

No. 657,352.

Patented Sept. 4, 1900.

W. A. MORELAND.
RAIL JOINT.

(Application filed May 31, 1900.)

(No Model.)

Fig. 1.

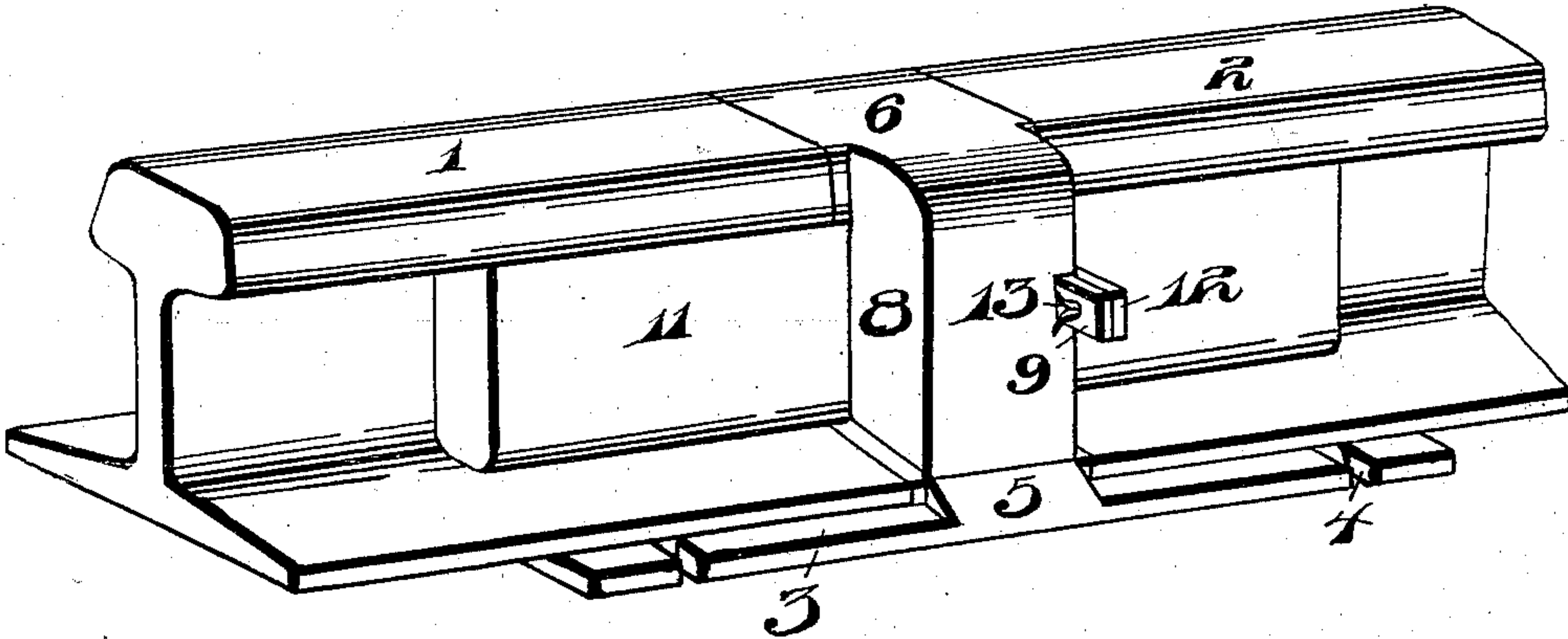


Fig. 2.

