

No. 695,768.

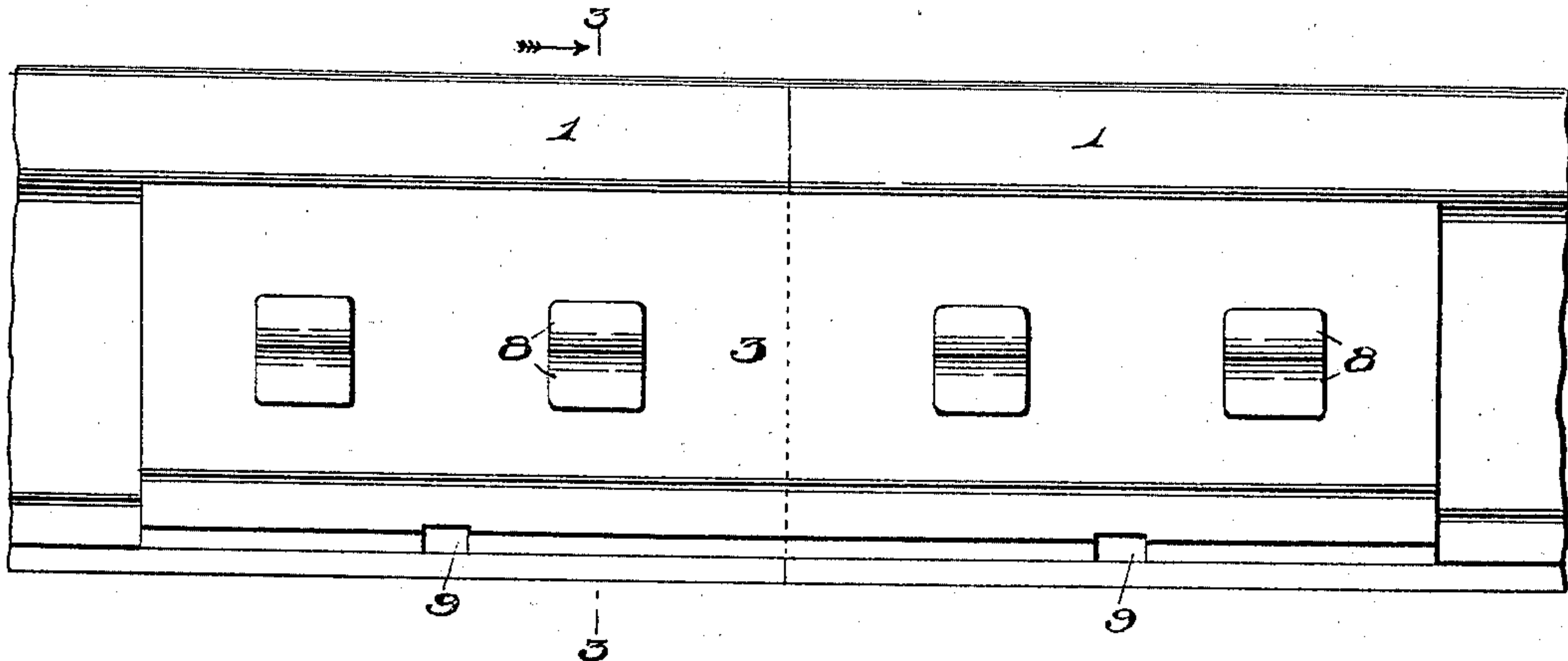
Patented Mar. 18, 1902.

