

No. 774,129.

PATENTED NOV. 1, 1904.

J. G. BARRETT.
COMBINED RAIL JOINT AND BRIDGE PIECE.

APPLICATION FILED MAR. 10, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

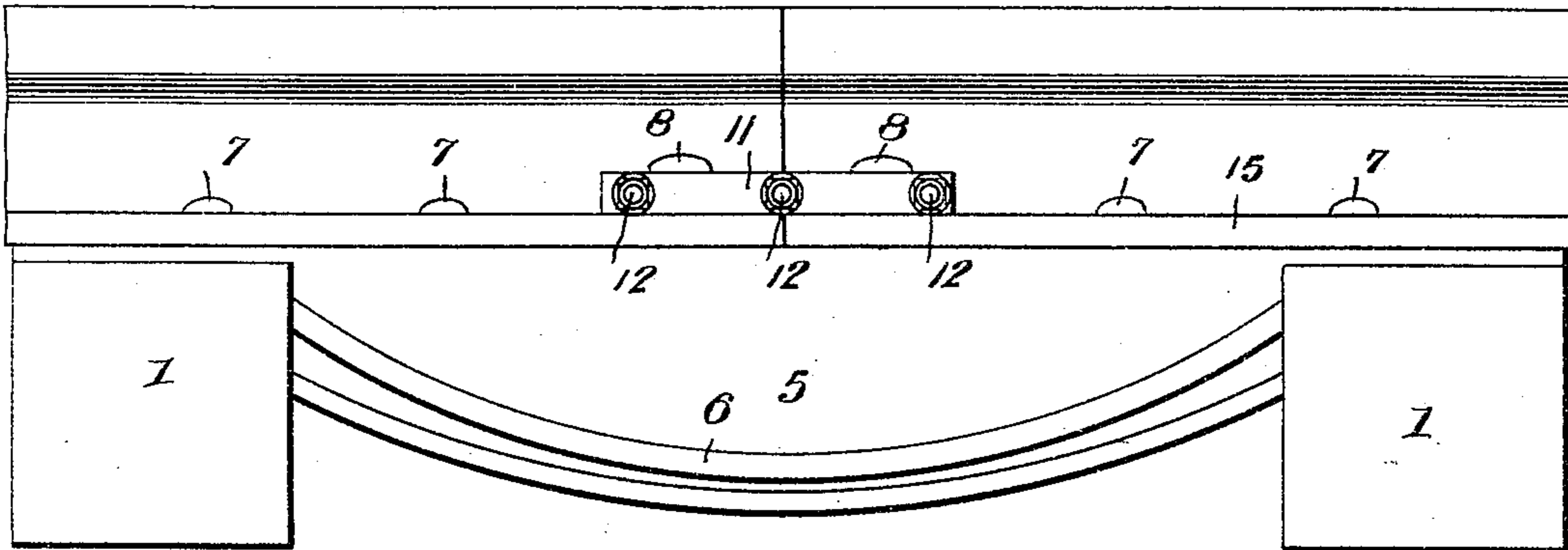


Fig. 2.

