

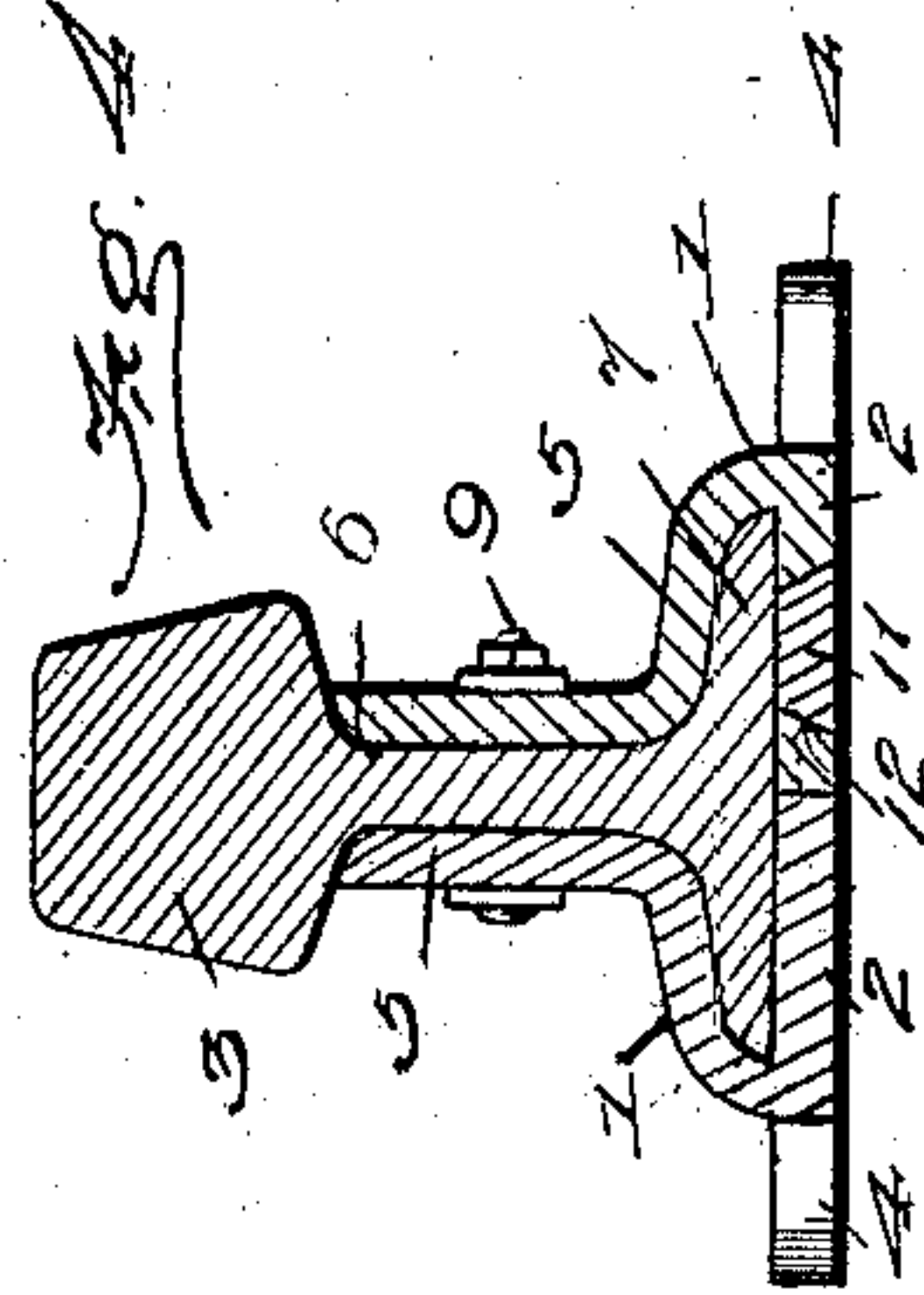