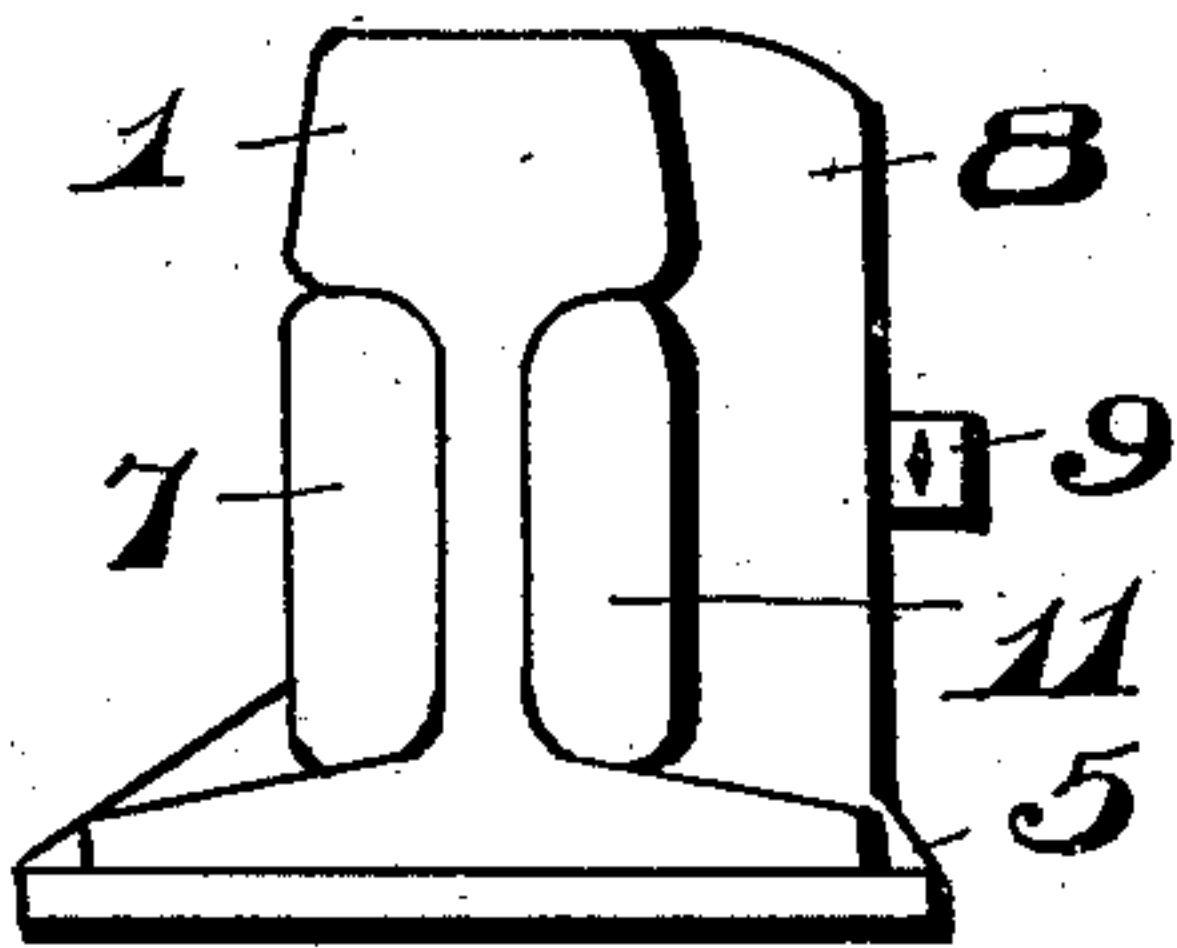


Fig. 3.

