

No. 687,749.

Patented Dec. 3, 1901.

J. A. HATTER & L. C. ADAMS.
JOINT CHAIR FOR RAILS.

(Application filed Nov. 2, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

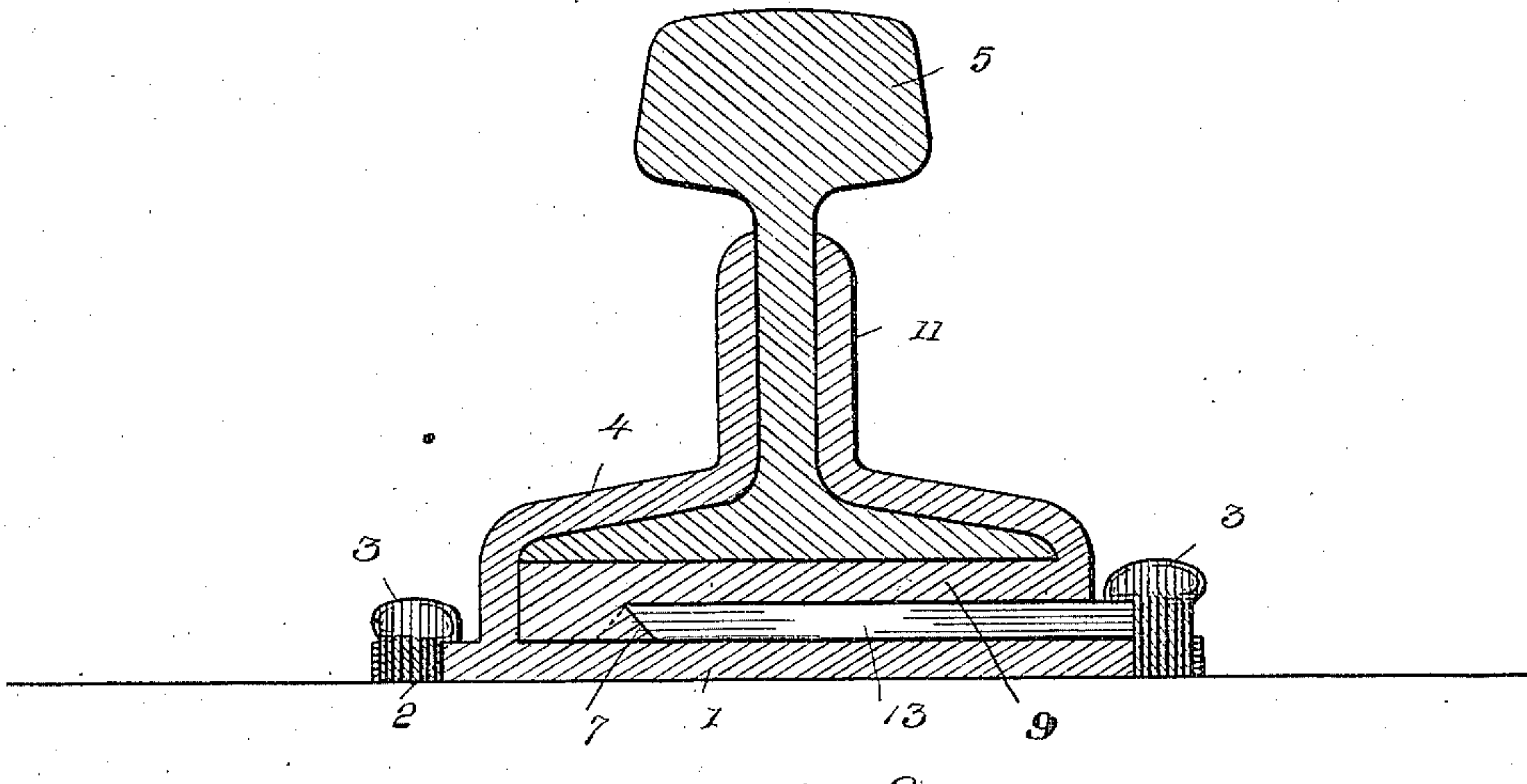


Fig. 2.