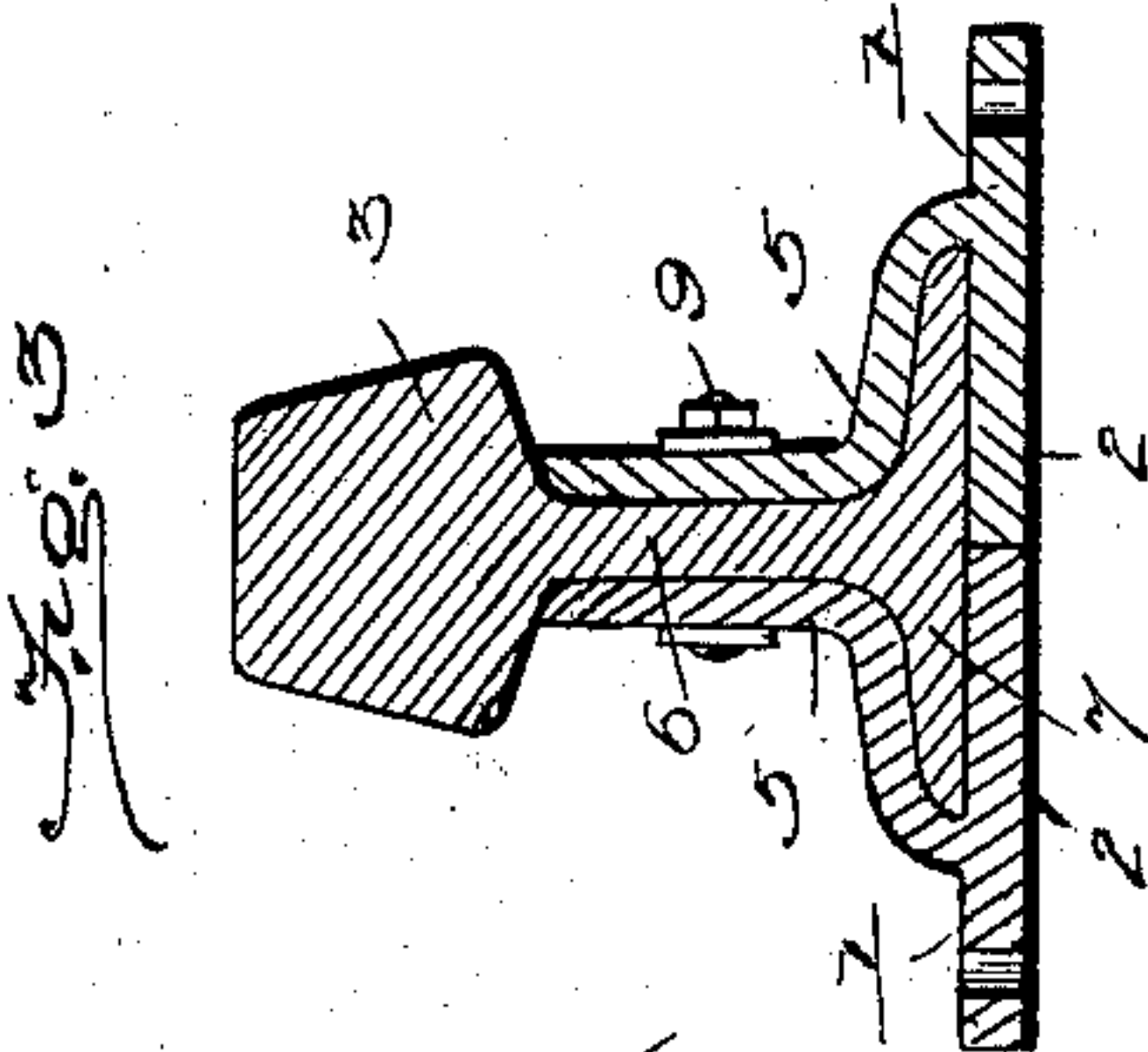
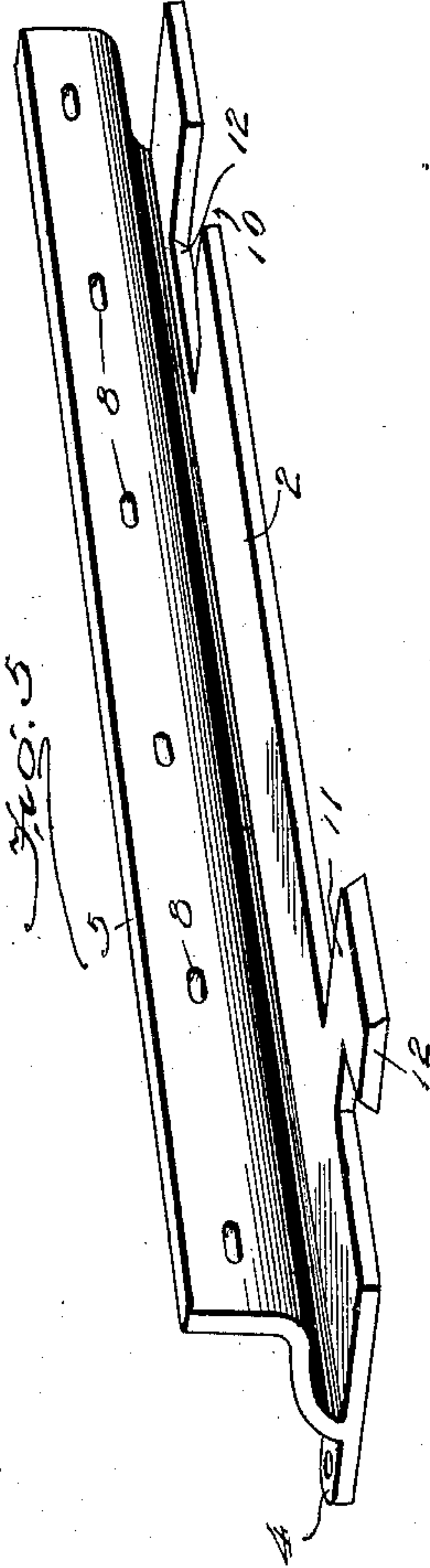
