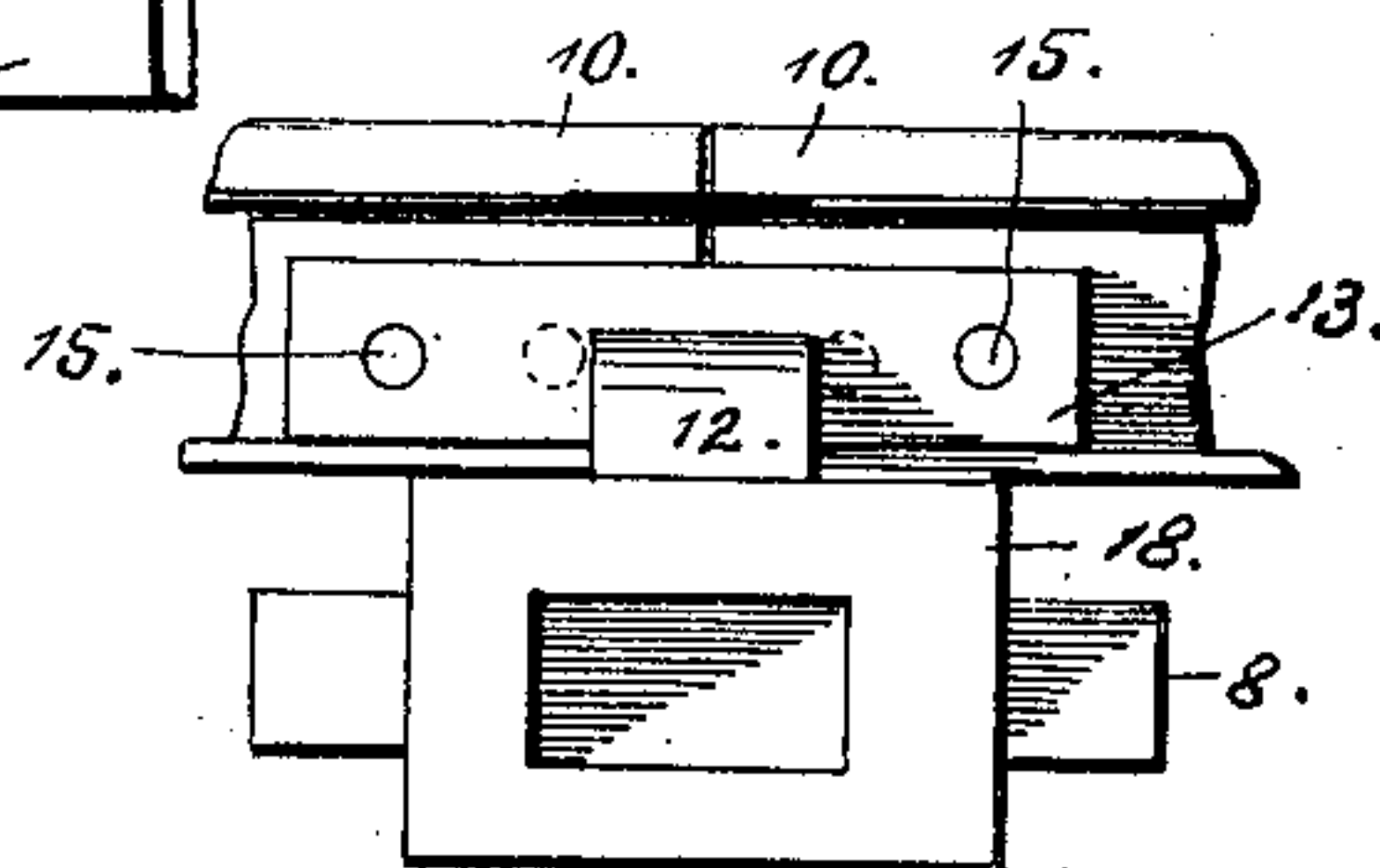
