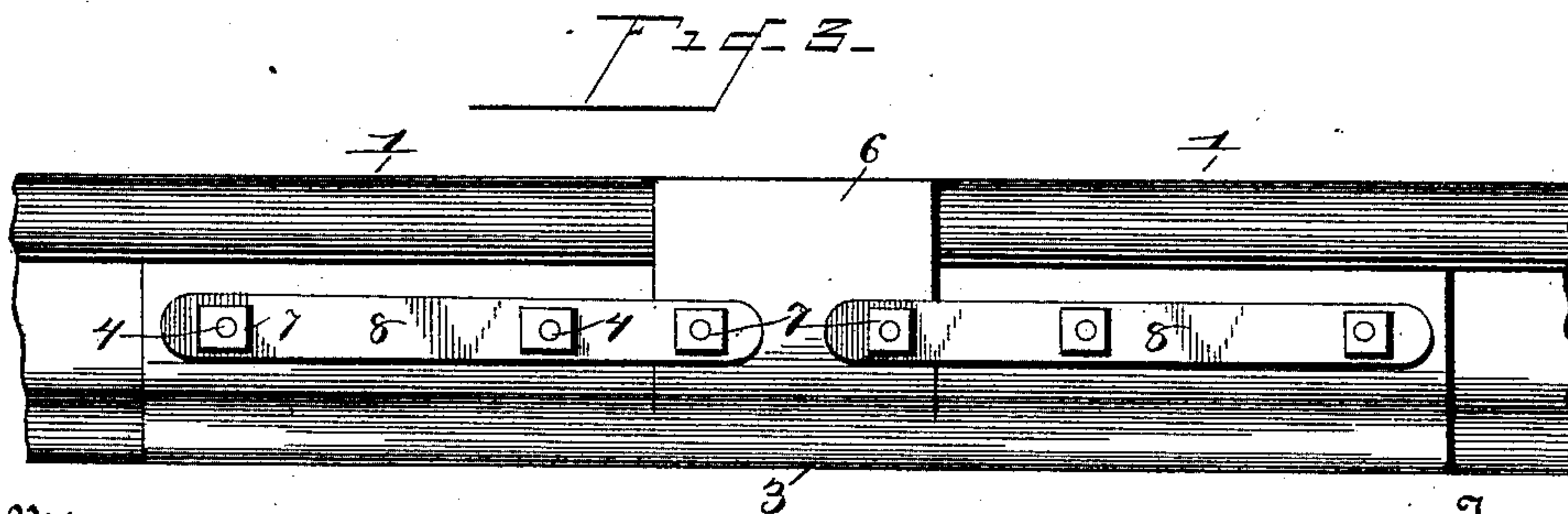
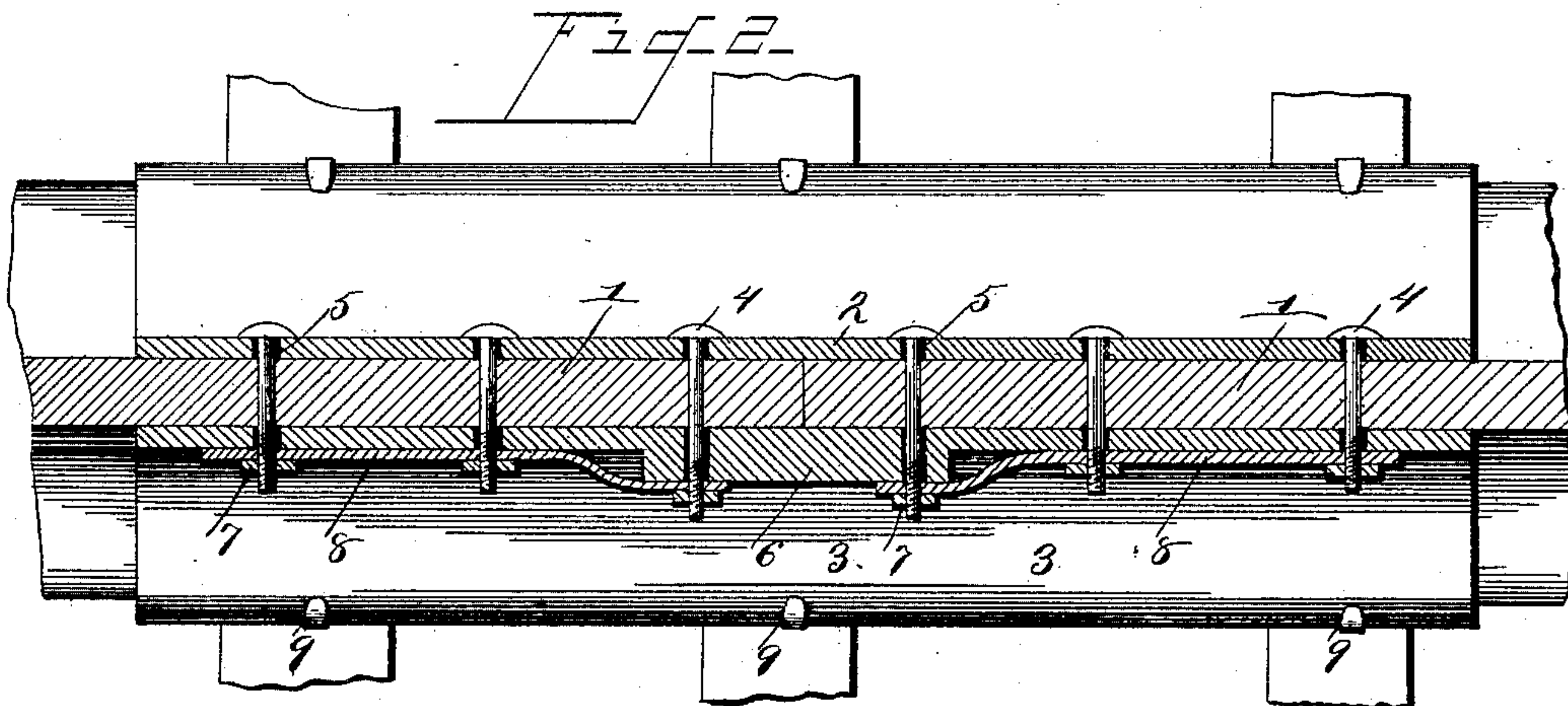
