

No. 828,428.

PATENTED AUG. 14, 1906.

S. W. SHAW.

RAIL JOINT.

APPLICATION FILED SEPT. 25, 1905.

Fig. 1.

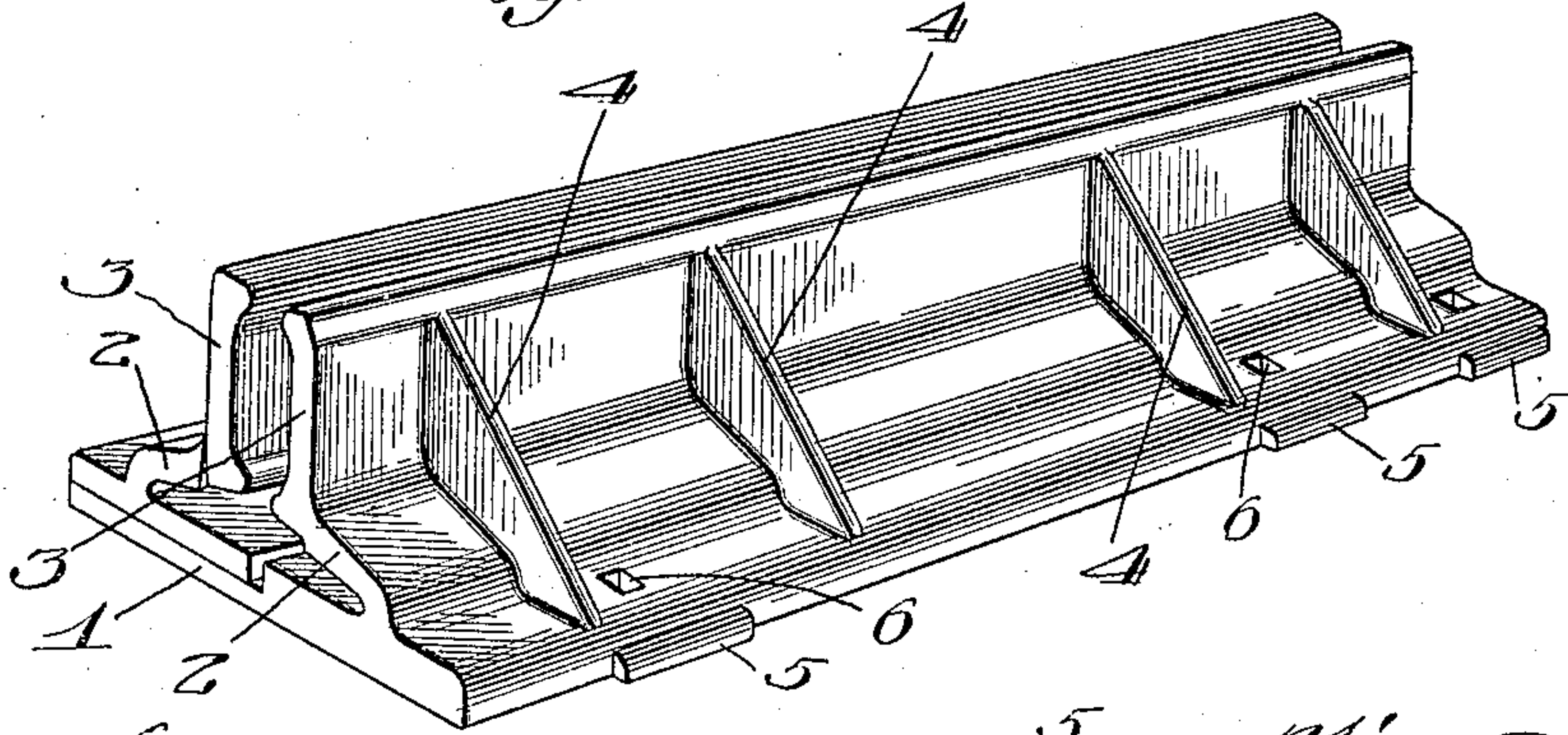


Fig. 2.