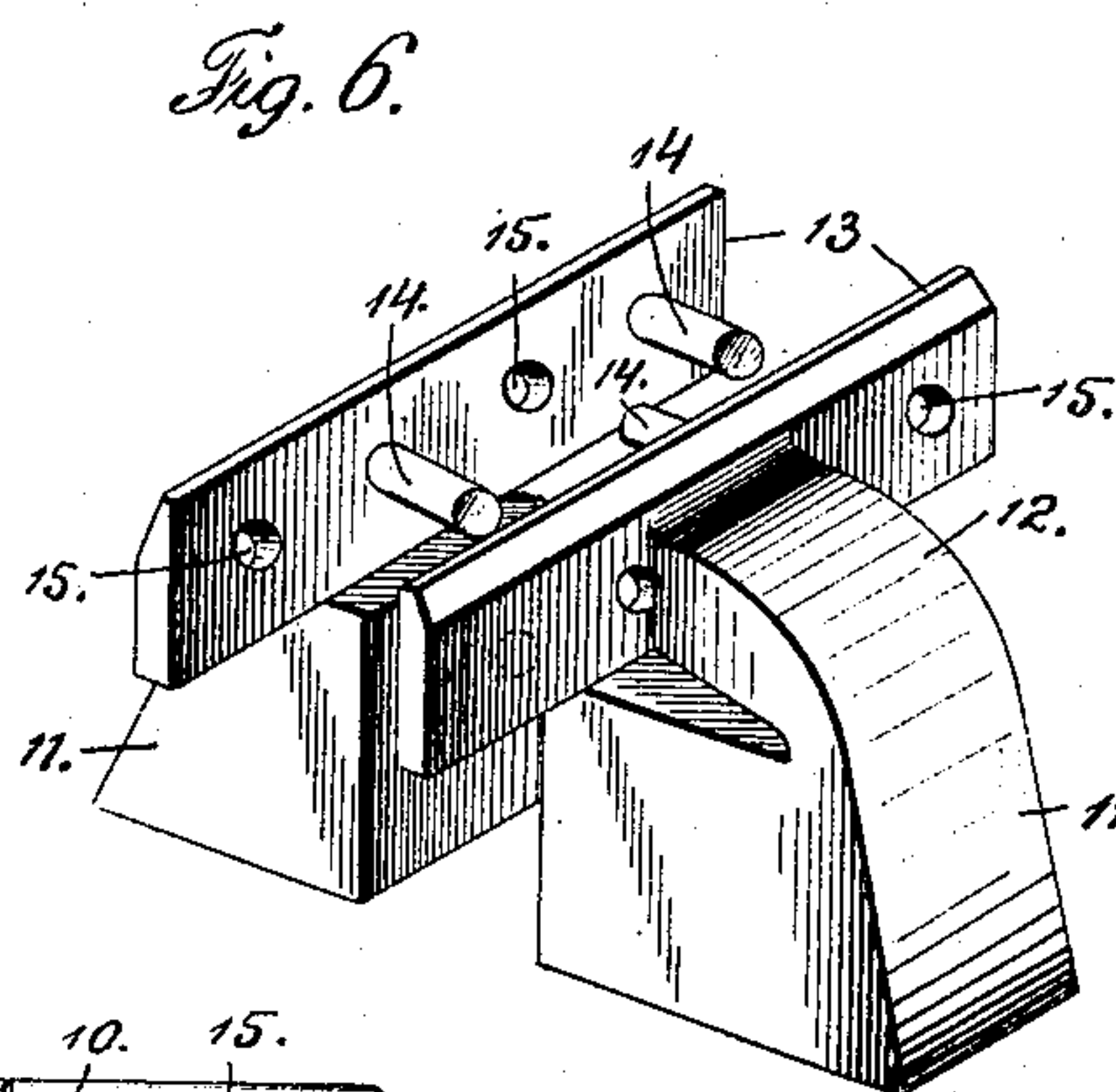