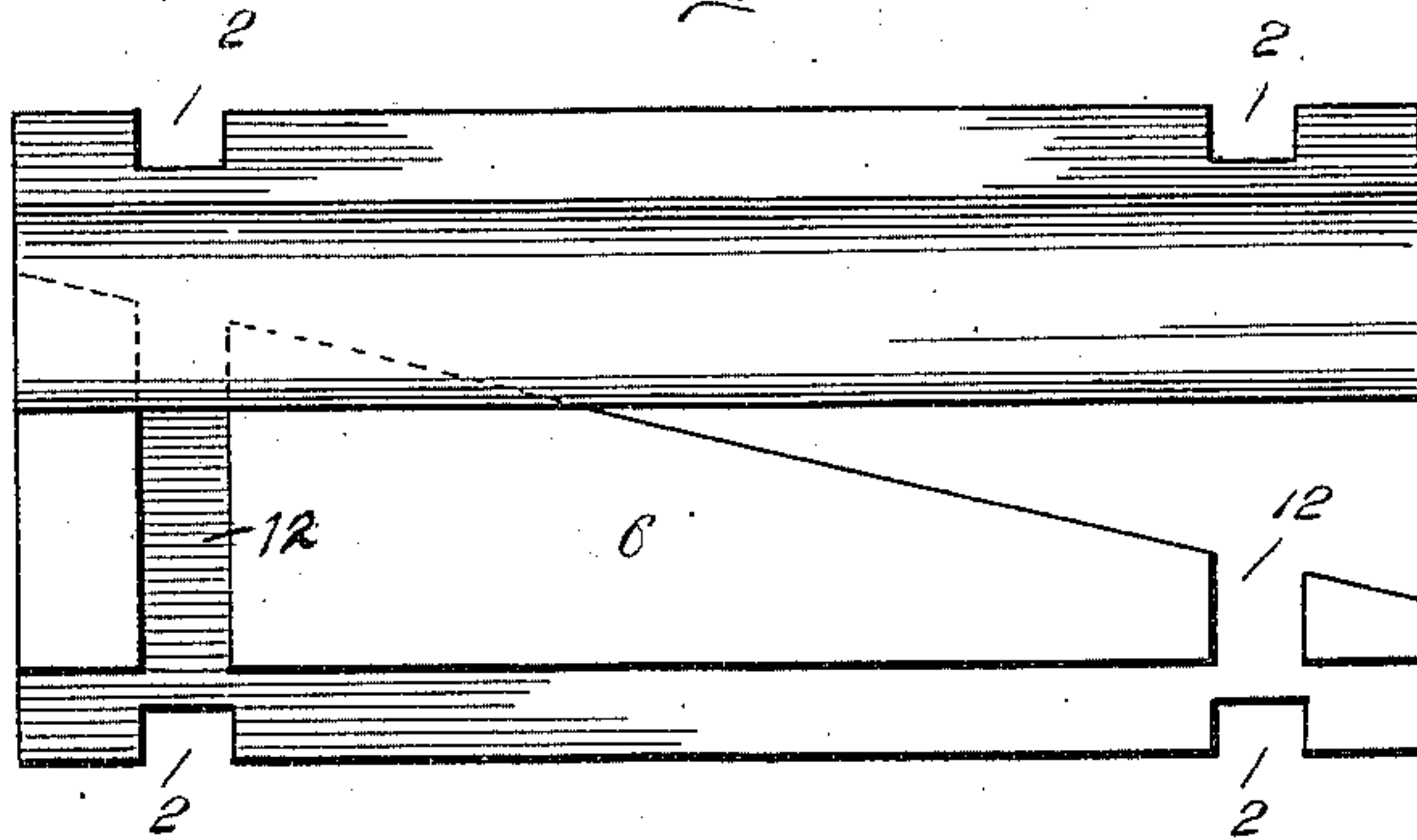


Fig. 3.