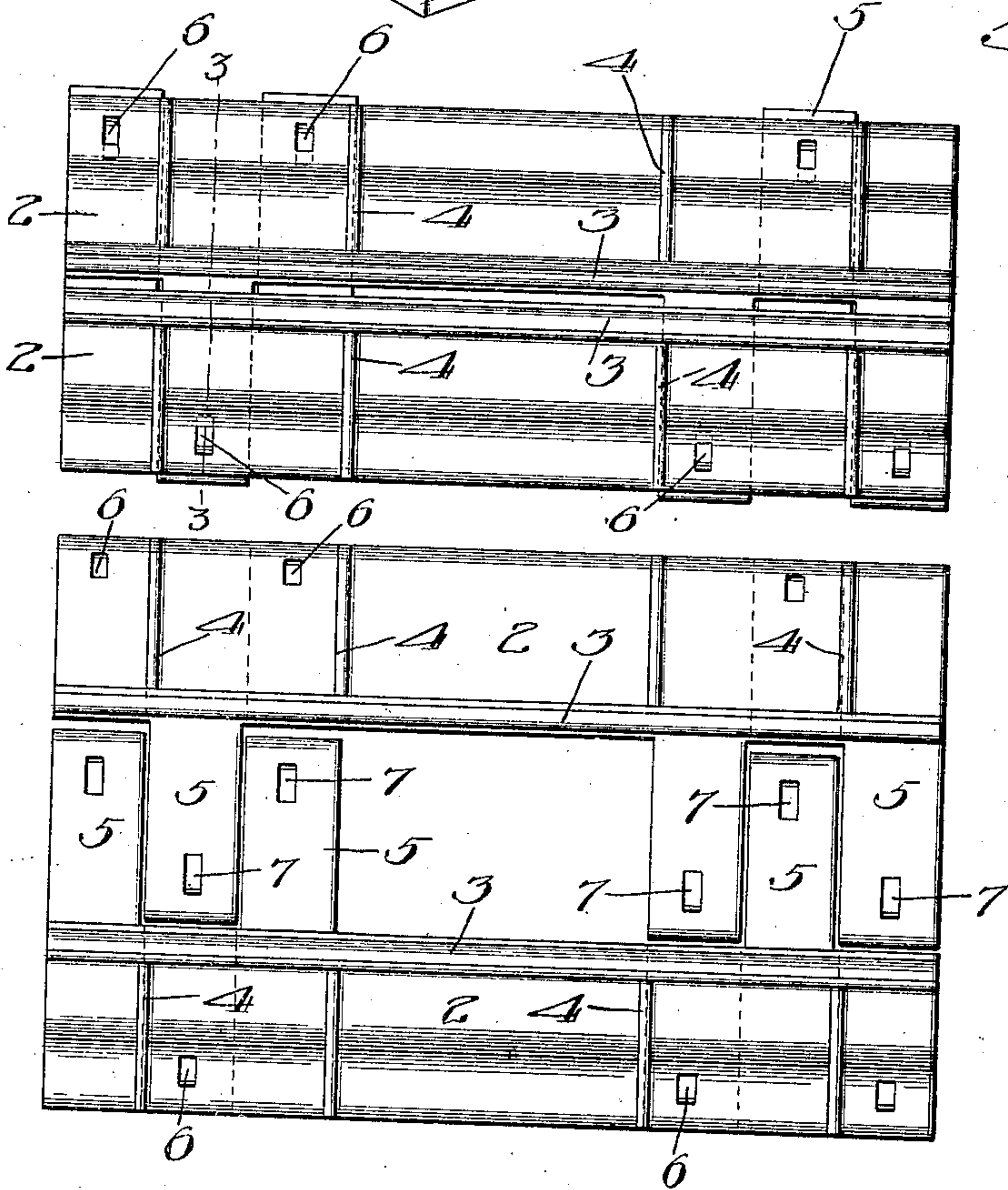


Fig. 3.