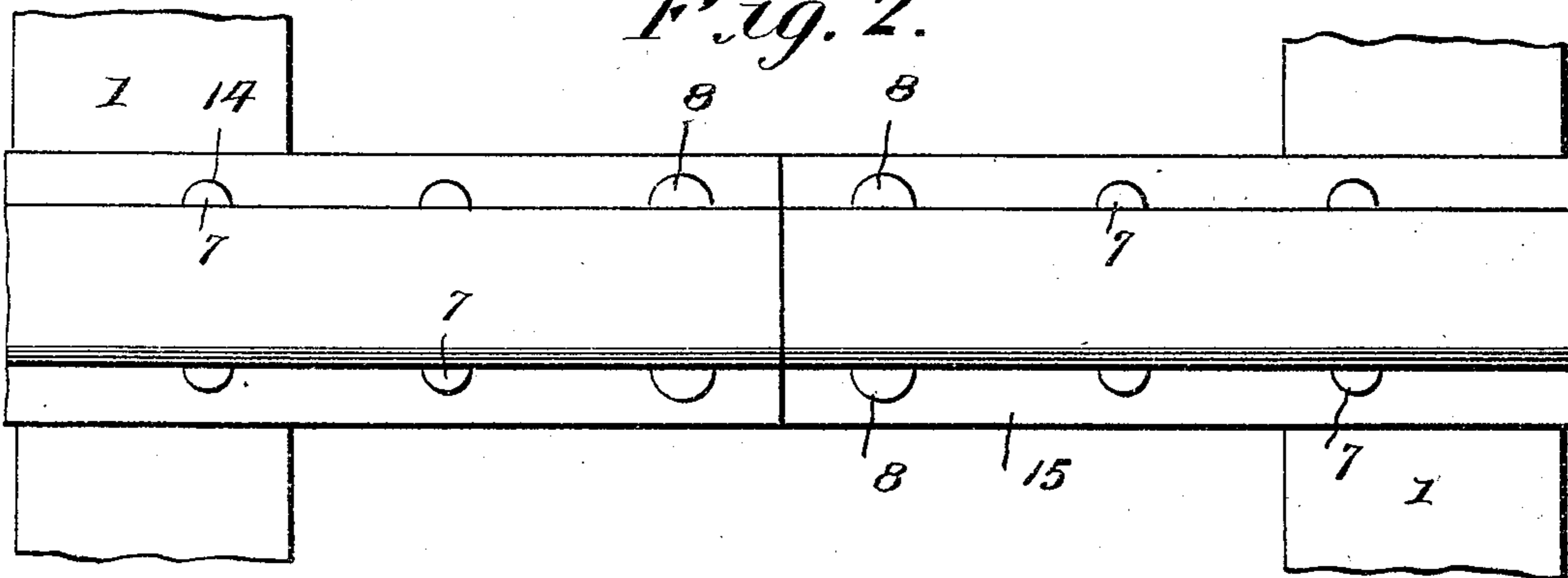
