

No. 786,118.

PATENTED MAR. 28, 1905.

E. E. HARRISON.

RAIL JOINT.

APPLICATION FILED DEC. 9, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

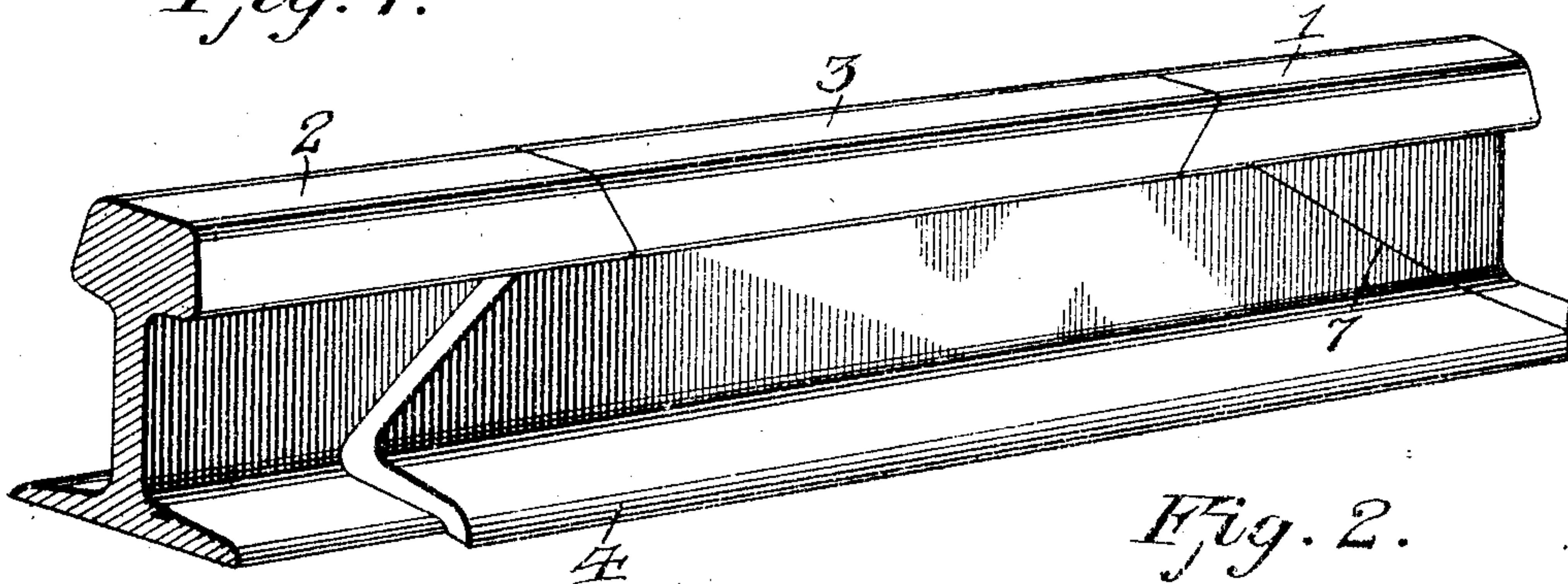


Fig. 2.

