

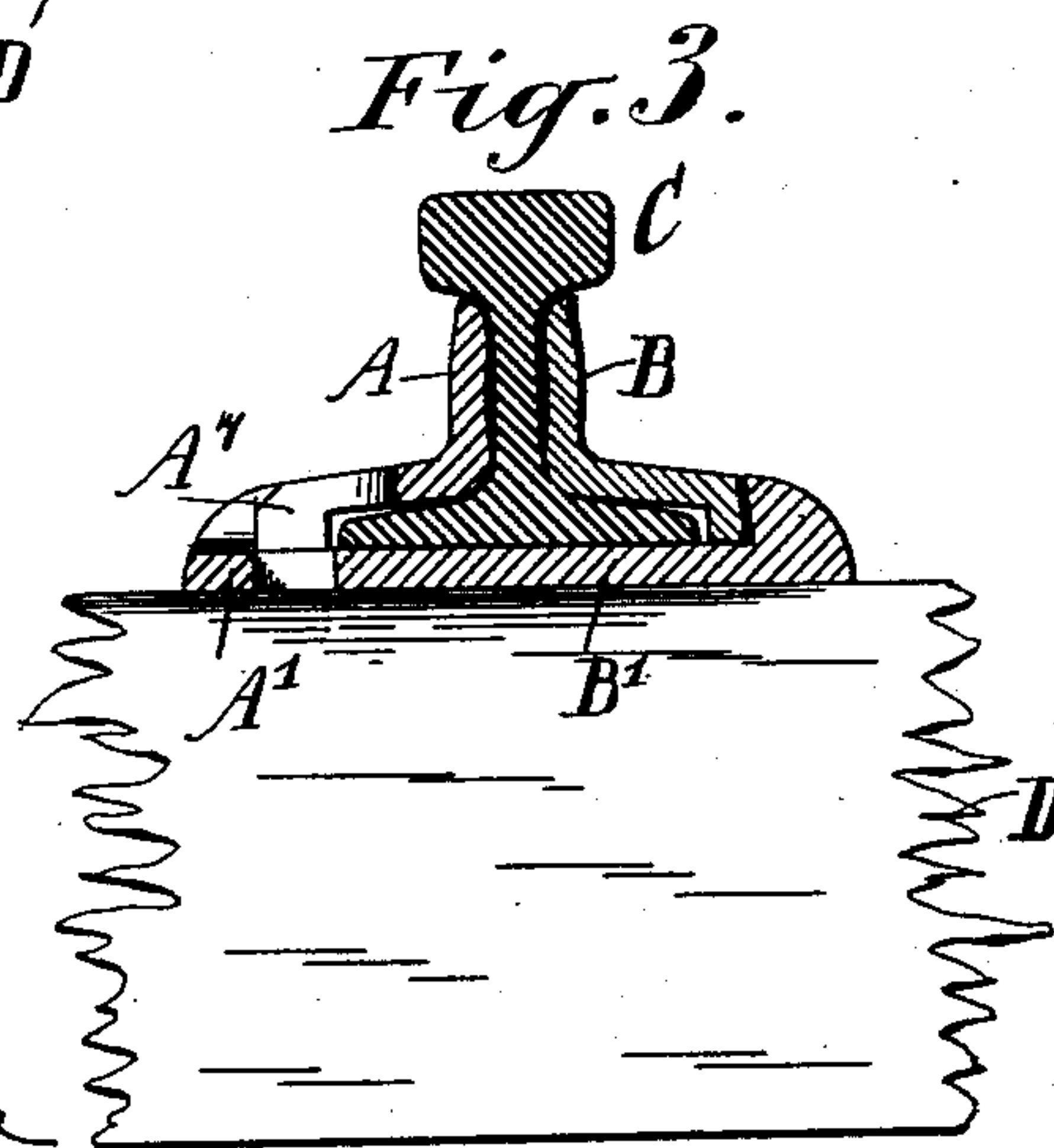