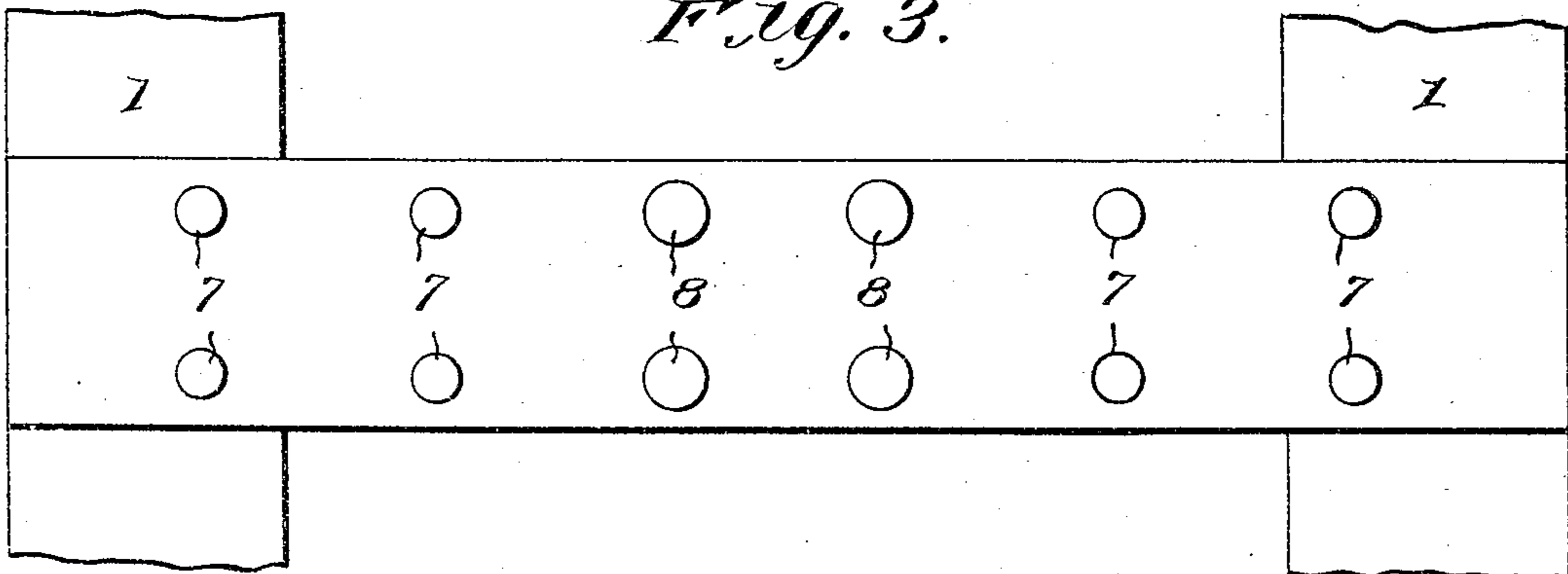