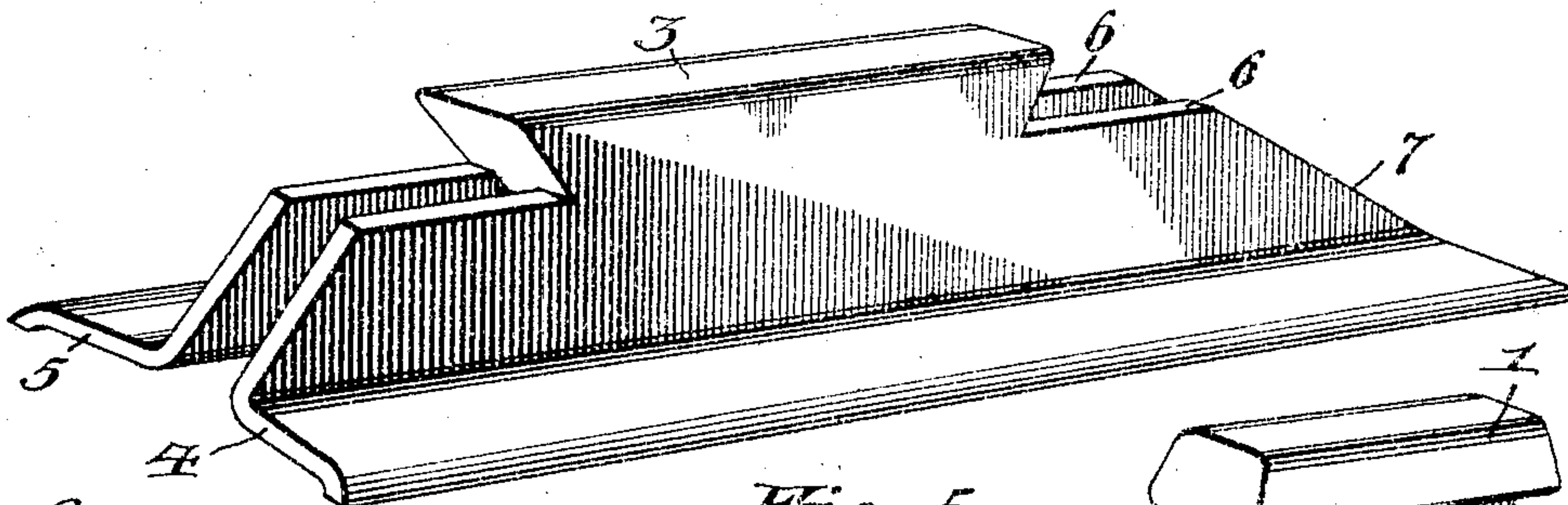


Fig. 5.