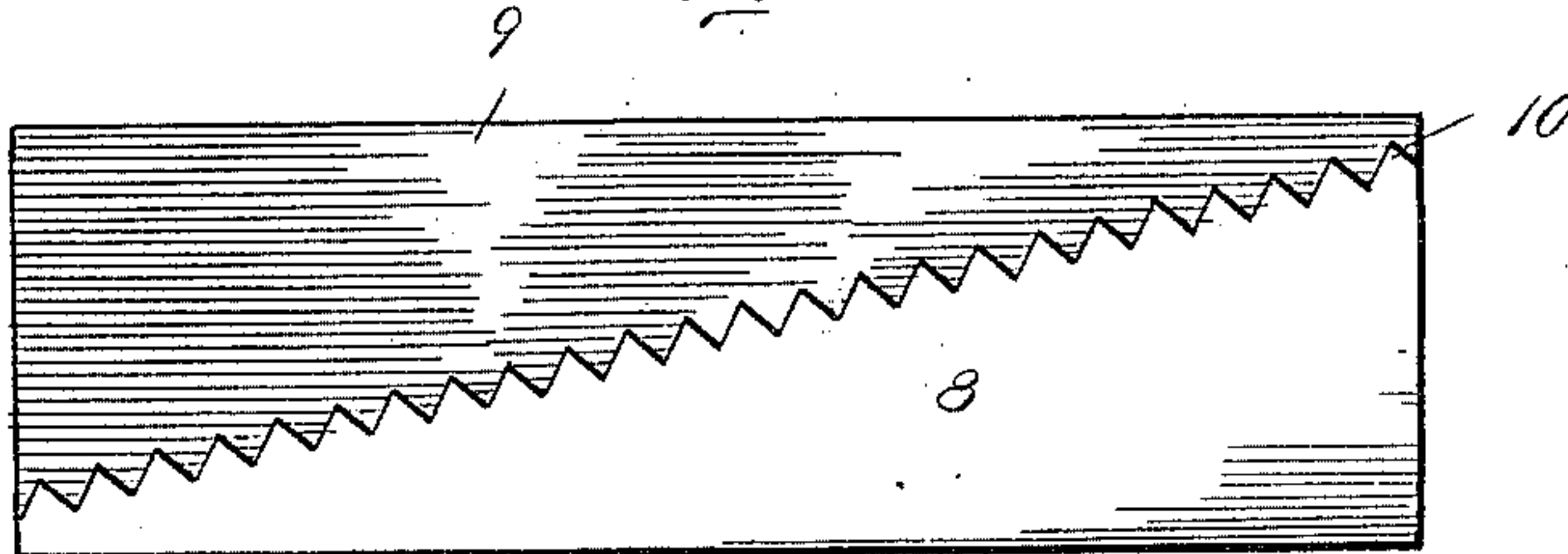


Fig. 4.



Witnesses

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Fig. 5.

