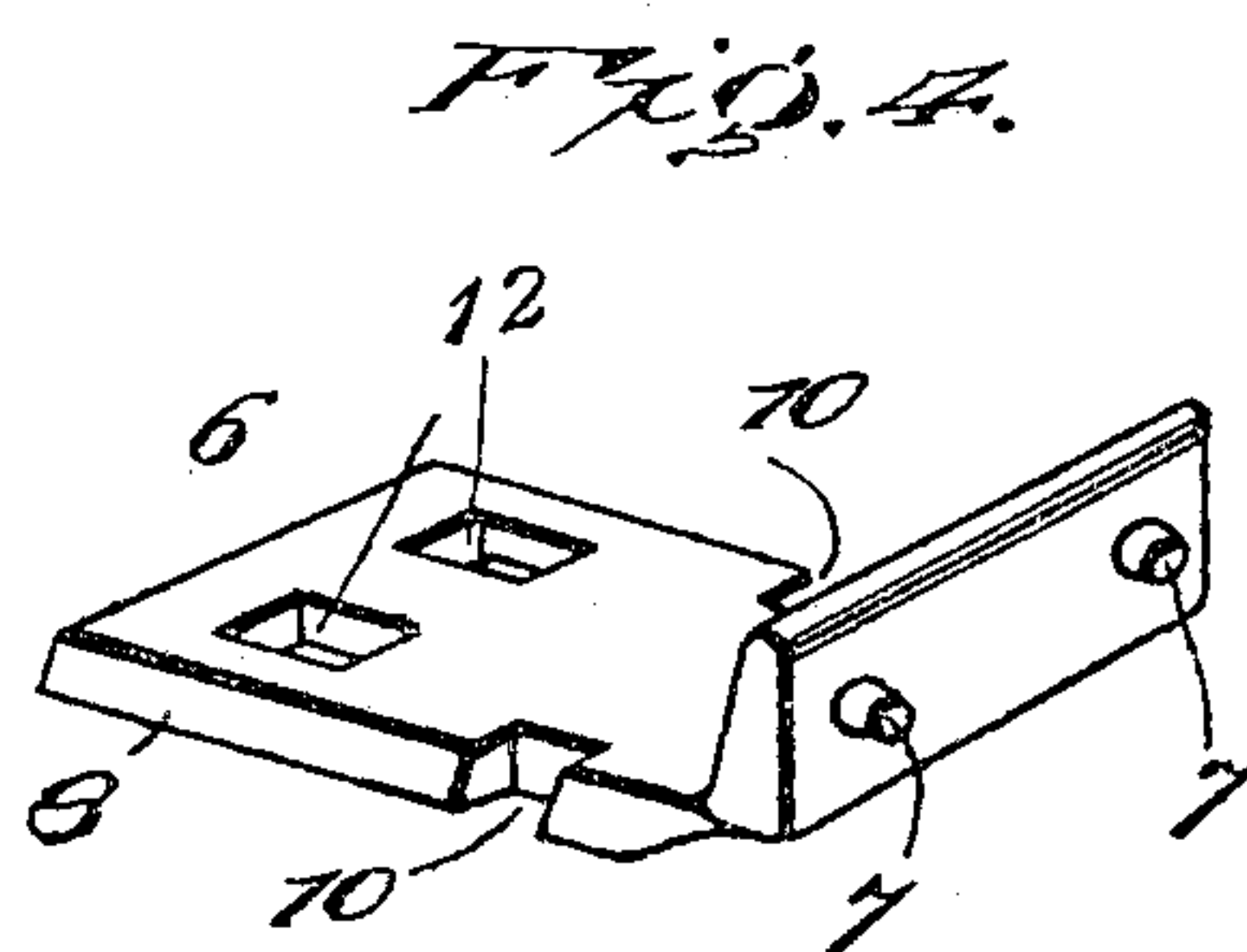