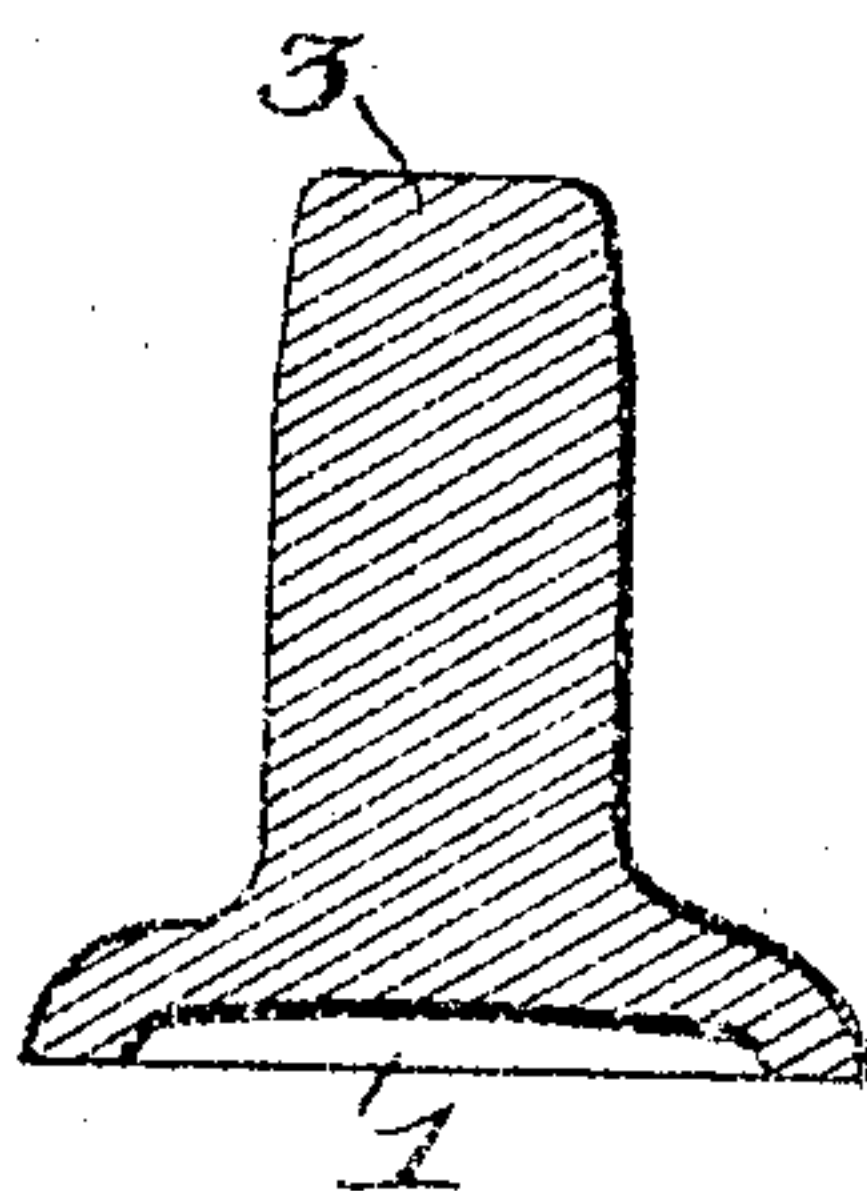


Fig. 4.