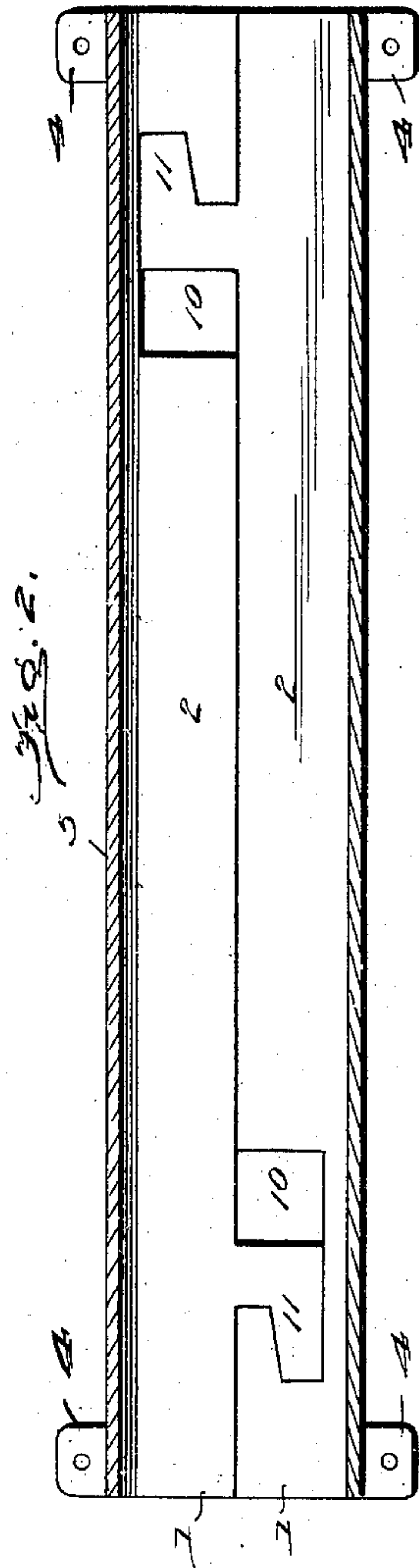