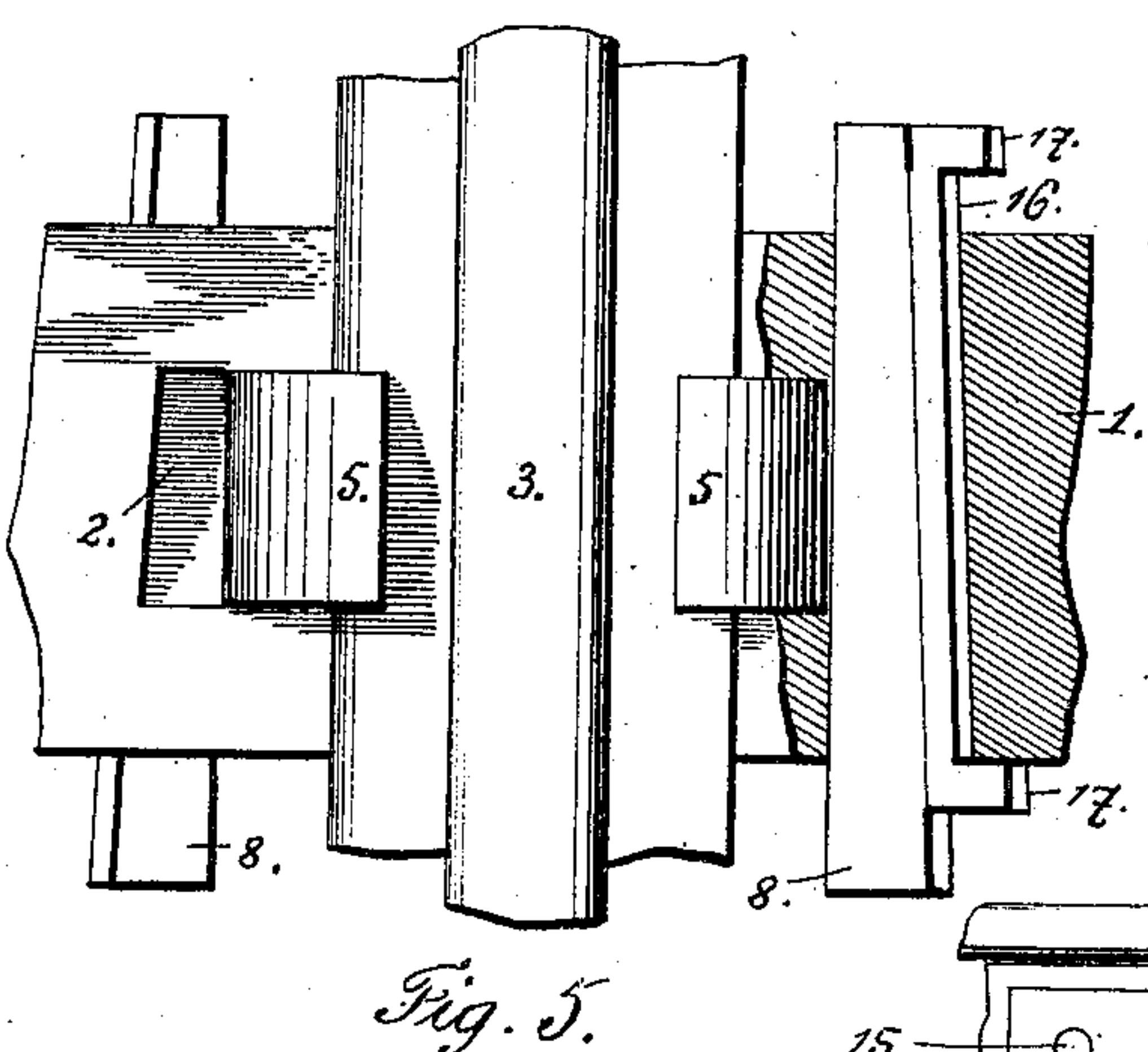