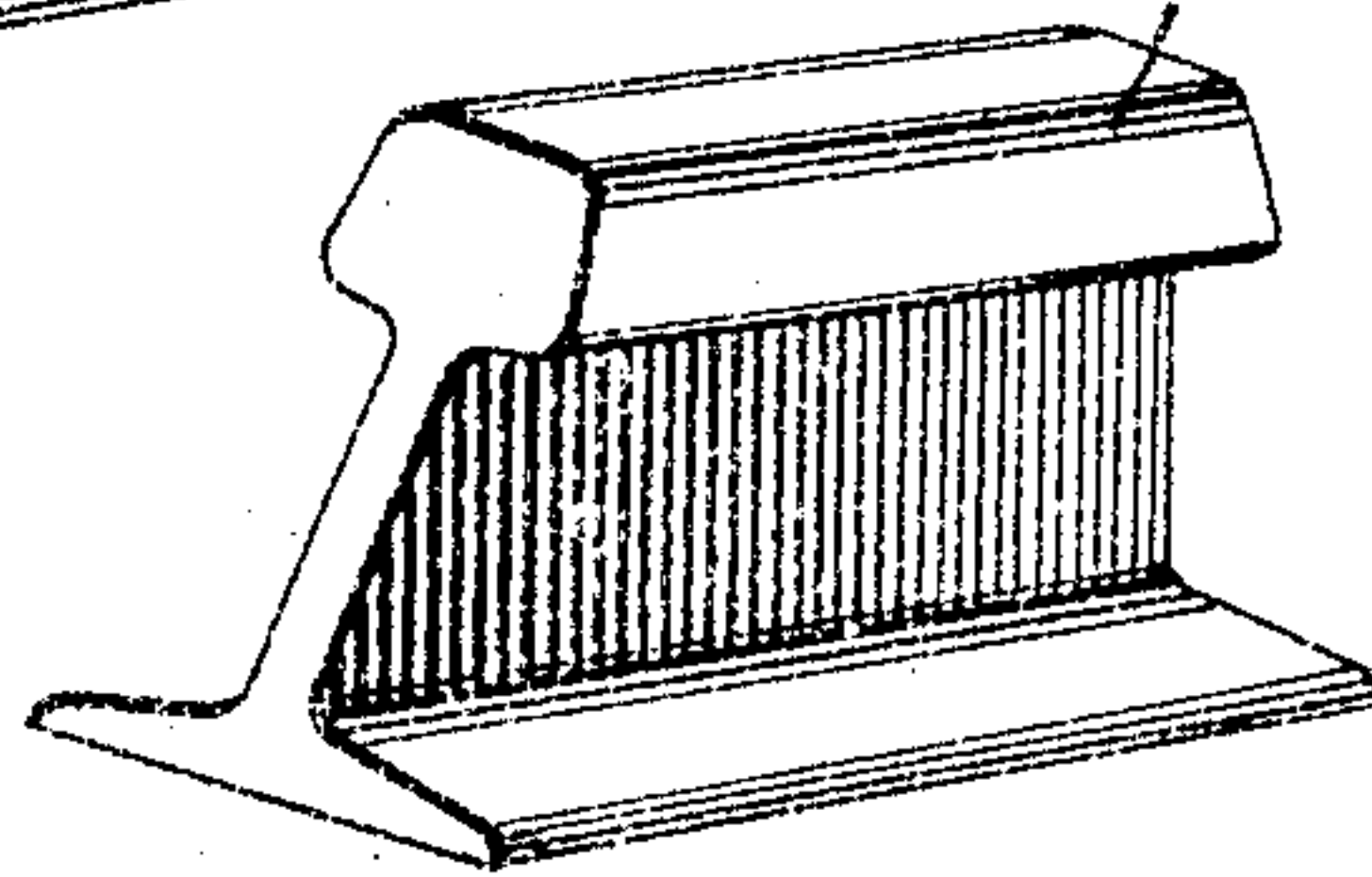


Fig. 3.