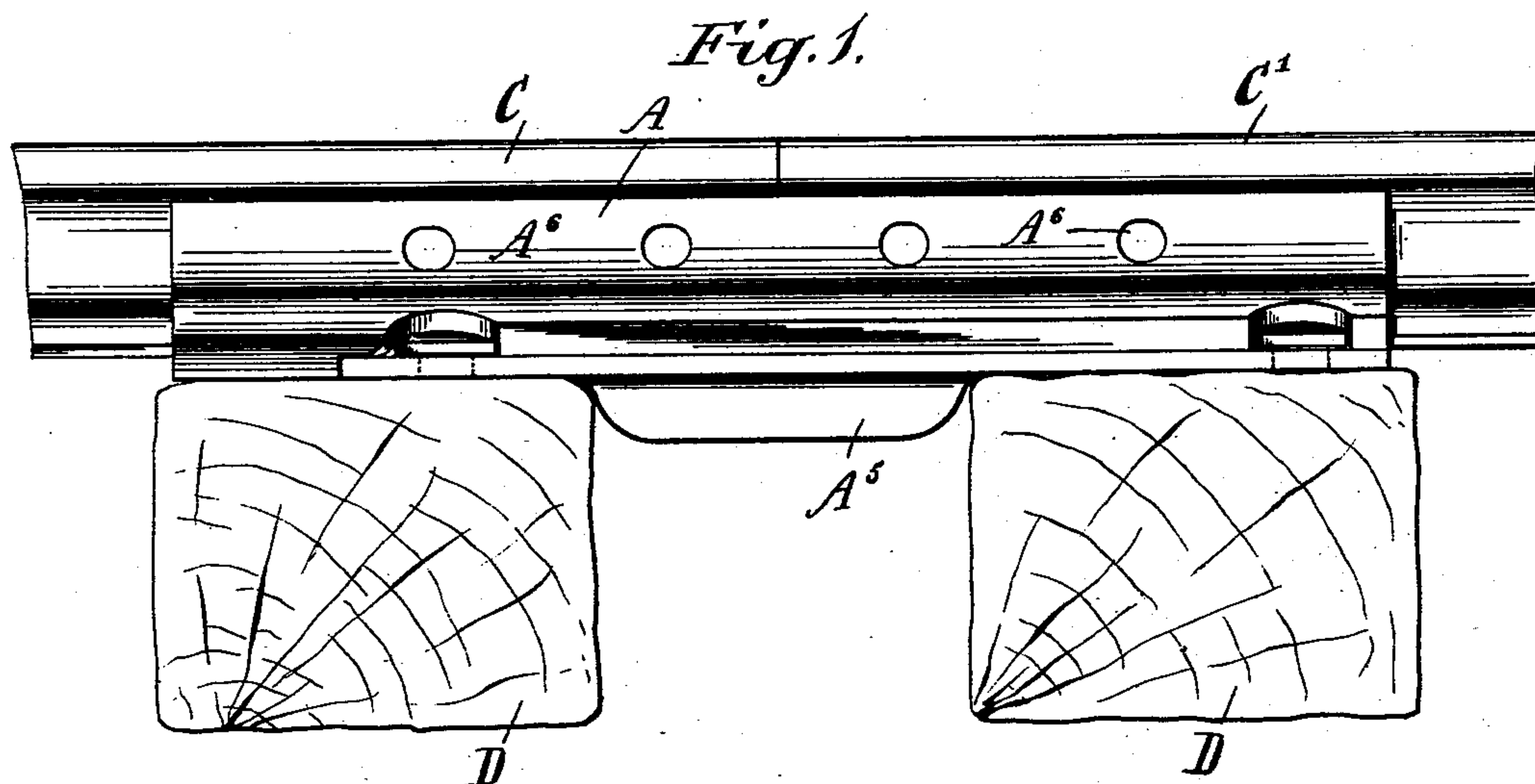
(No Model.)