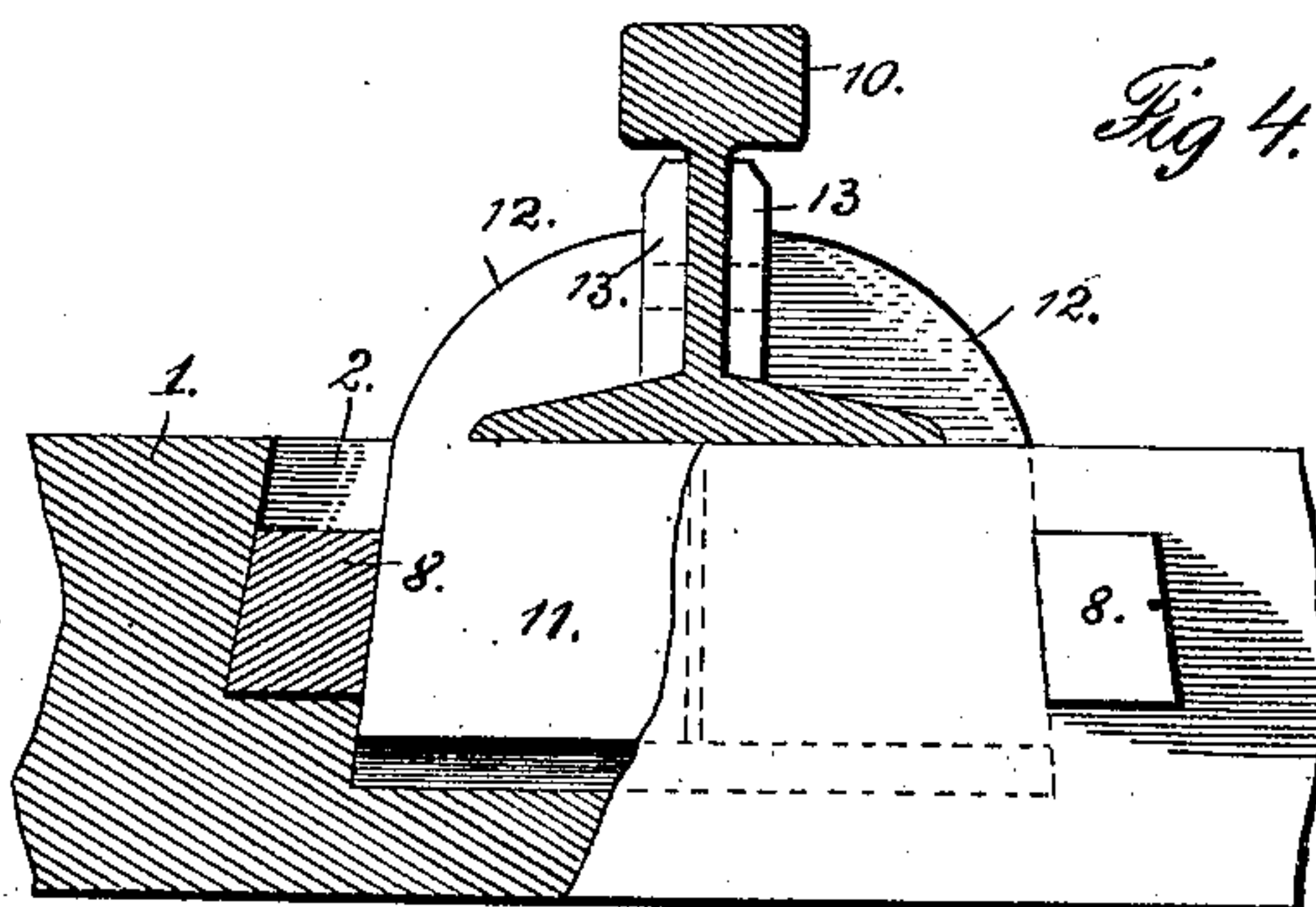