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

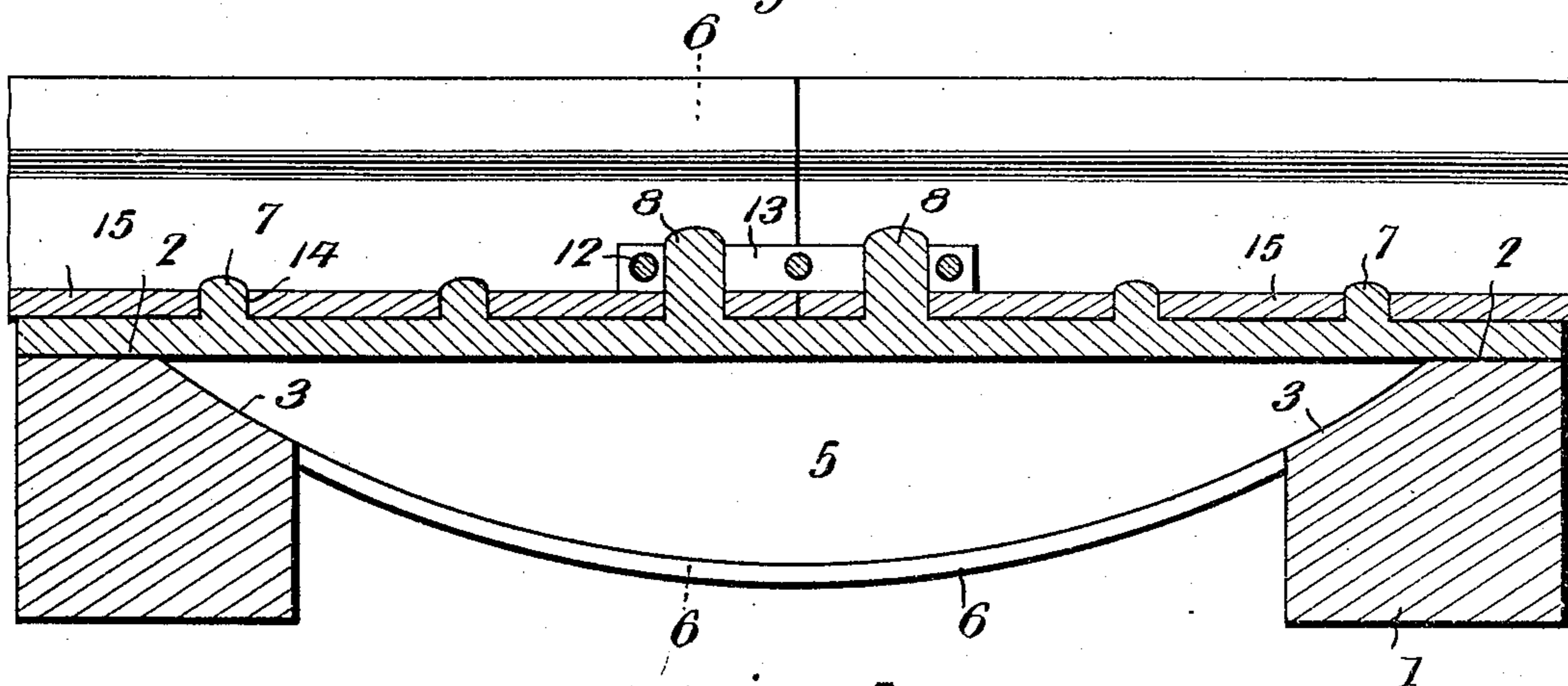


Fig. 5

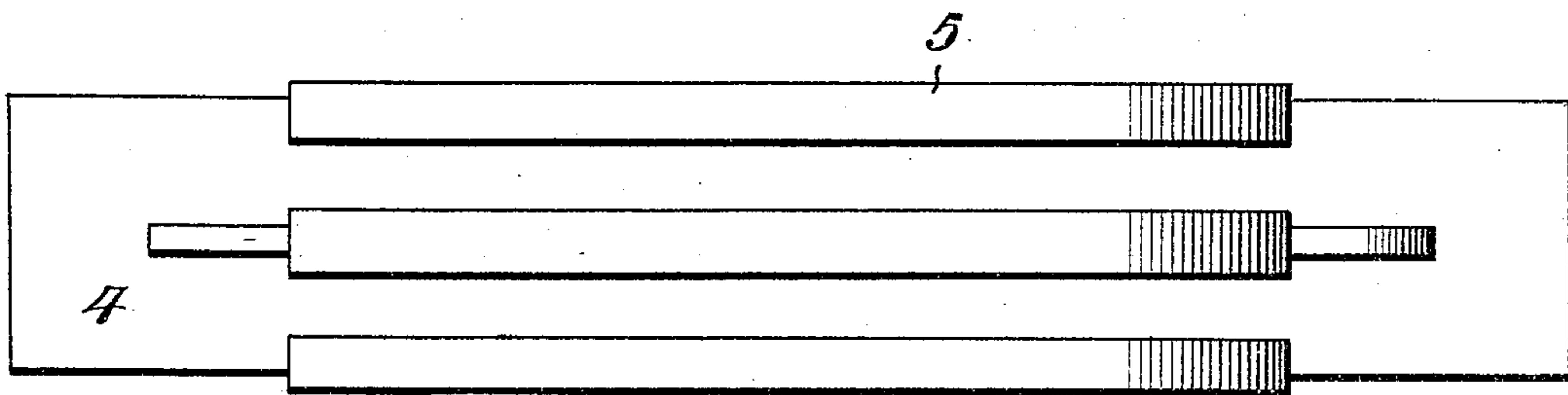


Fig. 6.