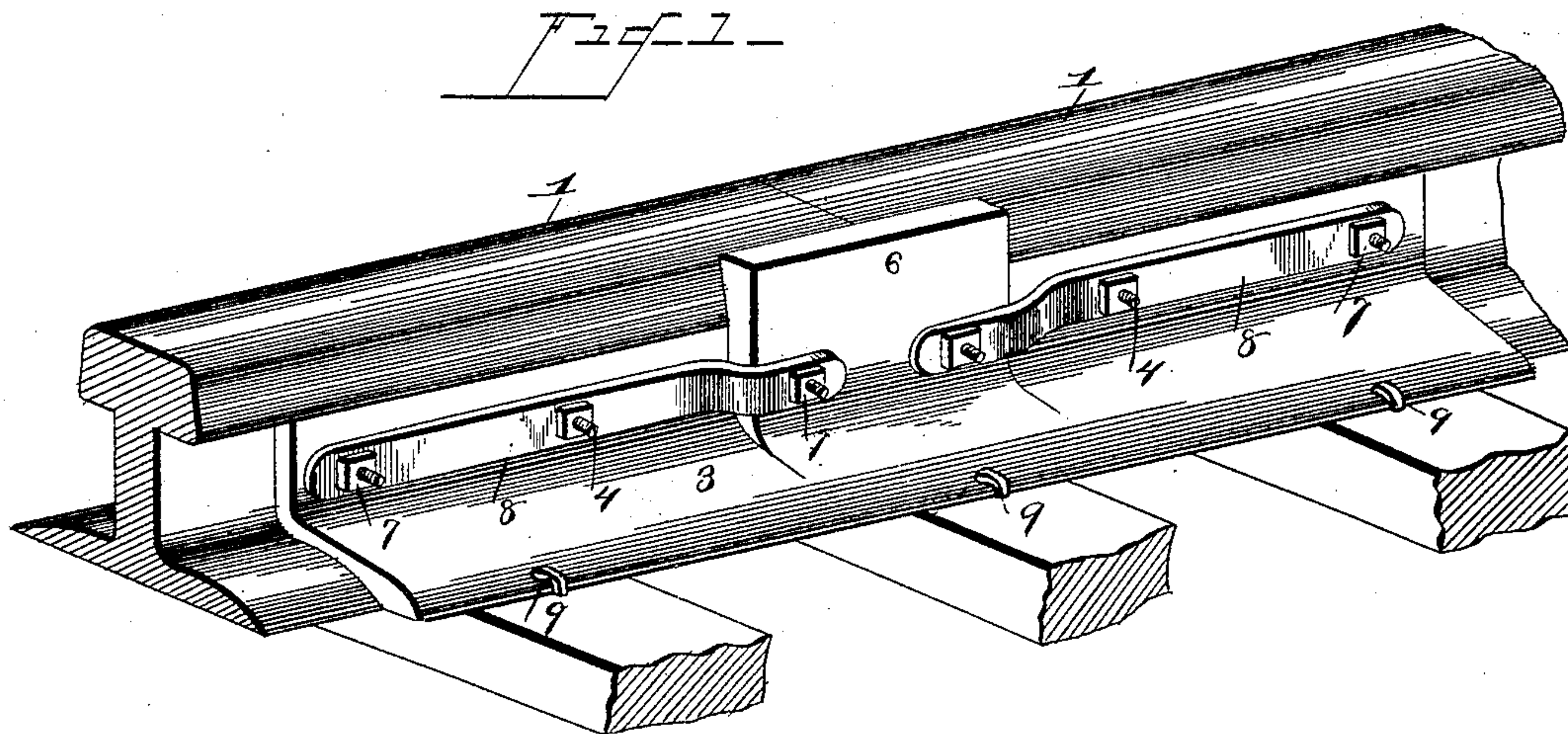