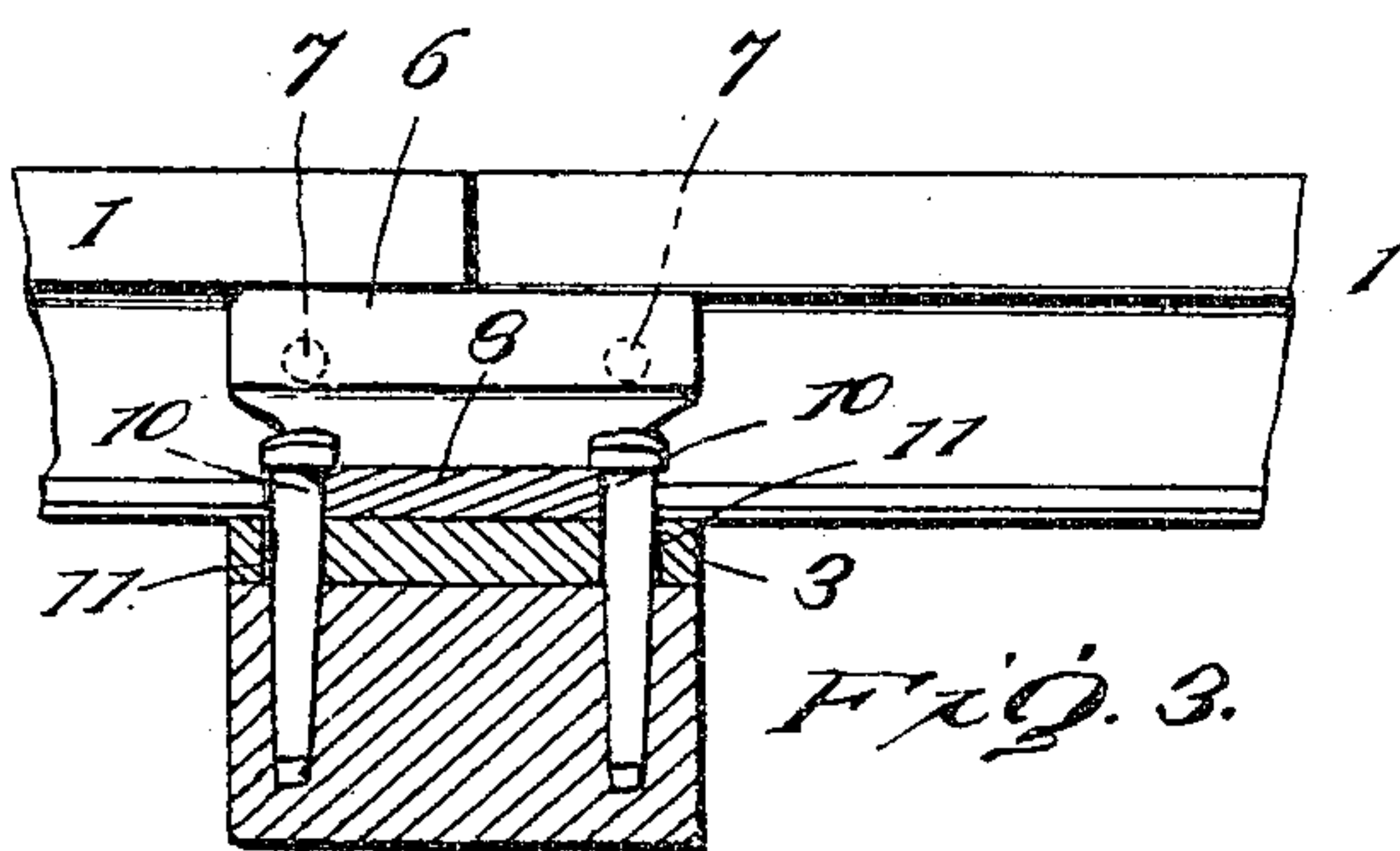
