

No. 734,853.

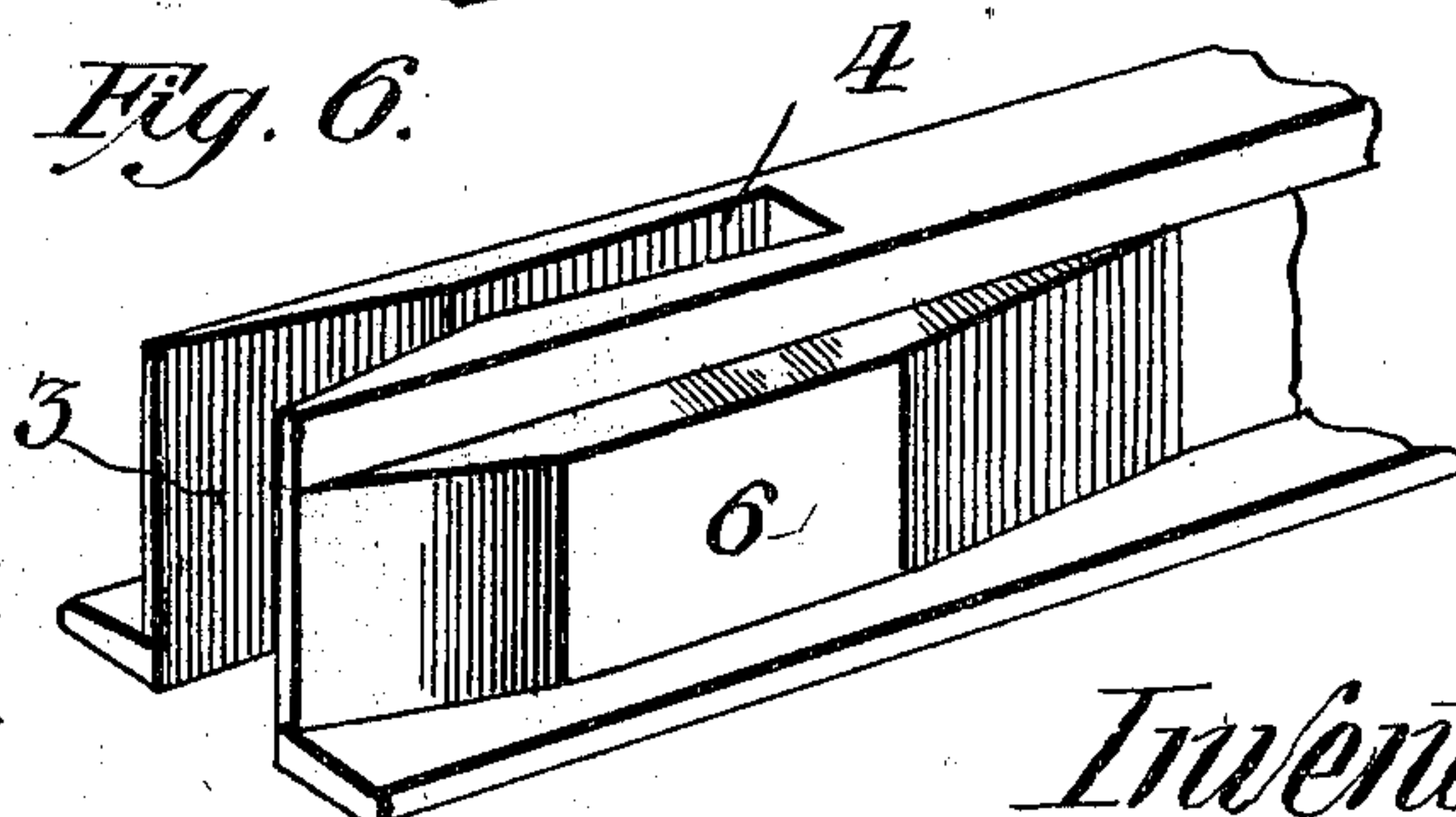
