adapted to slip over the sides of the ordinary roller-carriage and be bolted thereon, substantially as described, and for the purpose specified.

2. A grooving-machine consisting of a frame having bar B and horn C, the rack-bar A, roller and roller-carriage at the front end of said rack-bar, the axle 6, on which said roller is mounted, and the spring-roller and roller-frame 13 on said rack-bar, in combination with the herein-described attachment, consisting of a roller, a supplementary roller-carriage having up-rights 9 to fit the sides of the



bar B, the roller-axle 10, the roller 17 and its spring-frame secured to said carriage by its front end, with its body portion extended rearwardly between said uprights, said spring-roller frames 13 and 11 being arranged with the ends which bear their rollers facing each other, said ends being located at the right and left of the vertical plane in which lies the axle 6, substantially as described, and for the purpose specified.

3. The attachment for securing to grooving-machines, consisting of the two side pieces

held apart at the forward end by block 8 and perforated at their rear ends for attachment to the bolt of the ordinary roller, together with the roller supported between such side pieces, the uprights 9, and the roller 17, supported on the spring passing between said uprights to retain the roller on the seam, substantially as described.

GEORGE A. KENNEDY.

Witnesses:

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