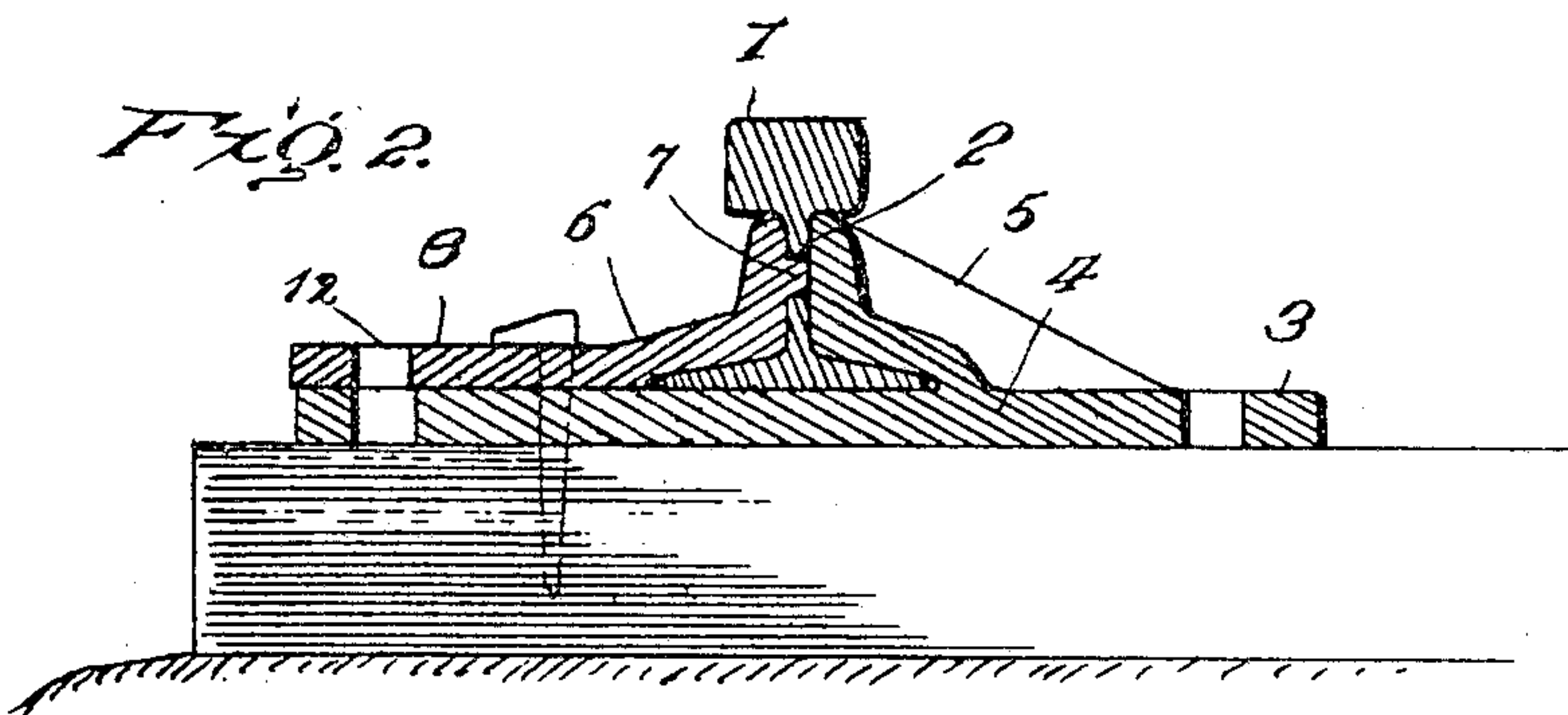