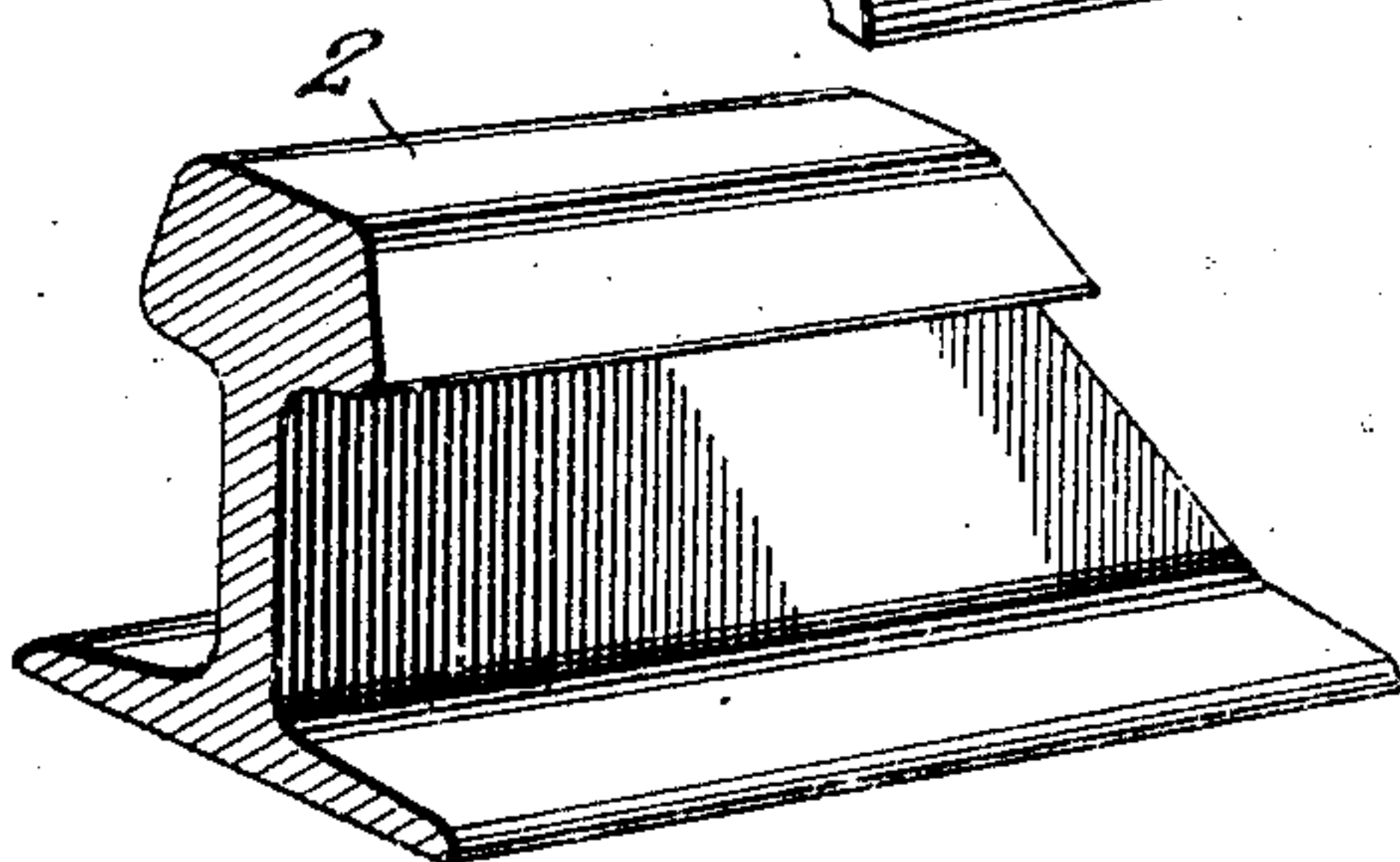
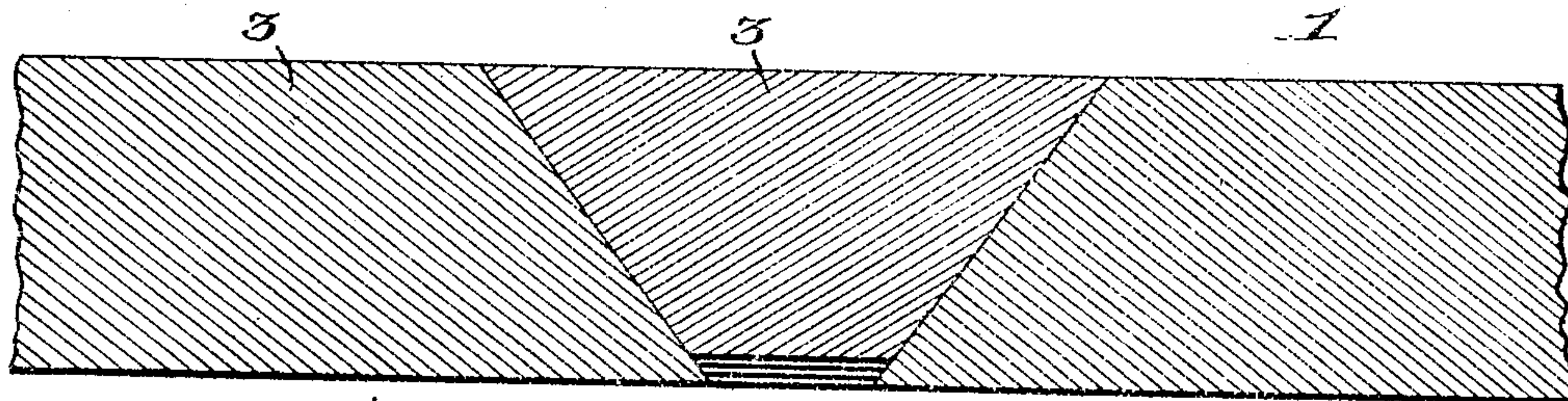


Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 7.

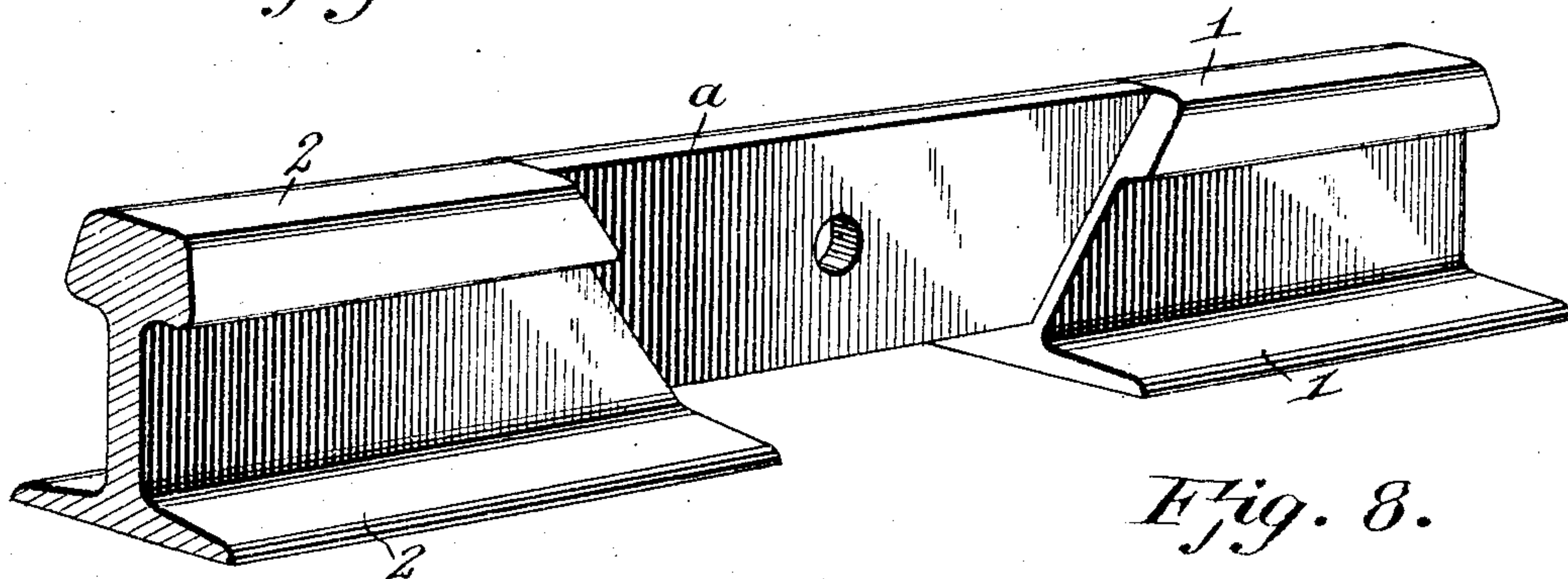


Fig. 8.

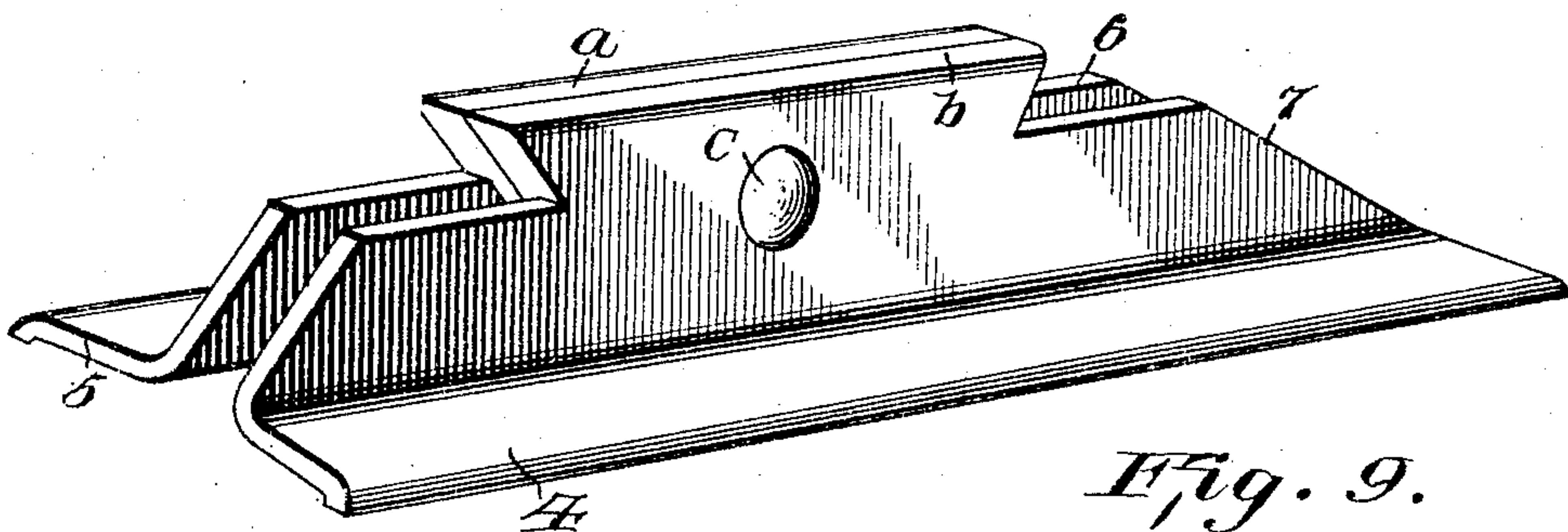


Fig. 9.