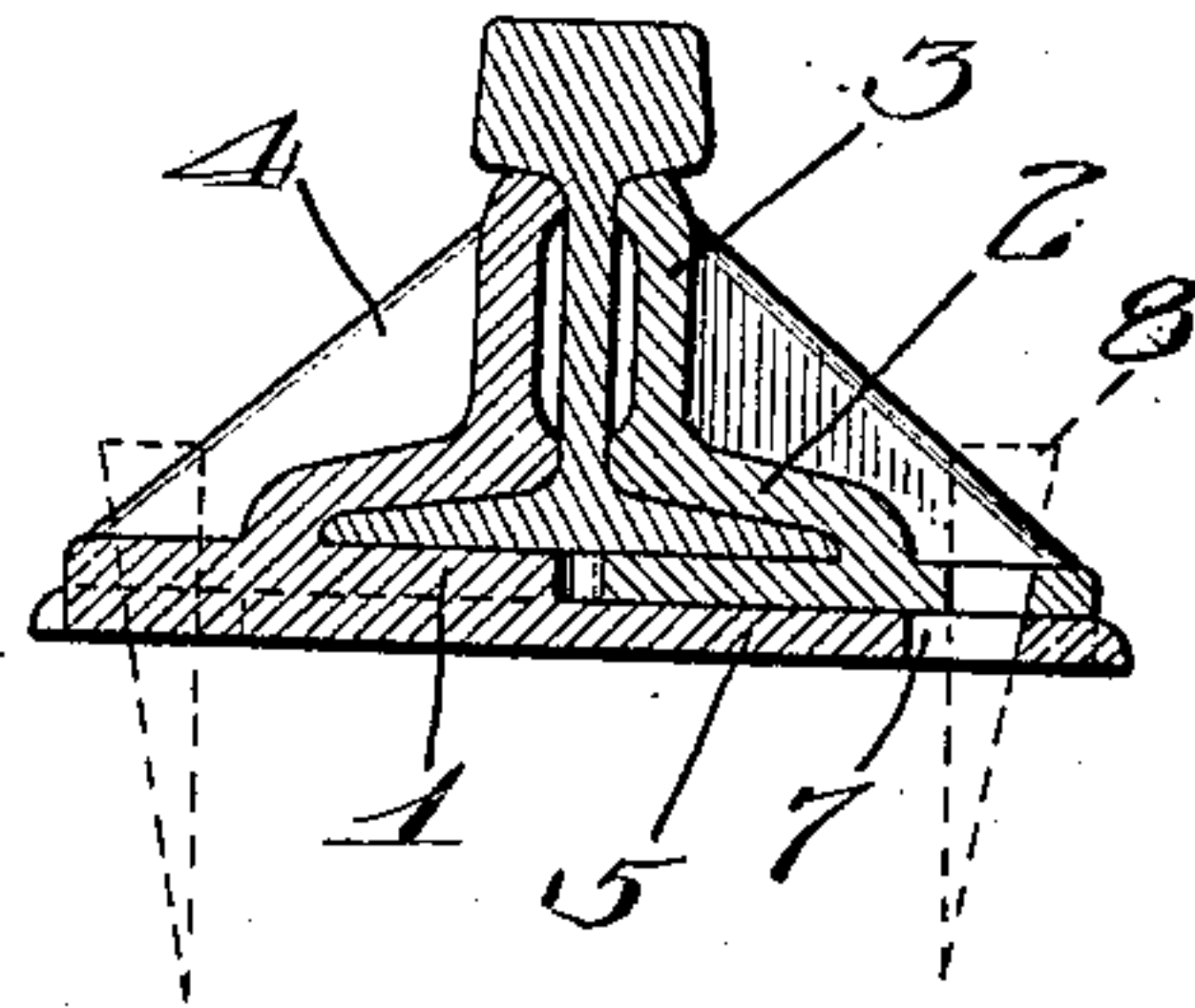


Fig. 4.