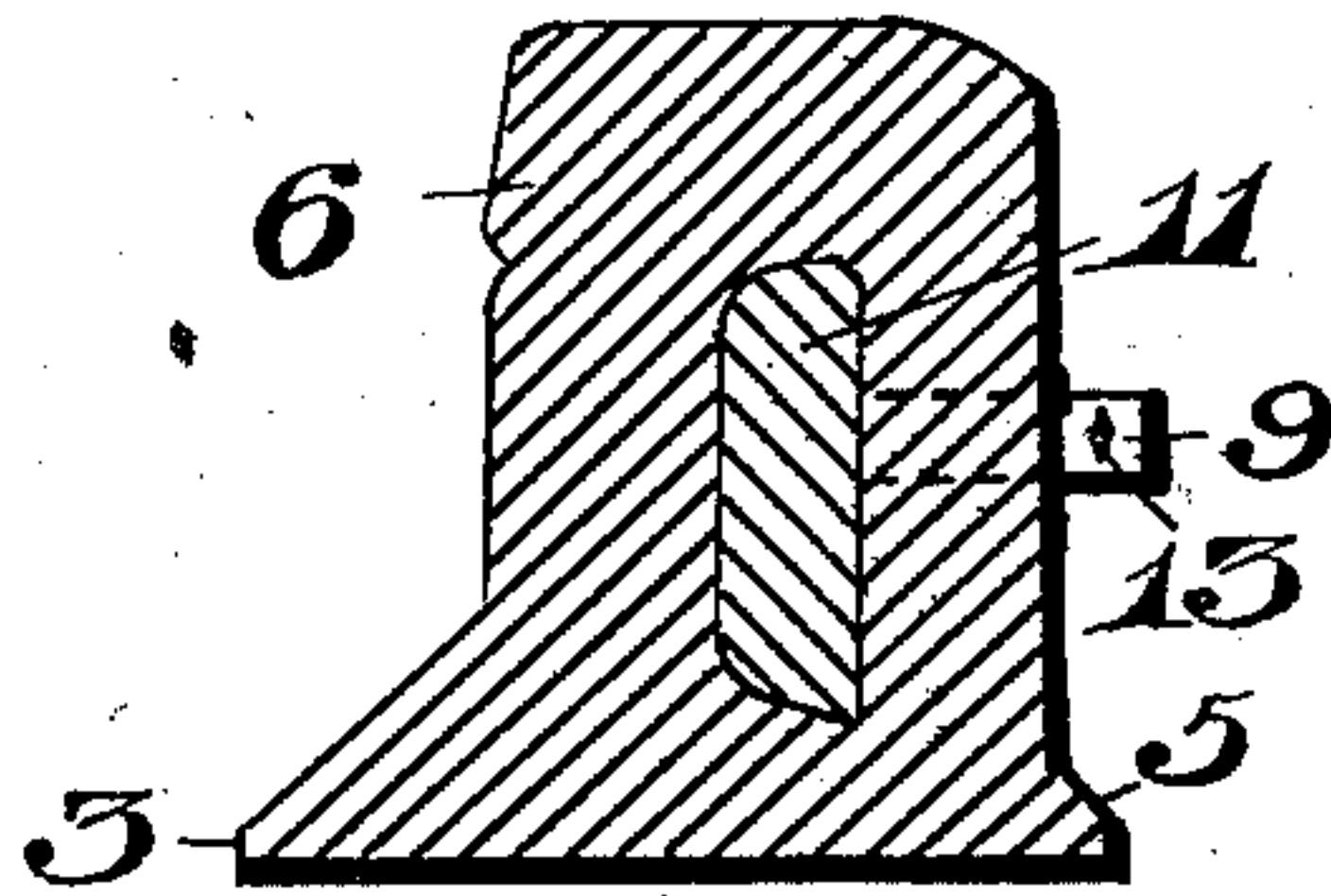


Fig. 4.