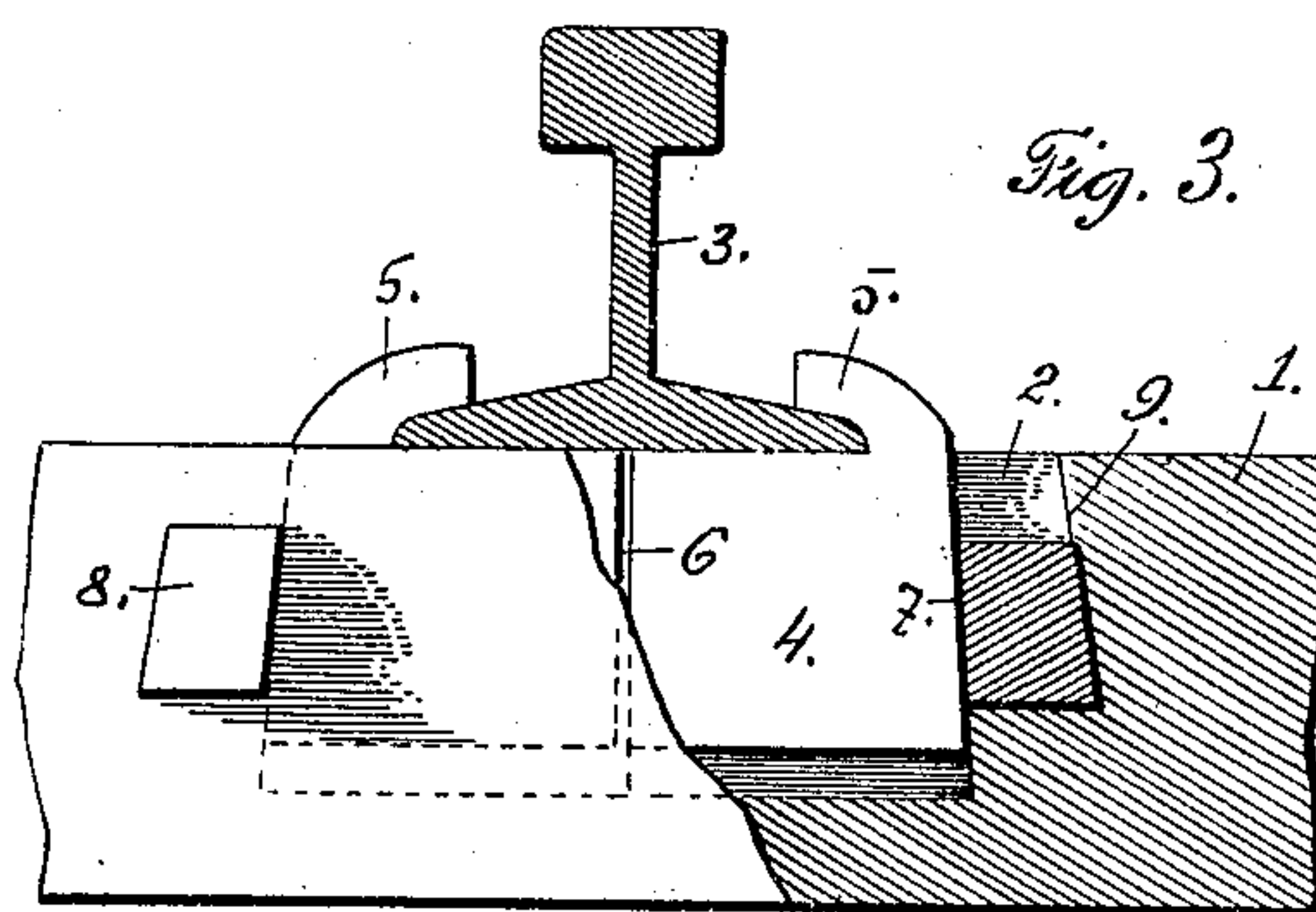