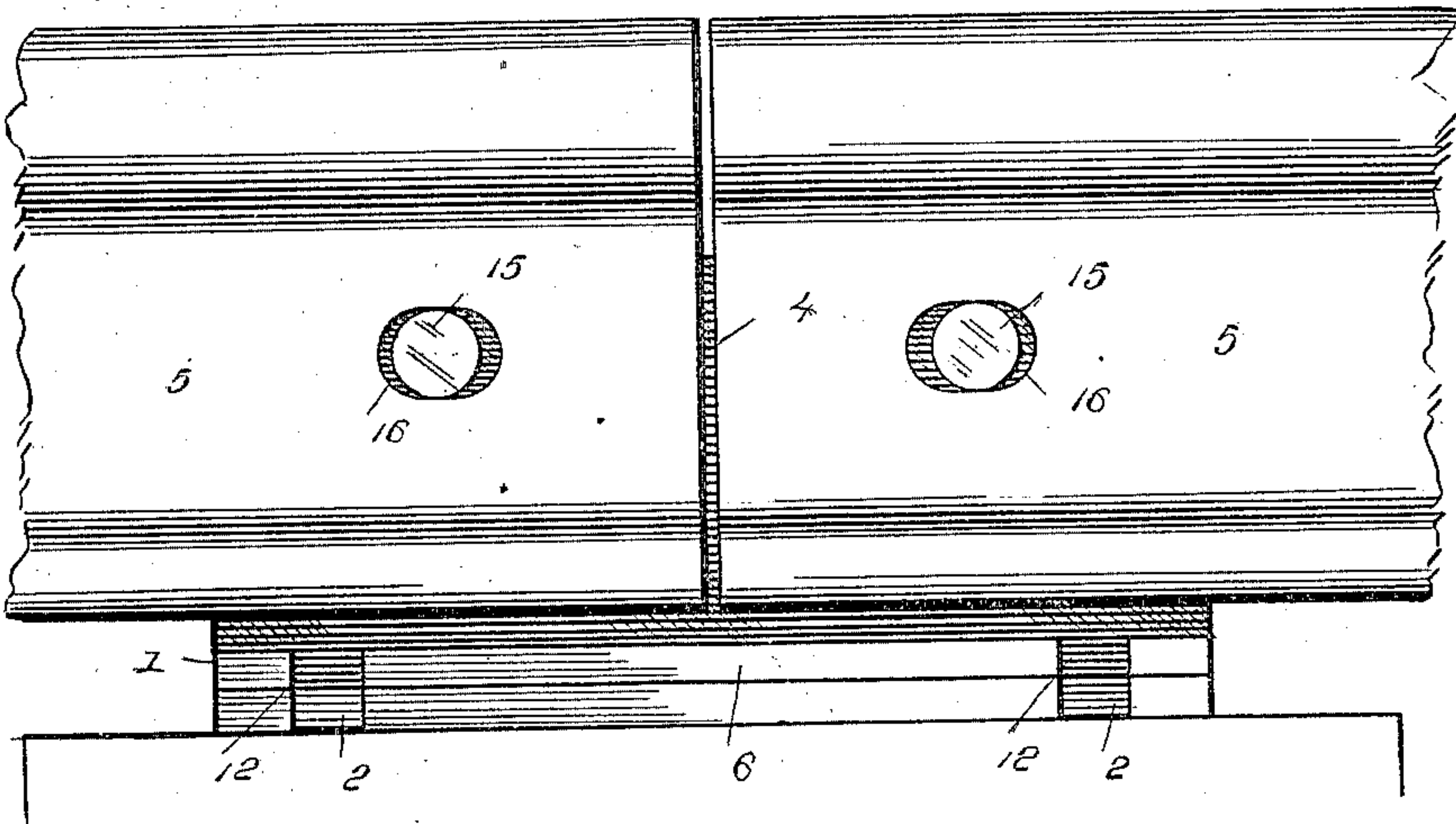
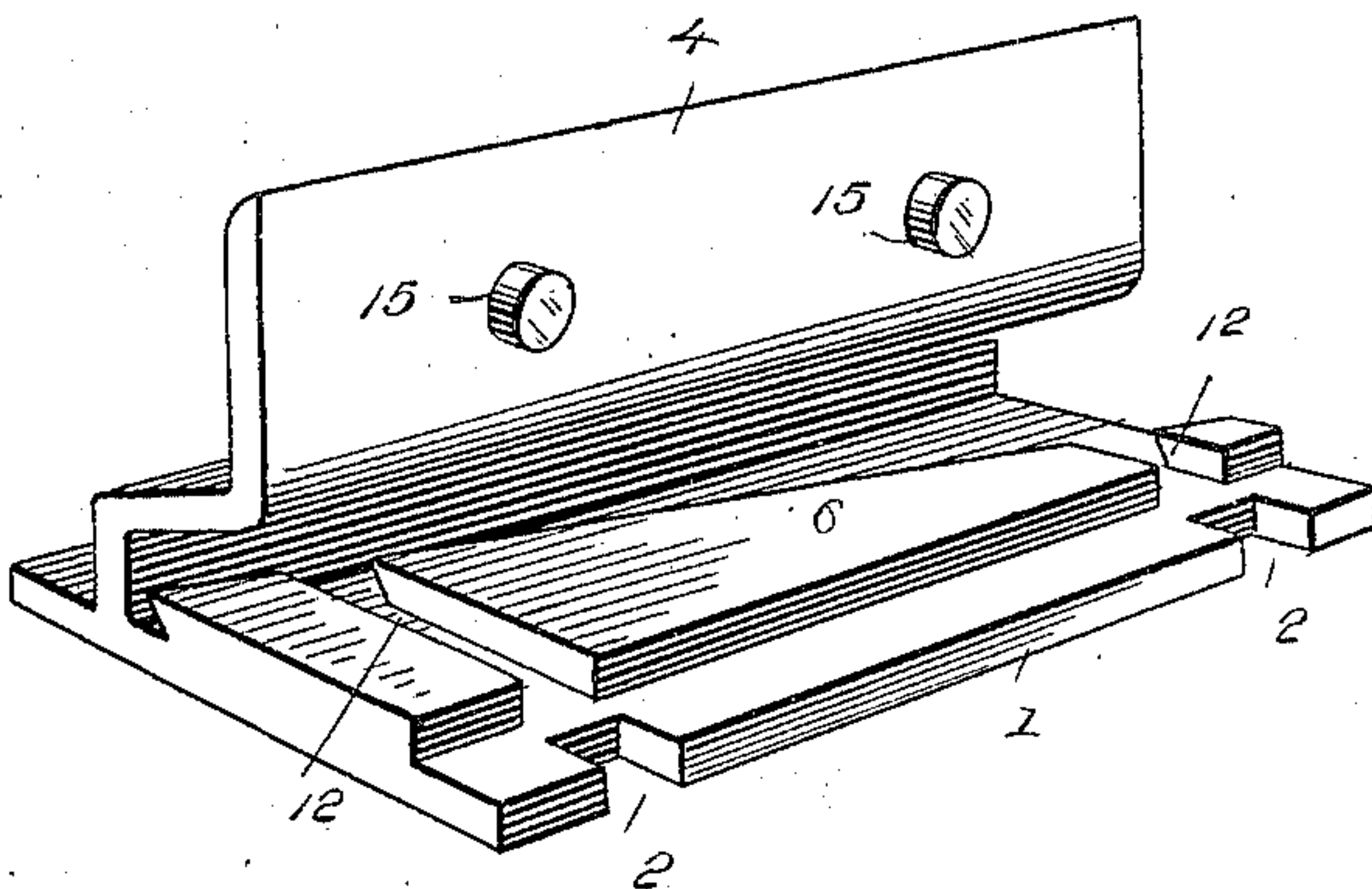