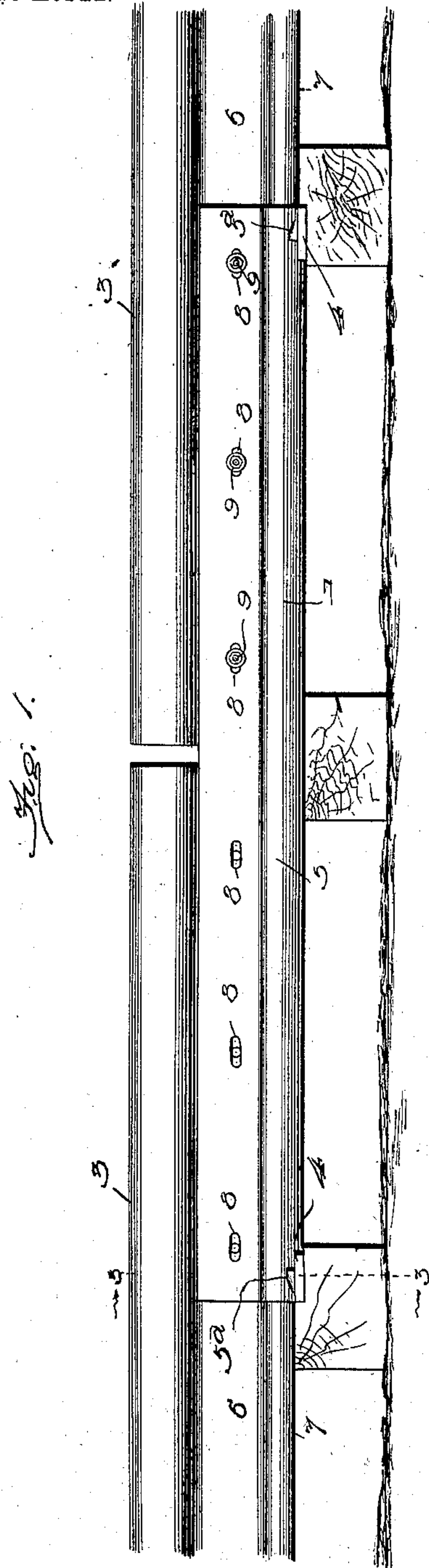
No. 746,550.