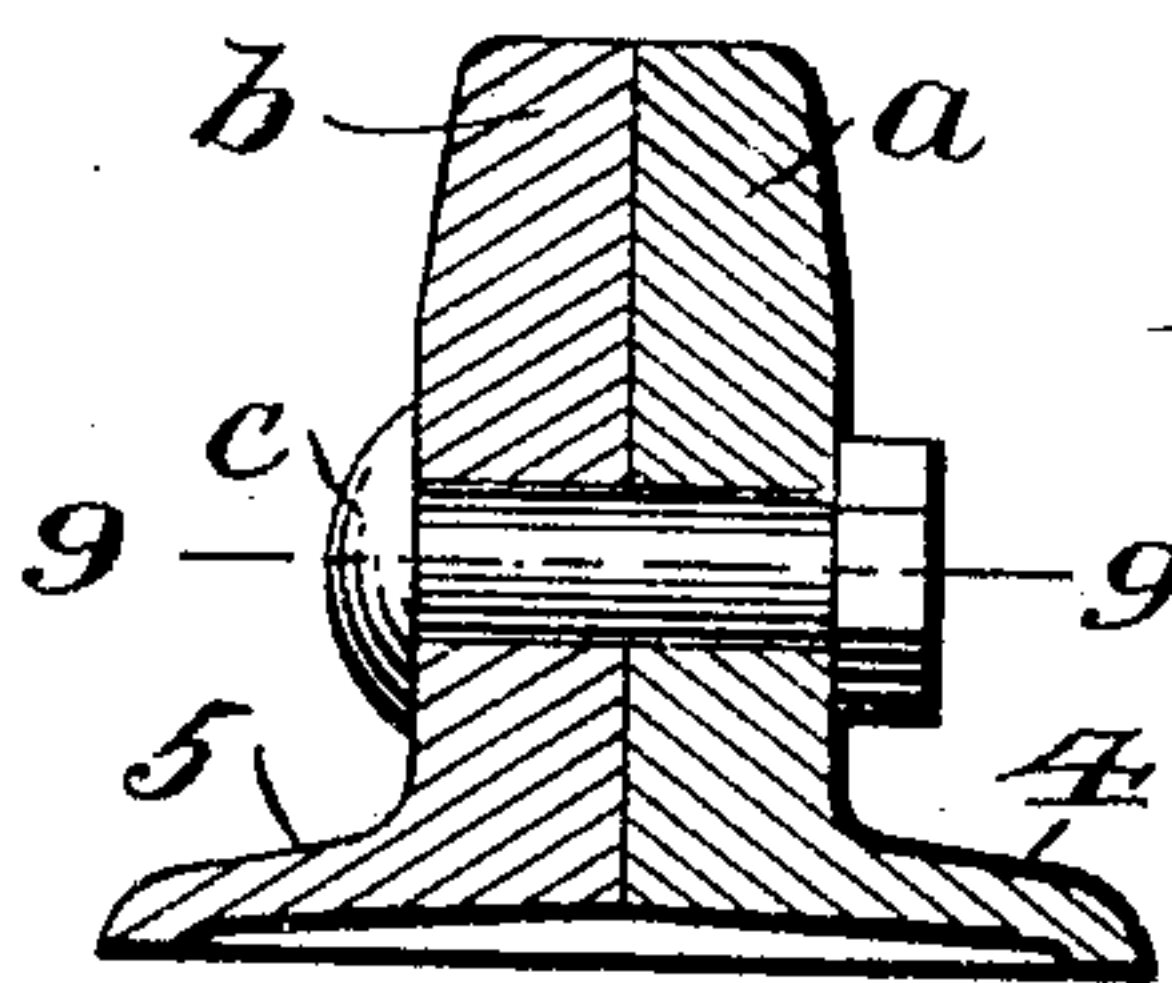
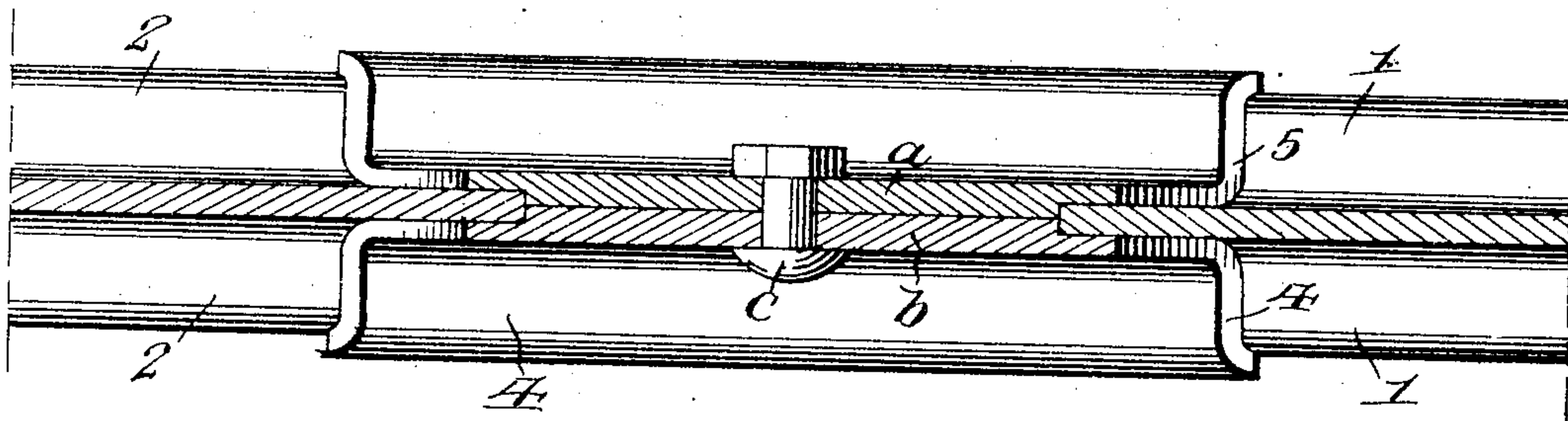