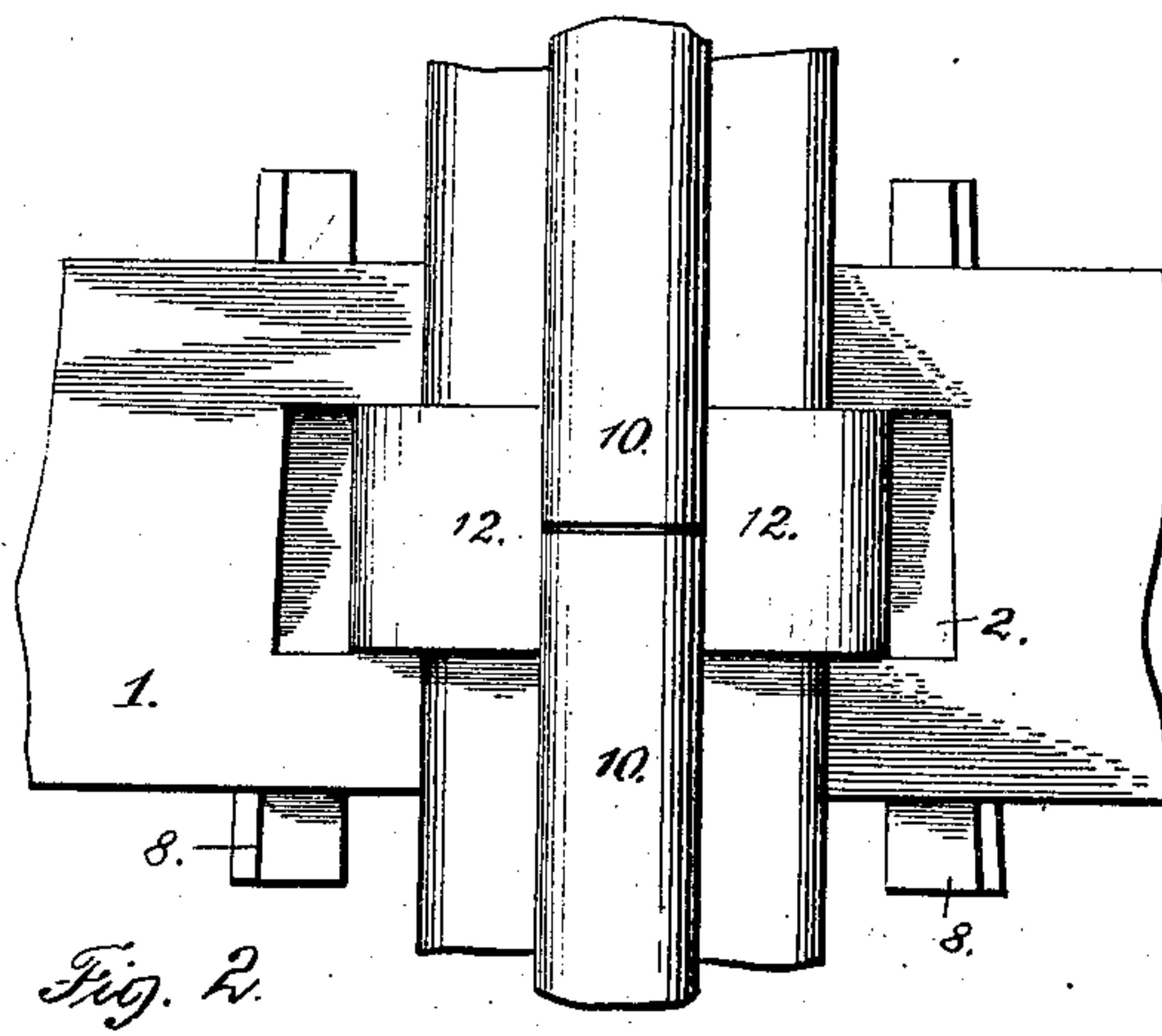