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SAMUEL W. SHAW, OF CHICAGO, ILLINOIS.

RAIL-JOINT.

No. 828,428.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed September 25, 1905. Serial No. 280,069.

To all whom it may concern:

Be it known that I, SAMUEL W. SHAW, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Rail-Joints, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to railway-rail joints, and has for its object to produce a rail-joint wherein the necessity of using transverse clamp-bolts for securing the opposite plates thereof to the ends of the rails is dispensed with.

A further object of my invention is to provide means whereby the clamp-plates will be clamped to the ends of the rails by means of the spikes which hold the joint in position upon the ties.

I have illustrated one form of my invention in the accompanying drawings, in which—

Figure 1 is a perspective view of the rail-joint. Fig. 2 is a plan view of the rail-joint when the same is in position to hold the ends of the rails. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 2 and in addition shows the cross-section of the rail clamped in position; and Fig. 4 is a plan view of the rail-joint, showing the oppositely-disposed clamping members spaced apart in order that the parts of the same may be more fully disclosed.

My improved device consists of oppositely-disposed clamping members adapted to embrace the opposite sides of the adjacent rail ends and are exact duplicates, so that any pair of plates may be selected at random and placed in position upon the rails. The clamping members being exact duplicates, the corresponding parts will be denoted by like reference characters, and the description of one will suffice for the other.

Each clamping member consists of a base portion 1, which extends partially beneath the rail-flanges, as shown in Fig. 3, and a portion 2, which is adapted to extend over the top of the flange of the rail and has formed thereon a vertical longitudinally-extending clamping member 3, which is formed to closely engage the vertical web of the adjacent rail ends and extend to a point immediately beneath the tread of the rail. Bracing-webs 4 extend from the longitudinally-ex-

tending clamping member 3 to the base 1 to prevent any tendency of the clamping-plate to bend outwardly.

Each clamping member has laterally extending from the base 1 fingers or clips 5, which extend beneath the rail-flanges to the opposite side of the opposite clamping member. These laterally-extending fingers or clips are preferably formed as shown, one being arranged at one end of the clamping member and spaced apart from the end thereof a distance equal to its own width. The opposite end of the clamping members is provided with two of these laterally-extending clips or fingers, one of the same being arranged at the extreme end of the clamping member and the other spaced therefrom a distance equal to its own width. By this arrangement sufficient space is allowed whereby the fingers of the two members are adapted to intermesh, as shown more particularly in Fig. 2, and the under side of the base 1 is channeled to receive the fingers, which extend transversely thereof. Suitable openings 6 are provided in the base 1, which register with openings 7, formed in the laterally-extending fingers or clips, and wedge-shaped spikes 8 are preferably used in fastening the clamping members upon the ties.

In assembling the members the end of one member carrying a single clip is arranged opposite the end of the other member, on which two of the laterally-extending clips are formed, the ends of the rail having been previously placed in position. When the wedge-shaped spikes 8 are driven home, the spikes tend to draw the two members together and cause the clamping-plates 3 to firmly grasp the web of the rail. A particular advantage of this arrangement is that while the ends of the rails are securely held in position they may expand or contract, due to the changes in the weather, without affecting in any manner their support.

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

In a rail-joint, a pair of members of similar formation, each comprising a base, an intermediate portion adapted to fit over the top of the flange of the rail, a vertical longitudinal portion adapted to engage the web of the rail each member having a series of tongues extending laterally from the base portion and adapted to intermesh beneath

the base of the rail and having openings in the
ends thereof adapted to register with open-
ings in the base portion of the opposite mem-
ber, and wedge-shaped spikes adapted to be
5 driven through said openings to draw the
clamping members together into close en-
gagement with the ends of the rail.

In witness whereof I have hereunto sub-
scribed my name in the presence of two wit-
nesses.

SAMUEL W. SHAW.

Witnesses:

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