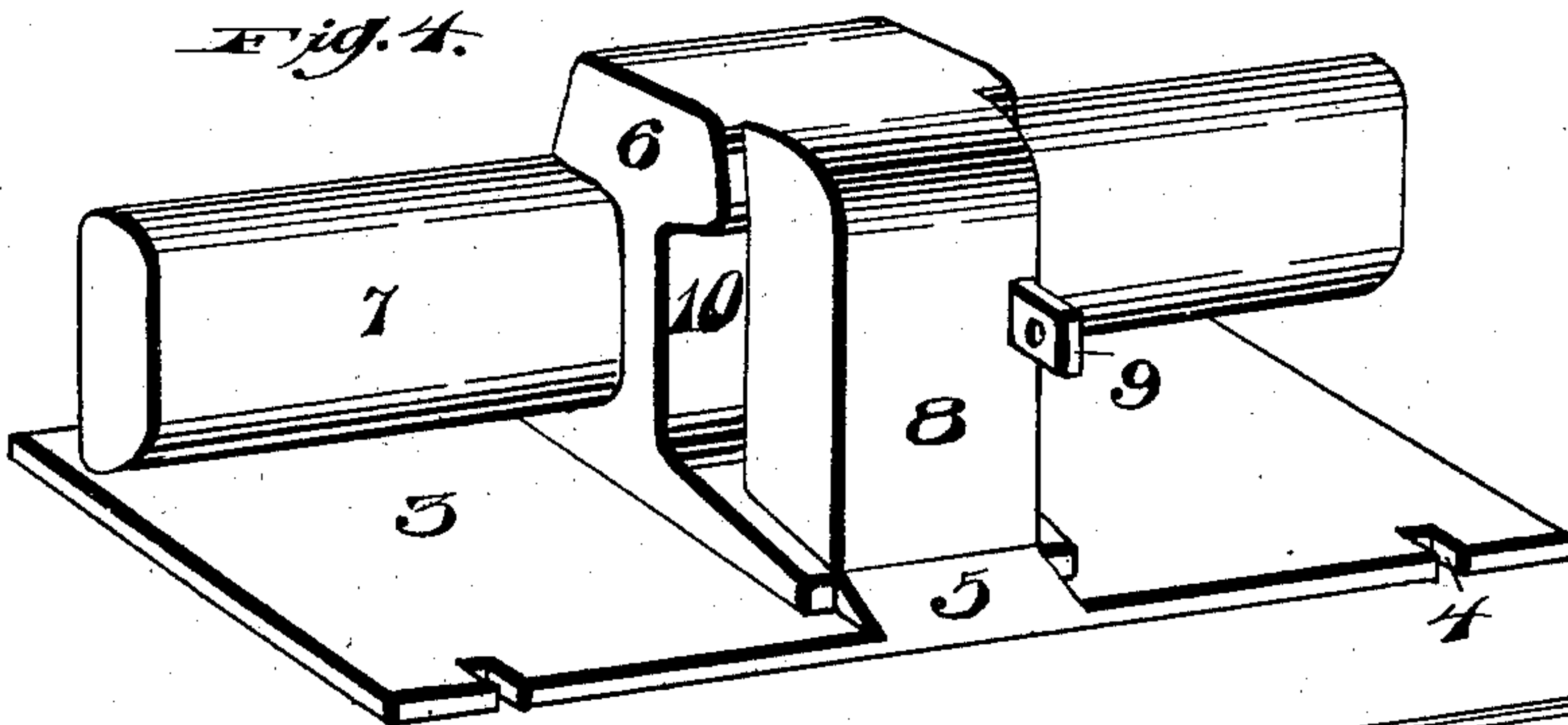
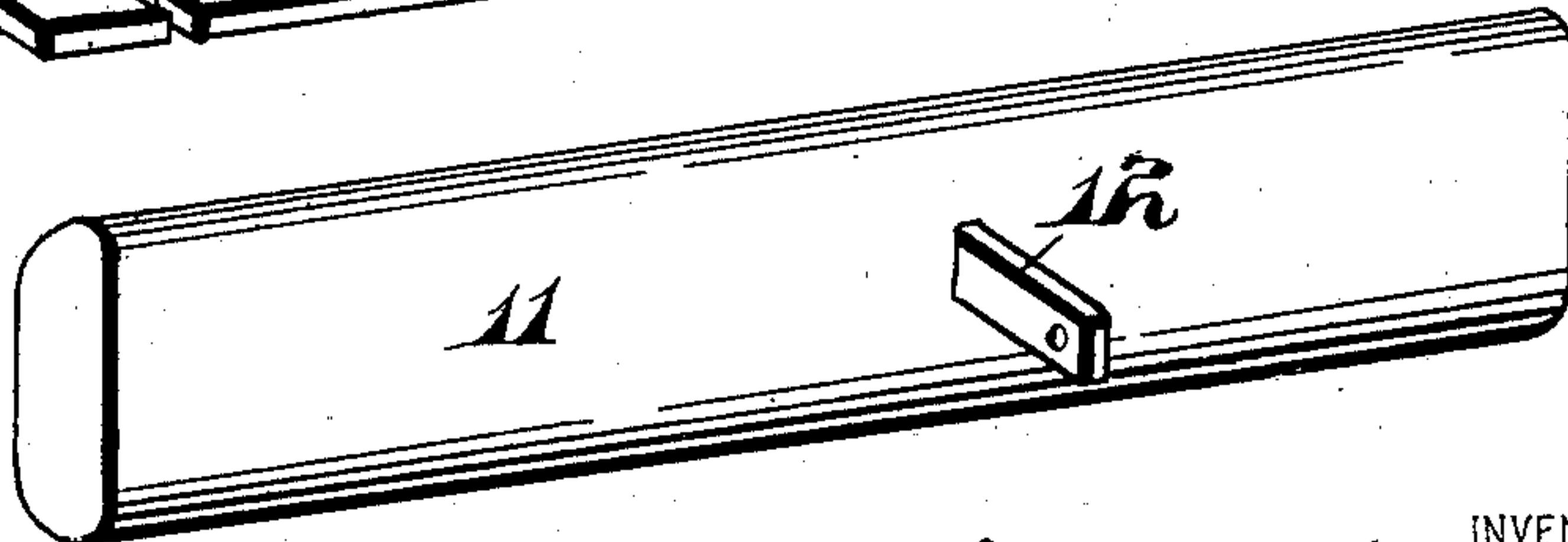


Fig. 5.



WITNESSES:

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WILLIAM A. MORELAND, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 657,352, dated September 4, 1900.

Application filed May 31, 1900. Serial No. 18,569. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. MORELAND, 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.