2 Sheets—Sheet 1.

C. W. DEHN.
RAIL JOINT.

No. 569,036.

Patented Oct. 6, 1896.



WITNESSES:

L. N. Legendre
Thos. G. Hostetler

INVENTOR

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BY

Wm. H. Dehn

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

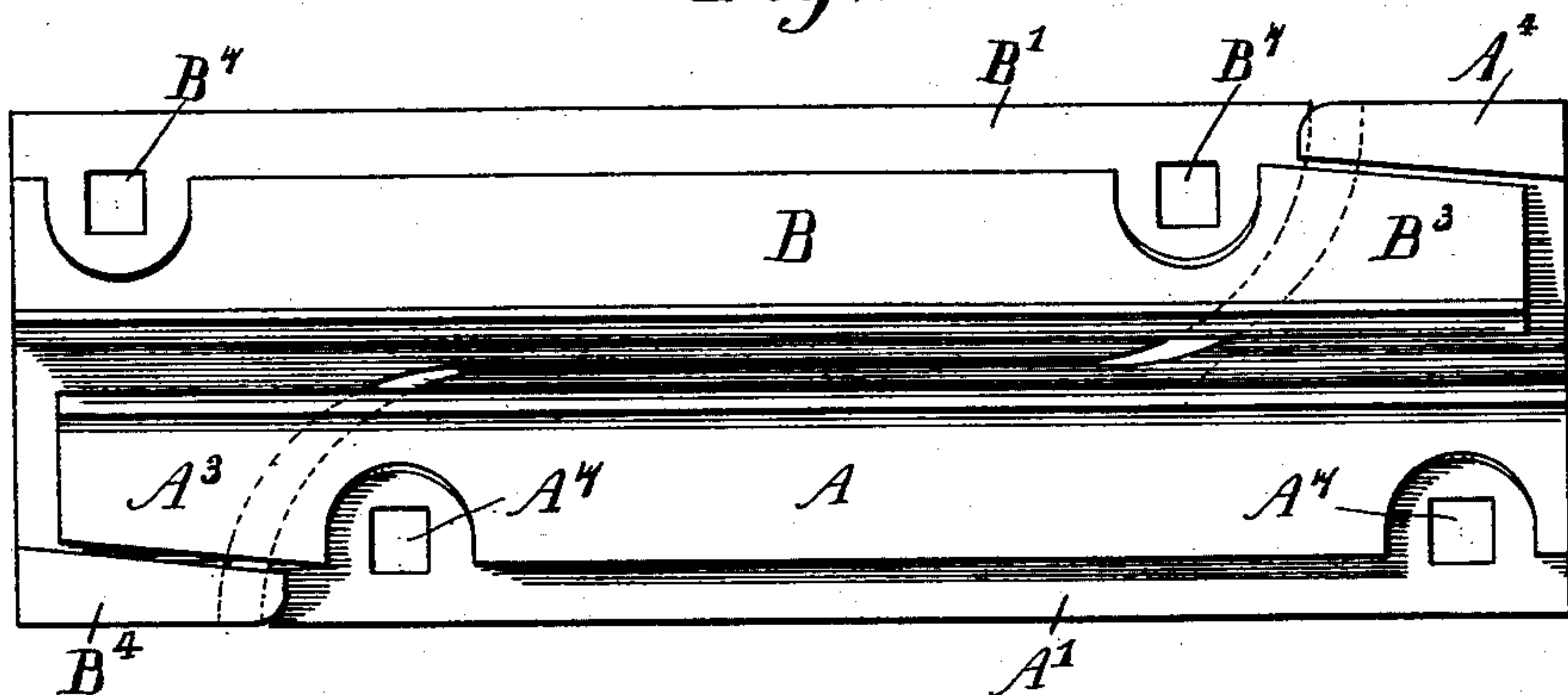


Fig. 5.