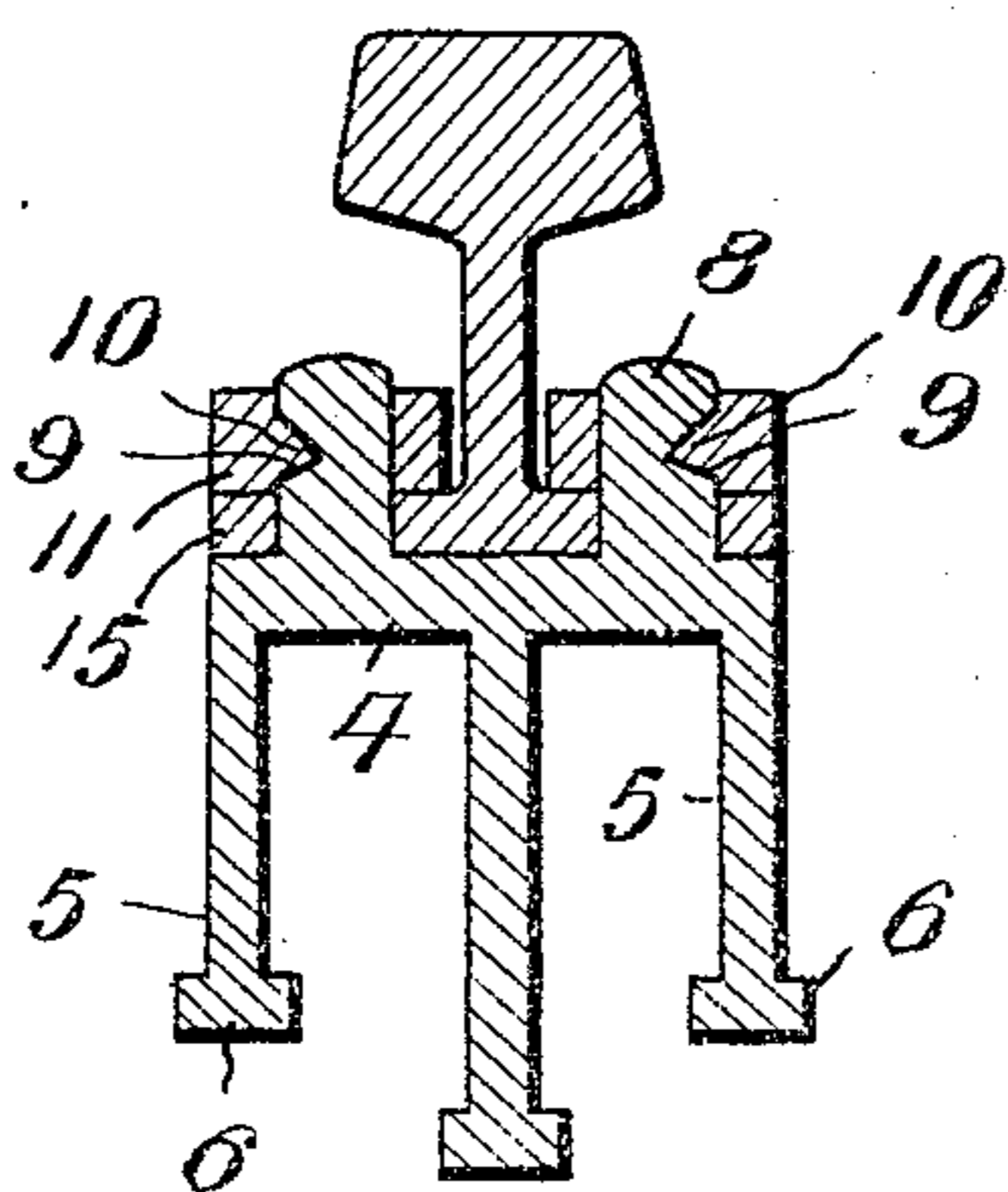