This invention relates to certain new and useful improvements in rail-joints, and is particularly adapted for connecting rails of all kinds in a quick, cheap, and substantial manner; and its object is to obtain such a construction and combination of the joint and rail that the juncture may be accurately, quickly, and durably effected without the aid of nuts, bolts, or screws extending through the web of the rails and the ordinary fish-plates.

To this end the invention consists of interposing between two rail-sections a joint having formed integral with one side a fish-plate adapted to engage the web of the rails and at its opposite side provided with an offset having an opening extending therethrough in which is mounted a fastening fish-plate, the latter being secured to the offset of the joint; further, providing a chair upon which the rail sections and joint are mounted, said chair having formed integral therewith a wedge for engagement with the joint, thereby securing the same in position.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

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—

Figure 1 is a perspective view of a pair of rails, showing my improved joint in position for securing the rails together. Fig. 2 is an end view thereof. Fig. 3 is a vertical sectional view of the joint. Fig. 4 is a perspec-

tive view of the joint. Fig. 5 is a perspective view of the fastening fish-plate.

Referring to the drawings by reference-numerals, 1 and 2 indicate a pair of rails mounted upon a chair 3, consisting of a rectangular piece of suitable material provided with a cut-away portion 4 to receive suitable fastening means for securing the same to the ties of a railway-track. The chair 3 is further provided, upon its upper face centrally of each edge, with a pair of diametrically-opposite wedge-shoulders 5, the function of which will be hereinafter described.

Interposed between one end of each of the rail-sections is my improved joint, which consists of a suitable rail-shaped block of any desirable material 6, provided at one side with an integral fish-plate 7, which engages the web of the rail-sections, and at its opposite side with an integral outwardly-extending offset 8, having an apertured lug 9. The offset 8 is formed integral at its top inner edge with one side of the tread portion of the joint and integral at its bottom with the upper face of the base of the joint, thereby forming an opening 10 between the offset and web of the joint. The joint when in position is adapted to be mounted upon the chair and secured between the wedge-shoulders 5.

The reference-numeral 11 denotes a fastening fish-plate which is inserted in the opening 10 and is provided with an outwardly-extending apertured lug or projection 12, which abuts against the apertured lug 9 of the offset 8. The fastening fish-plate is secured in position by means of a pin or other desirable fastening means 13, which extends through the apertured lugs 9 12.

My improved joint is set up in the following manner: The chair being secured to the ties of a railway-track, the joint is mounted thereon between the wedge-shoulders 5, which secure the joint in position. The rails are then brought against the ends of the joint and the fish-plate 11 inserted through the opening 10 until the apertured lugs 9 12 abut, when the fastening-pin is inserted through the apertures, which securely holds the joint in position. By this construction an accu-

rate and quick joint is effected, the rails kept
in horizontal alinement, and the usual con-
traction and expansion of the rails permitted,
overcoming the use of nuts, bolts, or screws
5 extending through the web of the rails.

It is thought the many advantages of my
improved rail-joint can be readily understood
from the foregoing description, taken in con-
nection with the accompanying drawings, and
10 it will be noted that various changes may be
made in the details of construction without
departing from the general spirit of my in-
vention.

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

1. In a device of the character described,
the combination of a chair provided with a
pair of diametrically-opposite wedge-shoul-
20 ders, a joint interposed between a pair of
rails and secured in position by said wedge-
shoulders, a fish-plate formed integral with
said joint and adapted to engage one side of
the web of said rails, a fastening fish-plate
25 extending through said joint and adapted to
engage the opposite side of said rails, an ap-
ertured lug formed integral with said joint,
an apertured lug formed integral with said
fastening fish-plate and adapted to engage

the apertured lug of the said joint, and means 30
extending through the said apertured lugs
for securing the said fastening fish-plate in
position.

2. In a rail-joint, the combination with a 35
railway-chair provided with a pair of diamet-
rically-opposite wedge-shoulders, of a block
interposed between two rails and secured be-
tween said wedge-shoulders, a fish - plate
formed integral with one side of said block
and adapted to engage one side of the web of 40
said rails, an offset formed integral with the
opposite side of said block in such a manner
as to form an opening between the inner face
of said offset and the web of said block, a
fastening fish-plate mounted in said opening 45
and adapted to engage the other side of the
web of said rails, an apertured lug formed
integral with said offset, an apertured lug
formed integral with said fastening fish-plate,
and means extending through the said lugs 50
for securing the said fastening fish-plate in
position.

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

WILLIAM A. MORELAND.

Witnesses:

H. C. EVERT,
JOHN NOLAND.