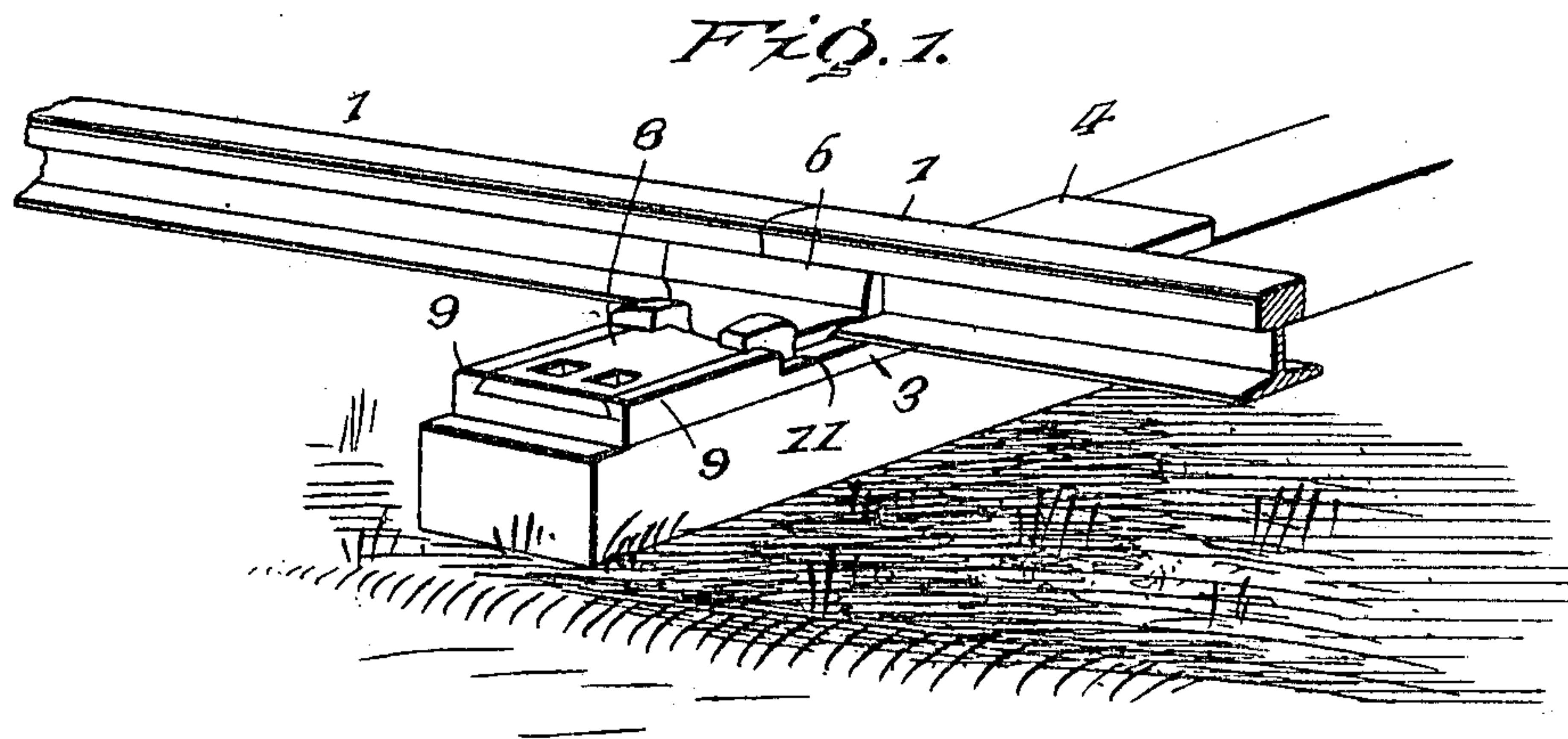