Fig. 10.

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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 786,118, dated March 28, 1905.

Application filed December 9, 1904. Serial No. 236,196.

To all whom it may concern:

Be it known that I, ELMER E. HARRISON, a citizen of the United States, residing at Herington, in the county of Dickinson and State of Kansas, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to splice-bars such as are used in connection with rail-joints.

The objects of the invention are to simplify, improve, and strengthen the construction of such devices.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in a novel form of splice-bar adapted to be fitted between the meeting ends of two rails and having integral fish-plates covering the web and base portions of said rails.

The invention also resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a splice-joint constructed in accordance with the invention. Fig. 2 is a similar view of the improved splice-bar having the integral fish-plates. Figs. 3 and 4 are perspective views of the rail ends. Fig. 5 is a transverse vertical section through the center of the splice-bar. Fig. 6 is a longitudinal vertical section through the rails and splice-joint. Fig. 7 is a perspective view of a rail-joint having a splice-bar separated longitudinally, one-half of the splice-bar being removed. Fig. 8 is a perspective view of the divided splice-bar having integral fish-plates. Fig. 9 is a horizontal section. Fig. 10 is a transverse section.

Like reference characters indicate corresponding parts in the different views.

In carrying out the present invention the rail ends 1 and 2, preferably, are cut away on a rearward incline from their base portions to their heads, as shown clearly in Figs. 3 and 4. Fitted between the meeting ends of said rails 1 and 2 is a wedge-shaped splice-bar 3,

having fish-plates 4 and 5 formed integral therewith, as shown in Fig. 2, said fish-plates being bent outwardly at their lower ends, so as effectually to cover not only the web portions, but also the base portions of the rails 1 and 2. The fish-plates 4 and 5 are formed with shoulders 6, which rest against the under portions of the rail-heads, and the ends of said fish-plates are inclined in a direction opposite to the incline of the adjacent rail.

A splice-bar constructed in accordance with the present invention is strong, simple, durable, and inexpensive in construction, as well as thoroughly efficient in use, the arrangement of the splice-bar and fish-plates being such as to prevent undue rattling or pounding of the car-wheels at the joint. For example, the splice-bar may be separated longitudinally into two parts *a* and *b*, as shown in Figs. 7, 8, 9, and 10, the two parts being connected by a bolt *c*.

Minor changes in the precise embodiment of invention illustrated and described may be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

1. The combination with a pair of rails, of a splice-bar fitted between the meeting ends thereof and having integral fish-plates bearing against said rails, said splice-bar being separated longitudinally into two parts.

2. The combination with a pair of rails, having cut-away meeting ends, of a splice-bar fitted between and conforming to said meeting ends, said splice-bar having integral fish-plates bearing against the rails.

3. The combination with a pair of rails, having cut-away meeting ends, of a wedge-shaped splice-bar fitted between said meeting ends and having integral fish-plates resting against the webs and covering the base portions of said rails.

4. The combination with a pair of rails, each cut away on an incline from its base portion to its head, of a wedge-shaped splice-bar fitting into and filling the cut-away portions of

said rails, and having integral fish-plates resting against the webs and covering the base portions of said rails, said fish-plates having shoulders disposed beneath the heads of said rails and being formed with inclined ends.

5 5. The combination with a pair of rails, of a splice-bar fitted between the ends thereof and having integral fish-plates bearing against

said rails, said splice-bar being separated longitudinally into two parts. 10

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

-ELMER E. HARRISON.

Witnesses:

F. M. McHALE,

G. C. HOUSTON.