PATENTED DEC. 8, 1903.

W. A. MOFFAT.
RAIL JOINT.

APPLICATION FILED AUG. 12, 1901. RENEWED MAY 14, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER A. MOFFAT, OF MORRISON, COLORADO.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 746,550, dated December 8, 1903.

Application filed August 12, 1901. Renewed May 14, 1903. Serial No. 157,193. (No model.)

To all whom it may concern:

Be it known that I, WALTER A. MOFFAT, a citizen of the United States, residing at and whose post-office address is Morrison, in the county of Jefferson and State of Colorado, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, the object in view being to provide a simple, efficient, reliable, and easily-applied device comprising oppositely-located splice-plates having an interlocking connection with each other whereby a perfectly level seat is formed for the abutting ends of the rails and a solid vise-like clamp provided for clamping both of the flanges of the rails. The splice plates or bars are so constructed and arranged that the interlocking connection between the same is established without resort to bolts and outside fastening devices, and the necessary expansion and contraction of the rails is also provided for.

The sections of the device are the counterparts of each other, so that only one form of pattern is necessary.

The device also provides a wide bearing and wearing surface, so as to prevent mutilation of the ties, and in view of the fact that the plates or bars are preferably of wrought-iron there is no danger of fracture.

With the above and other objects in view the invention consists in a rail-joint embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated, and claimed.

In the drawings, Figure 1 is a side elevation of the adjacent ends of a pair of rails, showing the splice-bars applied thereto. Fig. 2 is a longitudinal section through the joint, omitting the rails. Fig. 3 is a cross-section through Fig. 1, taken on the line 3 3 of said figure. Fig. 4 is a similar cross-section taken in line with the interlocking tongues and opening, and Fig. 5 is a detail perspective view of one of the splice-bars looking toward the inner side thereof.

Like numerals of reference denote like parts in all figures of the drawings.

In carrying out the present invention I employ a pair of splice bars or plates 1, each of which is the counterpart of the other. Each

splice-bar comprises a base portion 2, upon which the base of the rail 3 rests, as clearly shown in Figs. 3 and 4, said base being provided at its opposite ends with outwardly-projecting lugs 4, having openings therein for the reception of ordinary spikes 5^a, whereby the splice-bars are securely fastened upon the ties. Each splice-bar comprises an outwardly-extending body portion or flange 5, which is curved in ogee form to correspond with the curvature of the outer surface of the web 6 and base-flange 7 of the rail at one side, as shown in Figs. 3 and 4, said flange 5 being provided with elongated slots 8 to receive the usual bolts 9, by means of which the adjacent ends of the rails are connected to the splice-bars. The inner edge of the base is provided near one end with a bayonet-opening 10, comprising a transverse and longitudinal slot, and at the opposite end with a projecting bayonet-tongue 11. The edges of both the opening and tongue are dovetailed or inclined, as illustrated at 12, so that when the tongue of one splice-bar is slid longitudinally in the opening of the adjacent splice-bar the two splice-bars will not only be prevented from moving laterally with relation to each other, but will also be prevented from moving vertically.

In operation the splice-bars are introduced laterally to the rails by sliding the base portions 2 thereof under the base of the rail from opposite sides until the bayonet-tongues of each splice-bar enter the transverse slot of the bayonet-opening of the oppositely-located splice-bar. After this is effected one of the splice-bars is moved longitudinally with respect to the other splice-bar, thereby bringing the engaging shoulders of the bayonet-opening into contact and engagement, as illustrated in the plan-section, Fig. 2. After this is accomplished the fastening-spikes are driven through the lugs 4 in a manner which will be readily understood.

It will also be noticed that the tongues 11 are made tapering, the object in view being to draw the splice-bars together as they are moved longitudinally with relation to each other. In this way the splice-bars are adjustable to rails of any size and may be instantly applied.

From the foregoing description it will be seen that after the splice-bars are properly

adjusted to the rails an effective and reliable interlocking engagement is obtained between the base portions of the splice-bars which will prevent both vertical and lateral movement, 5 while longitudinal movement of the said bars is prevented by means of the spikes which are driven into the ties. A perfectly-level seat or rest is provided for the adjacent ends of the rails, and a solid vise-like clamp is 10 provided for engaging the base-flanges of the rails. The rail-joint is boltless and at the same time provides for the necessary expansion and contraction of the rails. A broad base is also provided, adapted to rest upon 15 the ordinary wooden or other ties. The two parts of the joint are also the counterpart of each other, and any two splice-bars may be engaged with each other to form a complete joint.

20 Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A rail-joint comprising plates each of which is provided with base portions having at opposite ends lugs with openings therein, and 25 curved flanges made in ogee form rising upward from the base-plates and having elongated slots therein, the inner edges of the base-plates provided at one end with an opening consisting of a longitudinal and trans- 30 verse slot, the opposite end of the plate having a tapering tongue and the edges of said longitudinal and transverse slots and said tongues being beveled or inclined whereby 35 when the two plates are connected together lateral and vertical movement is prevented, substantially as specified.

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

WALTER A. MOFFAT.

Witnesses:

JACOB SCHNEIDER,
ERWIN MCCALL.