No. 819,062.

PATENTED MAY 1, 1906.

F. A. HAPTONSTALL.
RAIL JOINT.

APPLICATION FILED JULY 19, 1905.



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UNITED STATES PATENT OFFICE.

FRANK A. HAPTONSTALL, OF COVINGTON, VIRGINIA.

RAIL-JOINT.

No. 819,062.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed July 19, 1905. Serial No. 270,373.

To all whom it may concern:

Be it known that I, FRANK A. HAPTONSTALL, a citizen of the United States, residing at Covington, in the county of Alleghany and State of Virginia, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, and more particularly to that type which employ a chair to prevent movement of the abutting rail ends.

It has for its object to produce a device of this character which will reduce to a minimum the lateral and vertical movement of the rail ends and which will therefore prolong the life of the rolling-stock and reduce the expense of track repairs.

A further object is to construct a rail-joint which will do away with the use of bolts and which will at the same time be simple and durable in construction.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of the joint, showing the same applied. Fig. 2 is a transverse sectional view through the chair. Fig. 3 is a sectional view showing the method of locking the movable portion of the chair in position. Fig. 4 is a detail perspective view of the parts.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numeral 1 designates the abutting rail ends, which are provided with openings 2 in the web thereof. The chair comprises a base 3 and two wings adapted to embrace the web and base of the rail, one of which, 4, is made integral with the base and is reinforced by a rib 5. The opposite wing 6 is provided with lugs or projections 7, which engage the openings 2 in the webs of the rail to prevent longitudinal movement of the same, and is formed with a plate 8, the sides of which are beveled and which operates in a dovetailed slot formed by shoulders 9, projecting from the chair-base 3. This wing 6 is locked in position by spikes which pass through corresponding openings in the plate 8 and the base 3. The sides of the plate 8 are provided with notches 10, which register with openings 11

in the base-plate 3, said openings being so placed that when the spikes are driven there-through they will bear partly against the shoulders 9 and partly against the notches 10. It will thus be understood that in order for the plate 8 to slide outward it would be necessary for the same to shear through the spikes.

In operation it is simply necessary to slide the wing 6 outward before the spikes have been applied in order to place the rail ends in position. The plate 8 can then be pushed back, so that the lugs 7 pass through the openings 2 in the rail ends and the device is locked in position by driving the spikes.

The openings 12 in the plate 8 are preferably placed so that the inner side projects slightly over the opening in the base 3, as seen in Fig. 2. Then when the spikes are driven through these openings they act like a wedge and force the wing 6 tightly against the rails, so as to form a rigid joint. It must also be understood that while I have illustrated the base 3 as only being of a sufficient width to fit upon one tie it may be made so as to reach across two ties, if required.

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

1. In combination a rail-chair comprising a base having an integral abutment to engage with one side of a rail resting upon the chair, and having spaced integral guides upon the end portion remote from said abutment, a sliding abutment mounted upon the base between the said guides and interlocking at its edges therewith and adapted to engage with the opposite side of the rail, the base of the sliding abutment having notches in its edges to register with vertical openings in the base of the chair at the inner ends of the aforesaid guides, and spikes passed through the openings in the chair-base at the inner ends of the guides and abutting thereagainst and seated in the registering notches of the sliding-abutment base.

2. In a rail-joint the combination of a base-plate having an integral abutment and integral guides, companion rails having their adjacent ends resting upon the base-plate and engaged by the said abutment thereof and provided in their webs with transverse openings, a sliding abutment having lugs projected therefrom and entering the openings in the webs of the rail ends and having the edge portions of its base interlocking with the said guides between which the sliding abutment

is fitted, the base of the sliding abutment having notches in opposite edges to register with vertical openings in the base-plate at the inner ends of the aforesaid guides thereof, and
5 spikes passed through the openings of the base-plate at the inner ends of said guides thereof and abutting against the inner extremities of the guides and seated in the reg-

istering notches of the sliding-abutment base, substantially as set forth. 10

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

FRANK A. HAPTONSTALL. [L. S.]

Witnesses:

C. R. KARNES,

J. E. ROLLINS.