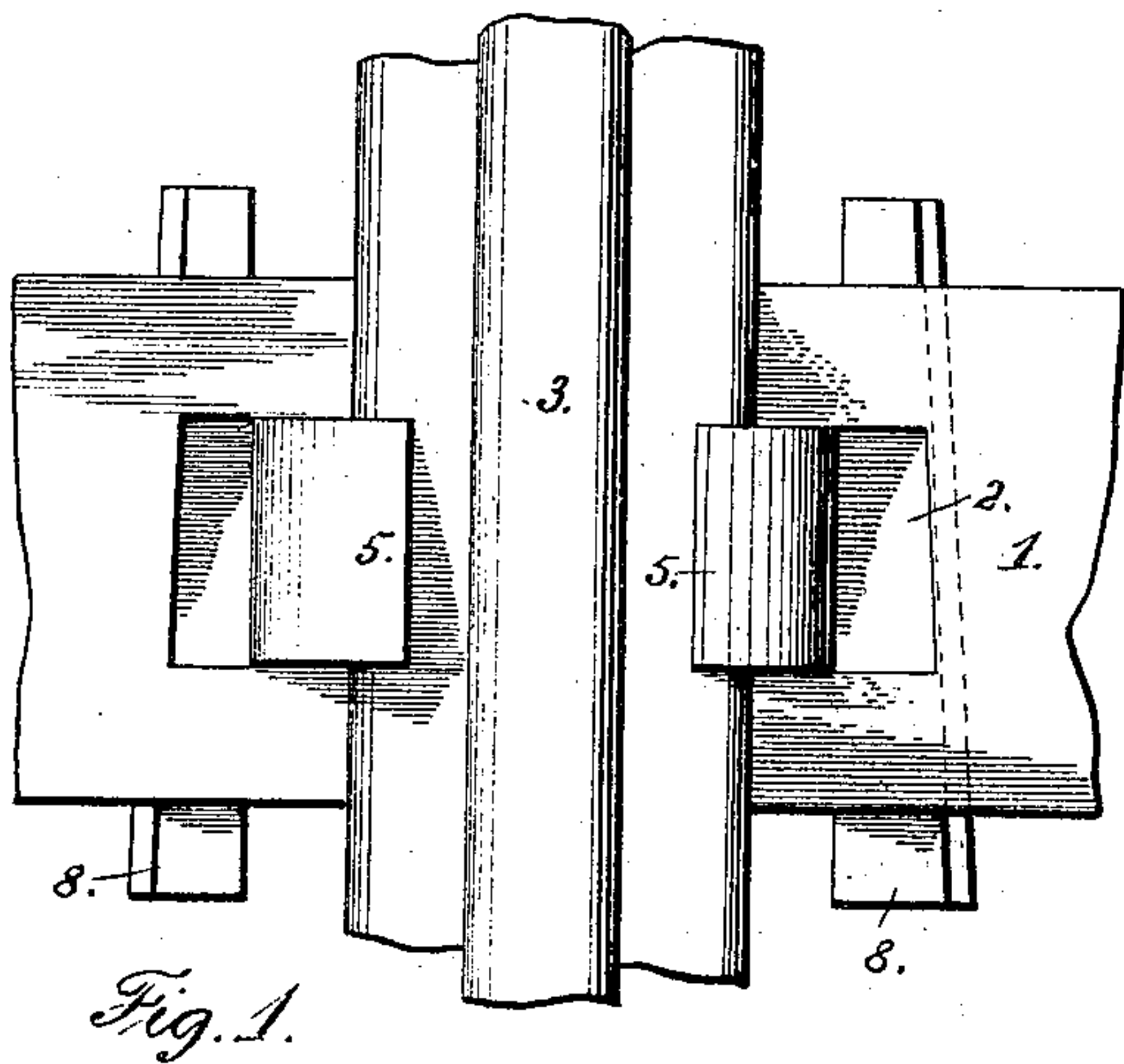