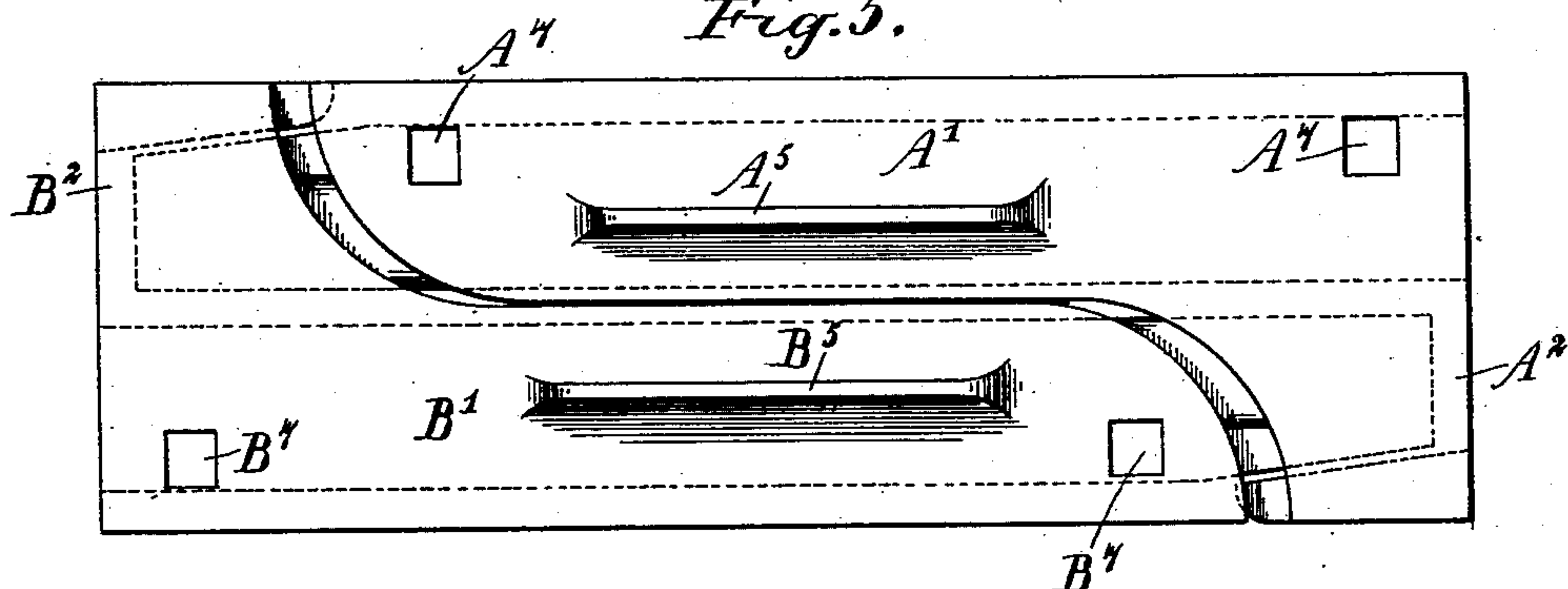


Fig. 6.