O. M. STEWART.  
RAIL JOINT.

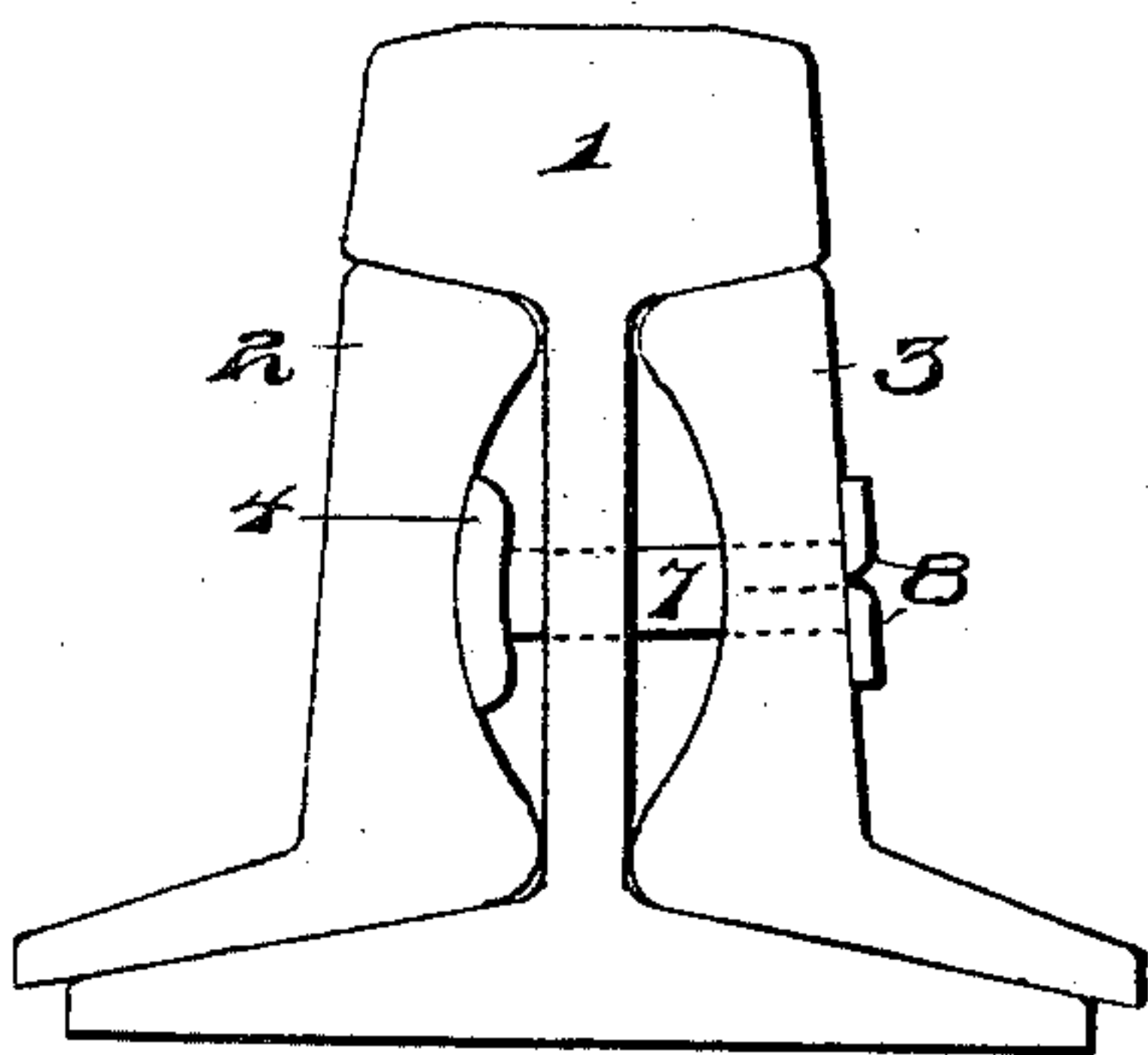
(Application filed Aug. 3, 1901.)

(No Model.)