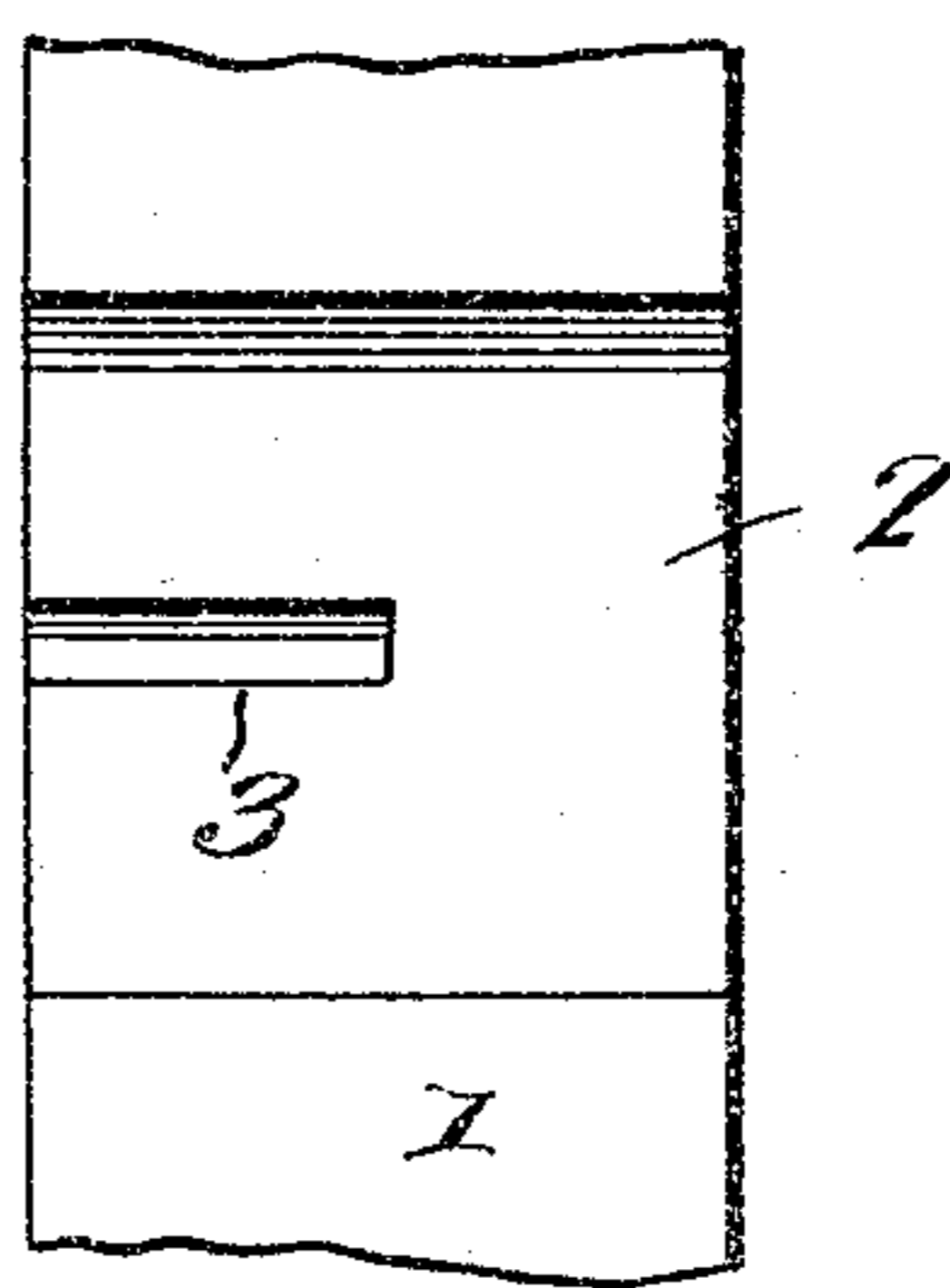