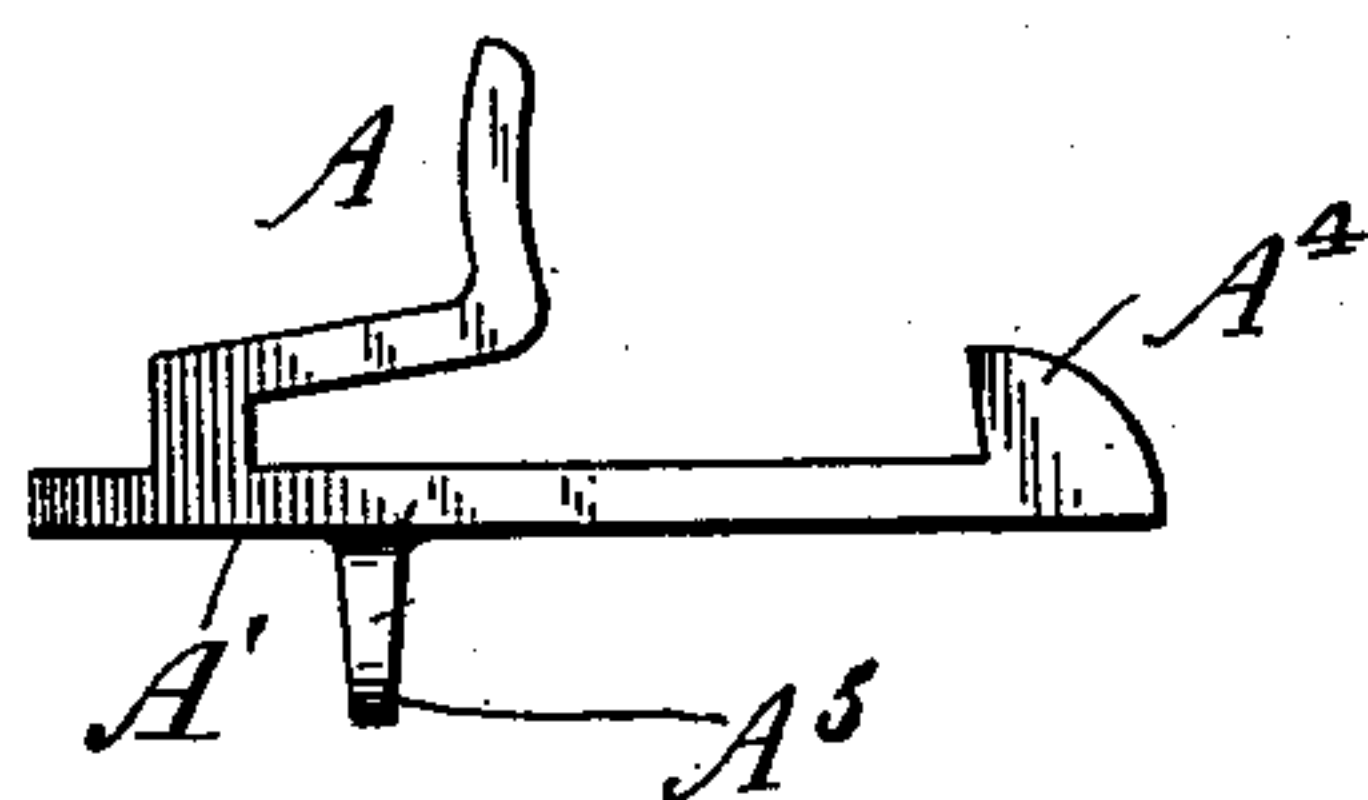
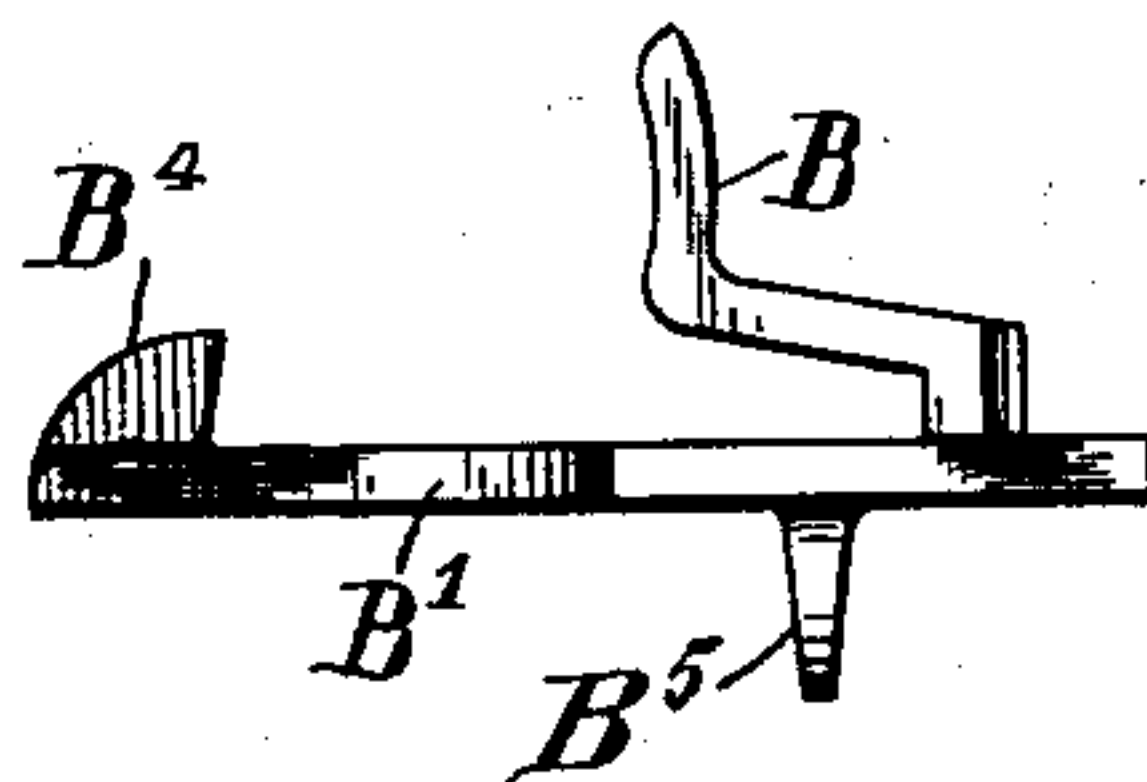


Fig. 7.



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UNITED STATES PATENT OFFICE.

CARL W. DEHN, OF TOPEKA, KANSAS, ASSIGNOR TO CARL J. ROSEN, JR.,
OF SAME PLACE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 569,036, dated October 6, 1896.