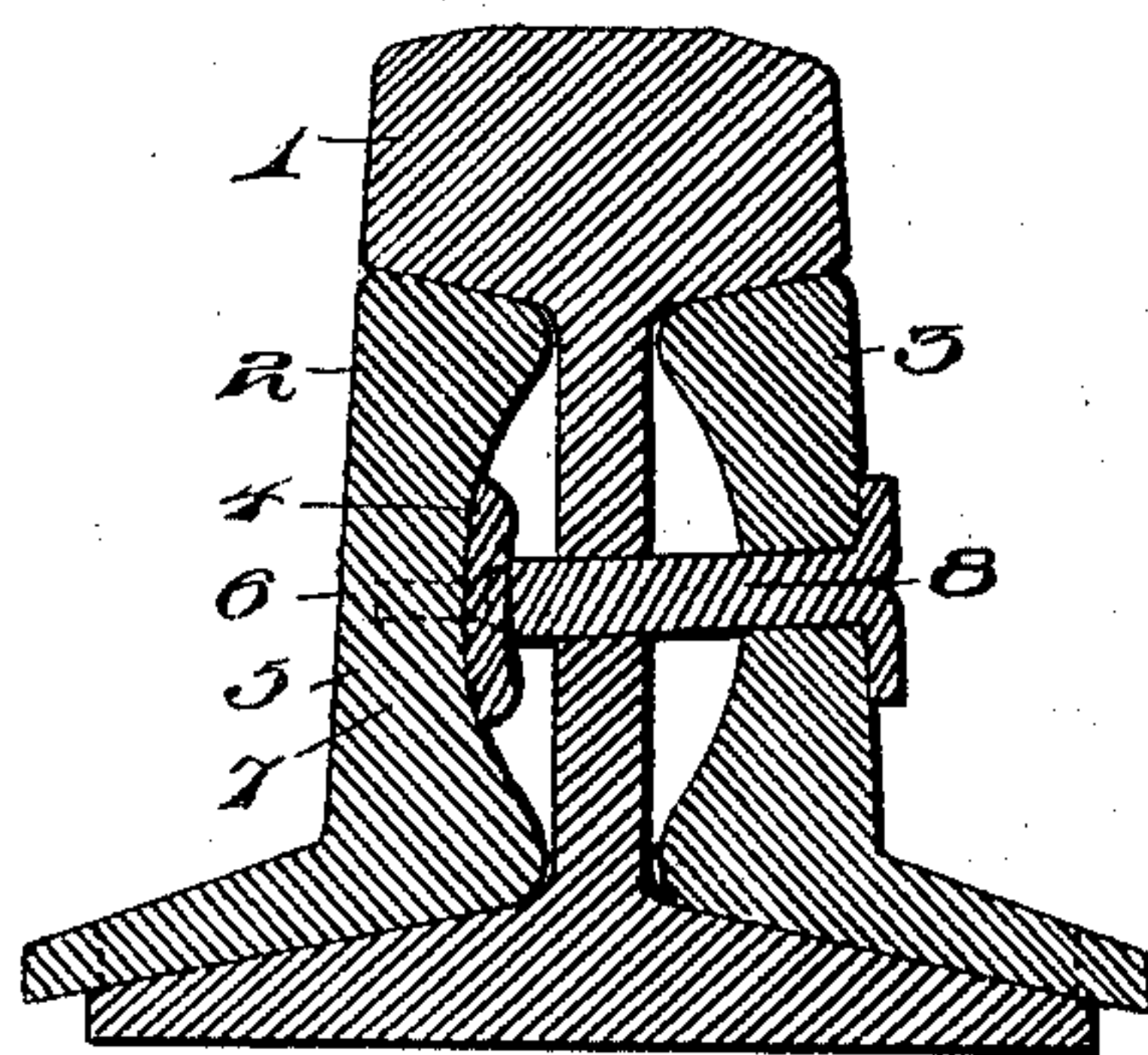
*Fig. 1.*



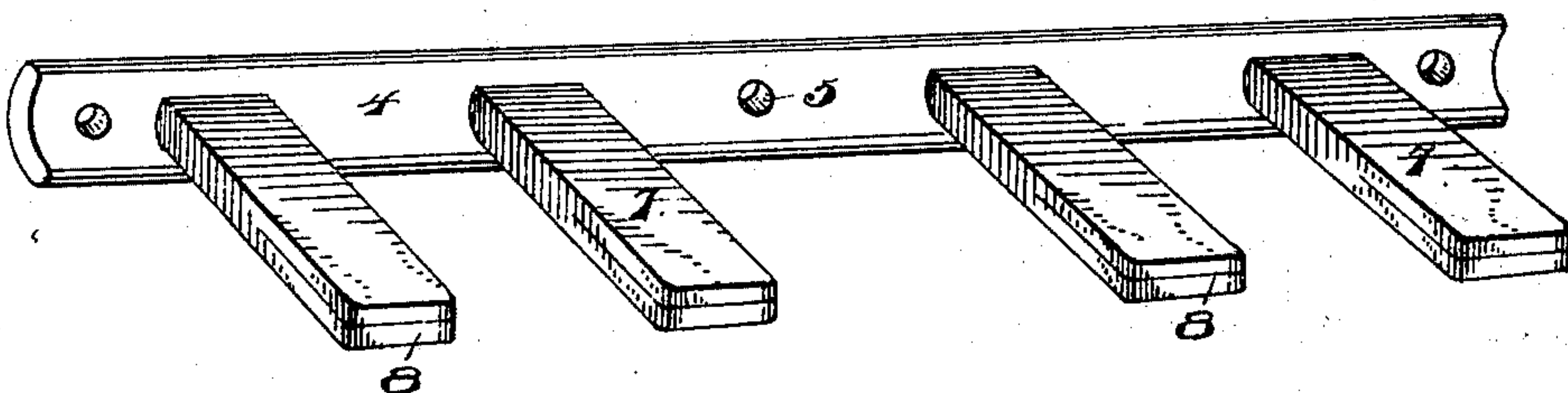
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:

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# UNITED STATES PATENT OFFICE.

OMERT M. STEWART, OF PITTSBURG, PENNSYLVANIA.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 695,768, dated March 18, 1902.

Application filed August 3, 1901. Serial No. 70,733. (No model.)

*To all whom it may concern:*

Be it known that I, OMERT M. STEWART, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in rail-joints, and relates more particularly to that class wherein the use of nuts and bolts is entirely dispensed with.

15 Briefly described, the invention consists of fish-plates, one of said fish-plates carrying a locking-plate having extensions that will engage the opposite fish-plate. This locking-plate may be formed integral with the fish-plate, or it may be attached thereto, as shown in the drawings.

20 The invention further consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

25 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

30 Figure 1 is a side elevation of two sections of rails having my improved rail-joint attached thereto. Fig. 2 is an end view of the same. Fig. 3 is a vertical sectional view taken on the line 3 3 of Fig. 1 looking in the direction of the arrow. Fig. 4 is a perspective view of the locking-plate carrying a series of extensions.

35 In these drawings the reference-numeral 1 indicates the rails, and 2 indicates the fish-plate carrying the locking-plate. 3 represents the opposite fish-plate.

40 The reference-numeral 4 represents a locking-plate having arranged therein a number of openings 5, adapted to receive bolts 6 for securing the same, and 7 indicates the extensions formed integral with the locking-plate 4 and extend through the web of the rail. The ends of the said extensions 7 are split as indicated at 8, these ends being turned upwardly or downwardly, forming a locking connection between the fish-plates and rail. The said