(No Model.)

R. M. AGEE & E. LANE.
RAILROAD JOINT.

No. 430,052.

Patented June 10, 1890.



Witnesses

Geo. C. French.

St. J. Remy

Inventors

Reuben M. Agee.
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By their Attorneys

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UNITED STATES PATENT OFFICE.

REUBEN M. AGEE AND EDWARD LANE, OF CANTON, MISSOURI.

RAILROAD-JOINT.

SPECIFICATION forming part of Letters Patent No. 430,052, dated June 10, 1890.

Application filed January 31, 1890. Serial No. 338,710. (No model.)

To all whom it may concern:

Be it known that we, REUBEN M. AGEE and EDWARD LANE, citizens of the United States, residing at Canton, in the county of Lewis and State of Missouri, have invented a new and useful Railroad-Joint, of which the following is a specification.

The invention relates to improvements in railroad-joints.

10 The object of the present invention is to provide a railroad-joint of simple and inexpensive construction adapted to carry the wheels of a train over the adjacent ends of rails without jar and without detriment to the rails, and capable of permitting the expansion and contraction of the rails without liability of weakening the parts.

15 A further object of the invention is to securely prevent the accidental unscrewing of the nuts, ordinarily caused by the passage of trains over the rails.

20 The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

25 In the drawings, Figure 1 is a perspective view of a rail-joint constructed in accordance with this invention. Fig. 2 is a horizontal longitudinal sectional view. Fig. 3 is a side elevation.

Referring to the accompanying drawings, 1 1 designate the ends of adjacent rails, which are connected together by fish-plates 2 and 3, that are secured to the rails by bolts 4, that pass through transverse openings through the rails and the fish-plates, and the bolt-openings 5 of the fish-plates are elongated and adapted to permit a limited movement of the bolts longitudinally along the fish-plate and the rails to allow for the creeping of the latter and prevent the rails being torn from their fastenings during contraction and expansion. The fish-plate 3 is provided intermediate of its ends with a bridge portion 6, that has its upper face flush with the tread of the rails, and arranged at the extreme ends of the rails and forming a bridge

to carry the wheels of a train over the ends without jar and detriment to the rails. The nuts 7 of the bolts are prevented from becoming accidentally unscrewed by spring-plates 8, each of which is designed to be secured to three bolts and bear against the nuts thereof, and by frictional contact therewith securely lock the same. The spring-plates are slightly curved and are provided with perforations to receive the bolts, and when the nuts are screwed home the ends of the spring-plates are pressed in, thereby causing the spring-plates to exert a pressure upon the nuts sufficient to lock them, and by pressing the ends of the spring-plates inward the central portion is forced outward and against the middle nut, thereby securely locking the latter. The fish-plates are provided in their outer edges with openings 9, through which pass the spikes that secure the fish-plates to the ties, and the rails near their ends are not spiked to the ties, which arrangement leaves them free to expand and contract without loosening the fastenings. The adjacent ends of the springs or plates 8 lap over upon the bridge portion 6 and are secured thereto by the central pair of bolts.

Having described our invention, what we claim is—

In a rail-joint, the combination of the rails, the fish-plates secured to the tie, one of said plates being provided with the bridge portion 6, arranged flush with the tread of the rail, the bolts passing through the fish-plates and the rail, and the slightly-curved spring-plates having their adjacent ends lapping over upon the bridge portion, each spring-plate being secured to three bolts and adapted to engage the nuts thereof, substantially as and for the purpose described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

REUBEN M. AGEE.
EDWARD LANE.

Witnesses:

LEANDER T. HENDRICKS,
WILLIE A. JACKSON.