Application filed March 21, 1896. Serial No. 584,241. (No model.)

To all whom it may concern:

Be it known that I, CARL W. DEHN, of Topeka, in the county of Shawnee and State of Kansas, have invented a new and Improved Rail-Joint, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved rail-joint which is simple and durable in construction, and arranged to securely hold the rails in place and to prevent loose joints.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement as applied, but with the bolts and spikes omitted. Fig. 2 is a plan view of the same. Fig. 3 is a cross-section of the same. Fig. 4 is a plan view of the improvement with the fish-plates slightly drawn apart. Fig. 5 is an inverted plan view of the same, and Figs. 6 and 7 are end views of the two fish-plates.

The improved rail-joint is provided with two fish-plates A and B, made alike and approximately L-shaped in cross-section, as plainly indicated in Figs. 3, 6, and 7, to engage the sides of the web and top of the base of the rails C C' to join the bases of the rails resting on the base-plates A' and B', forming integral parts of the fish-plates A and B, by having the outer sides thereof connected with said base-plates to form a sleeper for the adjacent ends of the rails, as will be readily understood by reference to Fig. 3. When the two fish-plates are in position then the inner edges of the base-plates A' and B' abut against one another to form an S-shaped joint. (See Figs. 4 and 5.)

One end of the bottom portion of the fish-plate A is made wedge-shaped, as at A³, with the side edge slightly beveled to engage a correspondingly-shaped head B⁴ on the corresponding end of the base-plate B' of the other fish-plate B. The bottom of the fish-plate B is likewise formed with a wedge-shaped beveled end B³, adapted to engage a correspond-

ingly-shaped head A⁴ on that end of the base-plate A'.

Now it will be seen that by the arrangement described the two fish-plates with their base-plates can be readily placed from opposite sides in position on the rails and then moved longitudinally to bring the ends A³ and B³ in engagement with the heads B⁴ and A⁴, respectively. In doing so the two fish-plates and their base-plates are locked one upon the other to prevent lateral and vertical movement, and in order to prevent longitudinal movement I form the under side of the base-plates A' and B' with longitudinally-extending ribs A⁵ and B⁵, respectively, adapted to pass between two ties D, as plainly indicated in Figs. 1 and 2.

The fish-plates A and B are formed in their respective portions with the usual bolt-apertures A⁶, adapted to register with each other and with openings in the webs of the rails whenever the two fish-plates are connected with each other, as above described.

In the base-plates A' and B' are also formed the usual spike-holes A⁷ and B⁷, respectively, adapted to receive the spikes for securing the base-plates to the ties D. The bottom portions of the fish-plates A and B are cut out around the openings or holes A⁷, as plainly shown in Figs. 2 and 4, to receive the heads of the spikes.

Now it will be seen that a rail-joint constructed in the manner described is absolutely proof against "loose joints," and even should the bolts and spikes become loose the parts forming the joint cannot be removed unless the rail is raised to permit of sliding the base-plates over the ties in longitudinal and opposite directions.

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

1. A rail-joint, comprising two fish-plates made approximately L-shaped in cross-section, and base-plates integral with the outer sides of the bottom parts of the fish-plates, to form a rest for the base of the rail, said base-plates having S-shaped edges extending in direct line with the rails at the meeting-point of the same, substantially as shown and described.

2. A rail-joint, comprising two fish-plates made approximately **L**-shaped in cross-section, and base-plates formed integral therewith having inner **S**-shaped edges adapted
5 to abut against one another and extend under the rail in direct line therewith, said base-plates being formed at their under side with longitudinal ribs to fit snug between adjacent ties, as and for the purpose set forth.
- 10 3. A rail-joint, comprising two fish-plates made approximately **L**-shaped in cross-section, and base-plates formed integral therewith, each base-plate being provided at one
end with a wedge-shaped bottom portion and at the other end with a correspondingly-
shaped head to be engaged by the wedge-
shaped bottom portion of the other fish-plate;
the body portion between said ends having
an **S**-shaped inner edge whereby said base-
plates form an **S**-shaped joint extending par-
allel with the rails at the meeting-point of the
same, substantially as shown and described.
CARL W. DEHN.

Witnesses:

W. J. MATTERN,
G. C. BOWMAN.