extensions are placed at an angle to the locking-plate 4. The opening in the web of the rail, as well as in the opposite fish-plate through which the extensions 7 extend, are also placed at an angle to obtain certain advantages in the locking connection, as will be readily apparent. These extensions 7 may be inclined upwardly at an angle or downwardly at an angle, as desired.

65 The reference-numeral 9 indicates openings formed in the base of the fish-plate to receive spikes or other suitable fastening means.

The manner of operating my improved rail-joint, as well as the many advantages obtained thereby, will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

70 It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In a rail-joint, the combination with the rails of fish-plates, a rectangular locking-plate rigidly secured to the inner face of one of said fish-plates, a series of extensions rectangular in cross-section secured to said locking-plate, the ends of said extensions being split and extending through apertures provided therefor in the other of said fish-plates and bent in opposite directions to engage the outer face thereof, substantially as described.

2. In a rail-joint, the combination with the rails of fish-plates, a locking-plate removably secured to the inner face of one of said fish-plates, a series of extensions formed integral with said locking-plate and extending at an angle through the web of the rail and the other of said fish-plates, the ends of said extensions being split and bent in opposite directions to engage the outer face of said second-named fish-plate, and spikes engaging said fish-plates and the ties, substantially as described.

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

OMERT M. STEWART.

Witnesses:

H. C. EVERT,  
E. E. POTTER