No. 847,024.

PATENTED MAR. 12, 1907.

F. M. PAXTON.
COMBINED RAIL FASTENER AND TIE.
APPLICATION FILED DEC. 31, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANCIS M. PAXTON, OF WASHINGTON, PENNSYLVANIA.

COMBINED RAIL-FASTENER AND TIE.

No. 847,024.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed December 31, 1906. Serial No. 350,158.

To all whom it may concern:

Be it known that I, FRANCIS M. PAXTON, a citizen of the United States of America, residing at Washington, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Rail-Fastener and Tie, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to combined rail-fasteners and ties; and its object is to provide simple and effective means for securing a rail in position upon a tie in such a manner as to permit the removal of the rail when necessary and which will be equally well adapted for securing rails at points between their ends or at a joint between the meeting ends of two rails.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawing, which forms part of this specification, and its novel features will be defined in the appended claim.

In the drawing, Figure 1 is a top plan view of a portion of a rail and tie with my improved fastener applied thereto. Fig. 2 is a similar view showing a modified construction of the improved fastener applied to a rail-joint. Fig. 3 is a view broken away and partly in vertical section of the devices shown in Fig. 1. Fig. 4 is a similar view of the form of the improvement shown in Fig. 2. Fig. 5 is a top plan view, partly in horizontal section, of a modification. Fig. 6 is a view in perspective of the clamping devices shown in Figs. 2 and 4. Fig. 7 is a side elevation of a further modification, showing the invention employed with a hollow tie.

Referring to Figs. 1 and 3, the reference-numeral 1 designates a railway-tie formed adjacent to each of its ends with a dovetail recess 2.

The numeral 3 designates a rail resting on the tie above the recess 2 and supported thereon by two oppositely-disposed clamps, each comprising a block or body portion 4 and a flange 5, projecting from the outer

upper edge of the block 4 and overhanging the upper surface of the block in position to overlap the base of the rail.

The inner meeting faces 6 of the clamping-blocks are vertical; but the outer sides 7 thereof are oppositely beveled to provide, in conjunction with the beveled walls of the dovetail recess 2, wedge-shaped seats for locking-wedges 8. The transverse walls 9 of the recess 2 are beveled, as indicated by dotted lines in Fig. 1, thus providing a wedge-seat into which the wedge-keys 8 are driven to hold the clamps in firm engagement with the base of the rail.

In Figs. 2, 4, and 6 is shown a modification of the improvement adapted to be applied to the meeting ends of two rails. The rails rest upon the tie above the recess 2 in the tie 1, and the body portions 11 of the clamps are similar to the blocks 4 in Figs. 1 and 3. The flanges 12 of the clamps extend over the base portions of the rails and are each formed with an integral splice-bar 13, formed with integral pins 14 and openings 15. The pins 14 extend through openings in the webs of the rails, and the pins of one flange 12 extend into the openings 15 of the other flange. The clamping-blocks are secured by wedge-keys 8, as in Figs. 1 and 3.

In Fig. 5 another modification is shown which differs from the construction shown in Figs. 1 and 3 only in employing a supplemental locking-key 16, formed with end lugs 17 in connection with one of the wedge-keys 8 to add to the security of the fastening.

In the form of the invention shown in Fig. 7 the construction is in all respects similar to that shown in Figs. 1 and 4, except that the tie 18 is hollow throughout its length.

The improved fastener constructed as described and shown affords a secure and reliable means for securing rails upon the ties and also provides a rail-joint which avoids the employment of the usual independent splice-bars or fish-plates.

I would have it understood that the invention includes all such variations in the detail features of construction as may be resorted

to without departing from the terms and scope of the claim.

What I claim, and desire to secure by Letters Patent, is—

5 The combination with a railway-tie formed with a dovetail recess having transversely-inclined walls, of a rail resting on the tie above said recess, clamping-blocks within said recess formed with integral oppositely-
10 extending flanges overlapping the base of the

rail, said blocks being beveled on their outer sides, and wedge-keys driven between the inclined walls of said recess and the beveled sides of the blocks.

In testimony whereof I affix my signature 15
in the presence of two witnesses.

F. M. PAXTON.

Witnesses:

WM. CHRISTMAN,
ANDREW M. LINN.