Fig. 7.



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UNITED STATES PATENT OFFICE.

JAMES G. BARRETT, OF WILLIAMSTOWN, MASSACHUSETTS.

COMBINED RAIL-JOINT AND BRIDGE-PIECE.

SPECIFICATION forming part of Letters Patent No. 774,129, dated November 1, 1904.

Application filed March 10, 1904. Serial No. 197,555. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. BARRETT, a citizen of the United States, residing at Williamstown, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in a Combined Rail-Joint and Bridge-Piece, of which the following is a specification.

My invention relates to new and useful improvements in combined rail-joints and bridge-pieces; and its object is to provide a simple and durable device of this character which is adapted to support the adjoining ends of rails and to hold them without the use of fish-plates such as ordinarily employed.

The invention consists of a bridge-piece having depending webs extending longitudinally thereof, and this bridge-piece is adapted to rest at its ends upon rail-ties and to extend under adjoining ends of rails. Lugs are formed upon the bridge-piece and are adapted to project through apertures formed within the base-flanges of the rails, and locking devices are adapted to be secured upon some of these lugs, so as to prevent the withdrawal of the rails from the bridge-piece.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation showing the ends of two rails arranged upon and secured by my improved bridge-piece. Fig. 2 is a top plan view of said rails with the bridge-piece removed. Fig. 3 is a top plan view of the bridge-piece. Fig. 4 is a longitudinal section through the bridge-piece and one base-flange of each of the rails. Fig. 5 is a bottom plan view of the bridge-piece. Fig. 6 is a section on line 6 6, Fig. 4; and Fig. 7 is a top plan view of a portion of one of the rail-road-ties and showing a recess for the reception of one end of the bridge-piece.

Referring to the figures by numerals of reference, 1 1 are railway-ties, and each has a rectangular recess 2 in its upper face, in which is formed a central longitudinally-arranged

groove 3. The recesses 2 are adapted to receive the ends of a bridge-piece 4, having parallel webs 5 at the edges and center thereof, and each of these webs has flanges 6 at its lower edges for strengthening the same. The central web 5 is of greater length than the side webs and is adapted to rest within the grooves 3. Arranged upon the upper face of the bridge-piece 4 and adjacent its edges are integral lugs 7, and two lugs 8 are located adjacent the center of each edge of the bridge-piece and are of greater length and diameter than the lugs 7. These lugs 8 have recesses 9 in their outer faces for the reception of projections 10, formed upon the inner faces of clamping-blocks 11. These clamping-blocks are adapted to be secured by means of bolts 12 to blocks 13, which are arranged between the lugs 8 and have recesses for the reception of said lugs. The rails to be secured upon the bridge-piece have apertures 14 in their base-flanges 15, and these apertures are adapted to receive the lugs 7 and 8. The ends of the rails are thus held between the lugs 8, and after the rails have been placed in position upon the lugs the clamping-blocks 11 and 13 are placed at opposite sides of the lugs 8 and bolted thereon. The projections 10 will engage the recesses 9 and prevent the rails from being removed from the lugs 8. The two ends of the rails will thus be held securely in proper relation to each other and will be prevented from sagging by the webs 5, extending under the bridge-piece. As herein described, it is unnecessary to use fish-plates and the ordinary securing-bolts, and a smooth and durable joint is produced, thereby preventing pounding by car-wheels passing thereover.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. A bridge-piece for railways having par-

allel webs thereunder, parallel series of rail-engaging lugs thereon and integral therewith, and rail-securing devices for engaging said lugs.

5 2. The combination with a bridge-piece having integral webs thereunder, and integral lugs extending from the opposite face of the bridge-piece, said lugs having recesses therein; of oppositely-disposed clamping-blocks
10 upon the lugs and projecting into the recesses, and means for securing the blocks upon the lugs.

3. The combination with recessed ties having transversely-extending grooves therein;
15 of a bridge-piece having its ends seated within the recesses, depending parallel webs integral with the bridge-piece, one of said webs extending into the grooves, rail-engaging lugs integral with and extending from the
20 bridge-piece, and clamping-blocks adapted to engage the lugs.

4. The combination with rails having base-

flanges provided with apertures; of a bridge-piece extending under said rails, lugs upon the bridge-piece and projecting into the ap- 25
ertures, and means for securing the lugs within the apertures.

5. The combination with rails having apertured base-flanges; of a bridge-piece extending under the rails, integral webs there- 30
under, lugs integral with the bridge-piece and extending into apertures in the base-flanges, recessed lugs integral with the bridge-piece and extending into apertures in the base-flanges, clamping-blocks at opposite sides of 35
the recessed lugs, and means for securing the blocks to said lugs.

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

JAMES G. BARRETT.

Witnesses:

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H. H. HEAP.