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN ANDREW HATTER, OF VICKSBURG, AND LYNNLY CRAYTON ADAMS,
OF MORTON, MISSISSIPPI; SAID HATTER ASSIGNOR TO SAID ADAMS.

JOINT-CHAIR FOR RAILS.

SPECIFICATION forming part of Letters Patent No. 687,749, dated December 3, 1901.

Application filed November 2, 1900. Serial No. 35,264. (No model.)

To all whom it may concern:

Be it known that we, JOHN ANDREW HATTER, residing at Vicksburg, in the county of Warren, and LYNNLY CRAYTON ADAMS, residing at Morton, in the county of Scott, State of Mississippi, citizens of the United States, have invented new and useful Improvements in Joint-Chairs for Rails, of which the following is a specification.

10 This invention relates to new and useful improvements in joint-chairs for rail-joints of railways; and its primary object is to provide a device of simple construction which obviates the necessity of employing bolts.

15 A further object is to so construct the device that the same may be readily placed in position and firmly bind the ends of rails together.

20 Another object is to provide means of novel construction whereby the parts of the joint-chair may be firmly locked in position when clamped upon the rails.

25 With these and other objects in view the invention consists in providing a joint-chair formed of two sections which are adapted to lie at opposite sides of the adjoining ends of the rails and which extend thereunder. The bases of the sections of the joint-chair are adapted to interlock and are so constructed

30 that the sections will slide toward each other when moved in opposite directions. Novel means are provided whereby the parts may be readily locked in position after being clamped upon the rails.

35 The invention also consists in the novel construction and combination of parts herein-after more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention,

40 and in which—
Figure 1 is a transverse section through the joint-chair. Fig. 2 is a top plan view of one of the parts of the joint-chair. Fig. 3 is a bottom plan view of the remaining section. Fig. 4 is a detail view of a locking-key. Fig. 5 is an elevation, the front section being removed to show a modified construction of the rear section and the connection between the latter and the ends of the rails. Fig. 6 is a

50 perspective view of this rear section.

Referring to said figures by numerals of

reference, 1 is the base of one of the sections of the joint-chair and is provided within each of the sides with recesses 2 for the reception of the securing-spikes 3. One of the jaws 4 55 of the joint-chair extends upward from this base 1 near one edge thereof, and this jaw is so shaped as to fit firmly against the base and the web of the rails 5, which are placed in position within the joint-chair. 60

A substantially triangular raised portion 6 is formed upon the top of the base of the rear section, with one straight edge thereof preferably parallel with the edge of the base farthest removed from the jaw 4. The other inclined straight edge of this triangular raised portion is dovetailed, as shown at 7 in Fig. 1, and is adapted to project over the inclined beveled edge of a triangular pendent portion 8, formed upon the lower surface of the base 70 9 of the second section of the joint-chair. This inclined edge of the portion 8 is provided with teeth 10, as shown in Fig. 3. The second jaw 11 of the joint-chair extends upward over the base 9 at one edge thereof and 75 is also adapted to lie upon the base and fit against the web of the rails placed within the joint-chair.

The raised portion 6, before referred to, is cut away, as at 12, in alinement with the recesses 2, adjacent thereto, and these cut-away portions are adapted to receive horizontal locking-keys 13, having teeth 14 at the end thereof. These teeth engage the teeth 10 upon the base 9 when the keys are forced 80 inward into position, and it is obvious that said keys will be held in position by the securing-spikes 3. When it is desired to secure two rails together, the base 9 is placed with the teeth downward upon the base 1, so that 90 said teeth will lie under the inclined edge 7 of the raised portion 6. It is obvious that the jaws 4 and 11 will then be in the position shown in Fig. 1. The ends of the rails are then placed between the jaws and the base 9 95 slid upon the lower base 1. As the toothed edge 10 is slid along the inclined edge of the raised portion 6 it is obvious that the jaws will be forced together, firmly clamping the rails therebetween, and when suitable pressure thereon has been obtained the keys 13 100 are inserted into the apertures 12, the teeth

thereon engaging the teeth 10, locking the two bases together. The spikes 3 are then placed within the recesses 2 and driven into position, and it will be seen that the keys as well as the joint-chair will be securely held in position thereby.

Where the rails are located upon grades, we preferably employ a modified form of base-section 1, as shown in Fig. 5. Stud 15 extend laterally from the jaw 4 of this casting, and they are adapted to project into elongated slots 16, formed adjacent to the ends of the rails 5. These studs will obviously prevent "running" or "sliding" of the rails, and the slots 16 are long enough to admit of the natural expansion and contraction of the metal. While the studs are, as before stated, desirable where the rails are located upon a grade, they are not deemed necessary upon level tracks.

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

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A joint-chair comprising a section constructed with a base, having a jaw extending upward therefrom and adapted to fit firmly against the base and web on one side and an approximately triangular raised part formed on the base having transverse key-recesses, and a section constructed with a base seating on the raised part of the base of the first-named section having a jaw extending upward therefrom and adapted to fit firmly against the base and web on the other side, and an approximately triangular pendent part having a toothed edge and seating on the base of the first-named section, and keys having teeth and occupying the key-recesses.

2. The combination with a lower base, of a

longitudinally-extending inclined shoulder thereon, a jaw upon said base, a second base, a longitudinally-extending inclined shoulder thereto having teeth adapted to extend under the edge of the shoulder upon the lower base, a jaw upon said second base, and a transversely-extending key detachably secured within the lower base and adapted to engage the teeth and lock the bases together.

3. The combination with a rail, of a lower base, recessed edges to said base, an inclined shoulder upon the base, a jaw to said base adapted to bear upon one side of the rail, a second base below the rail and upon the lower base, an inclined shoulder thereto, teeth to the shoulder extending under the edge of the rail upon the lower base, a jaw to said second base adapted to bear upon the opposite side of the rail, a toothed key adapted to project through the shoulder of the lower base and engage the teeth and thereby lock the bases together, and spikes for holding the key and bases in position.

4. The combination with rails having apertures within their adjacent ends, of a lower base, recessed edges to said base, an inclined shoulder upon the base, a jaw to said base adapted to bear upon one side of each of the rails, studs upon the inner face of said jaw adapted to extend into the apertures within the rails, a second base below the rail and upon the lower base, an inclined shoulder thereto, teeth to the shoulder extending under the edge of the rails upon the lower base, a jaw to said second base adapted to bear upon the opposite sides of the rails, a toothed key adapted to project through the shoulder of the lower base and engage the teeth and thereby lock the bases together, and spikes for holding the key and bases in position.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN ANDREW HATTER.

LYNNLY CRAYTON ADAMS.

Witnesses:

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