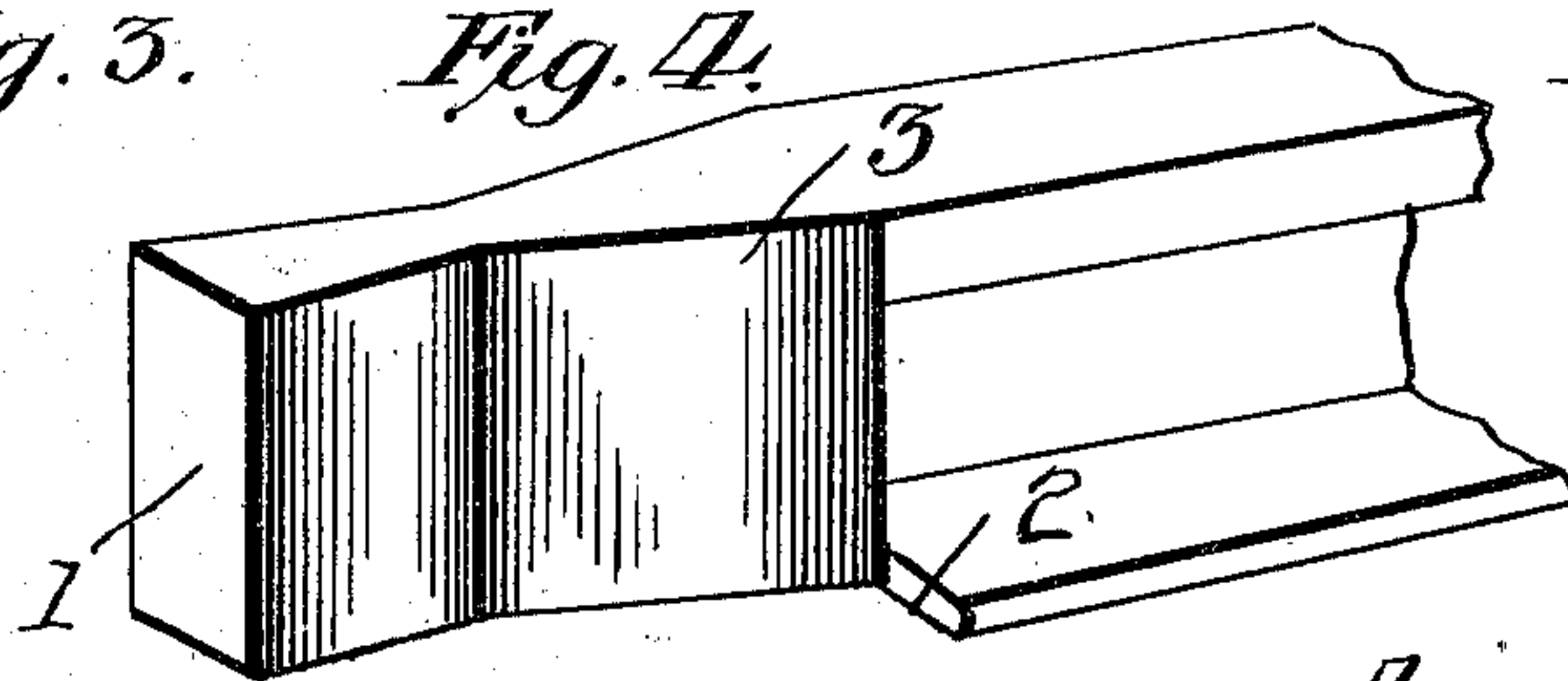
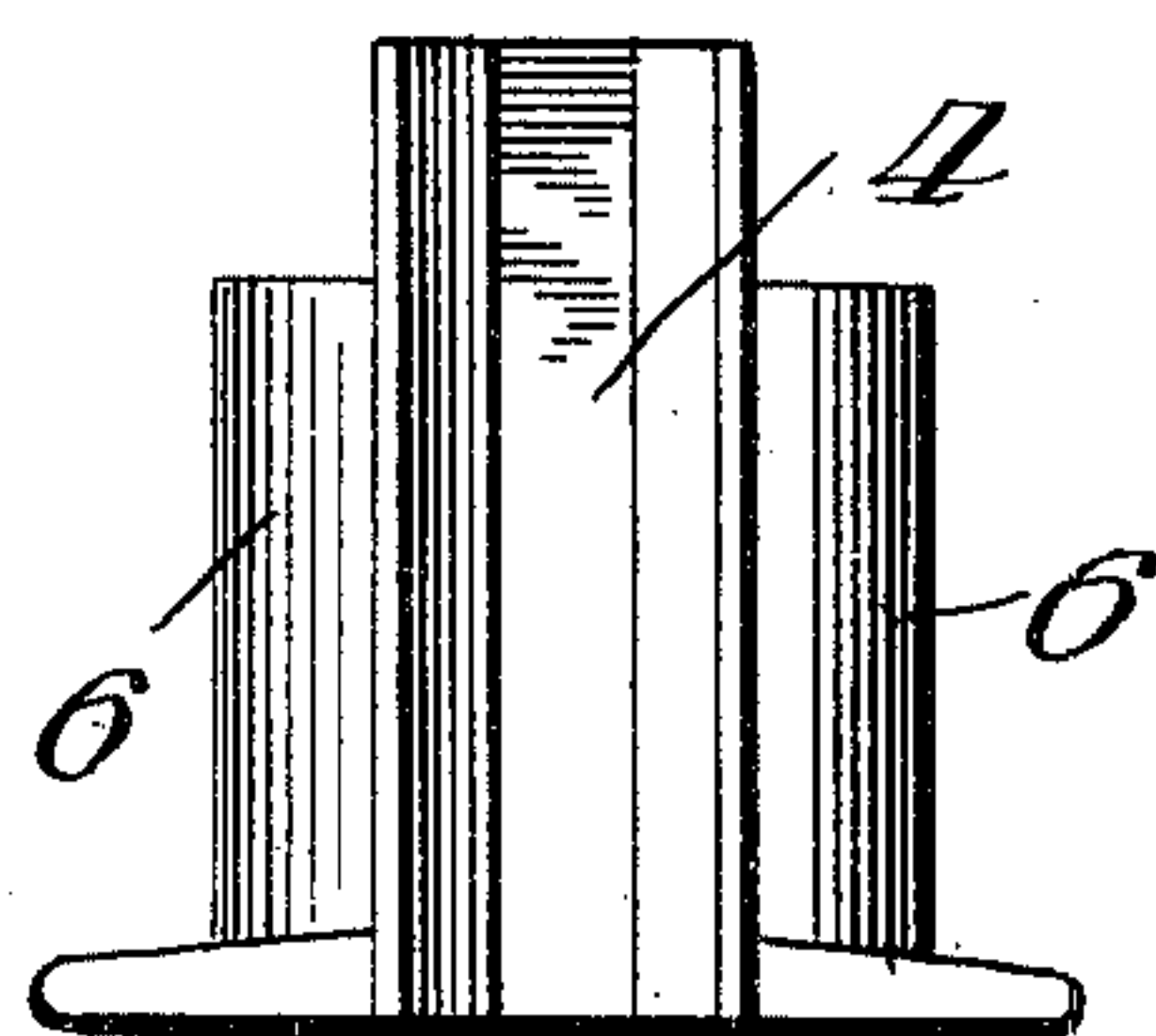
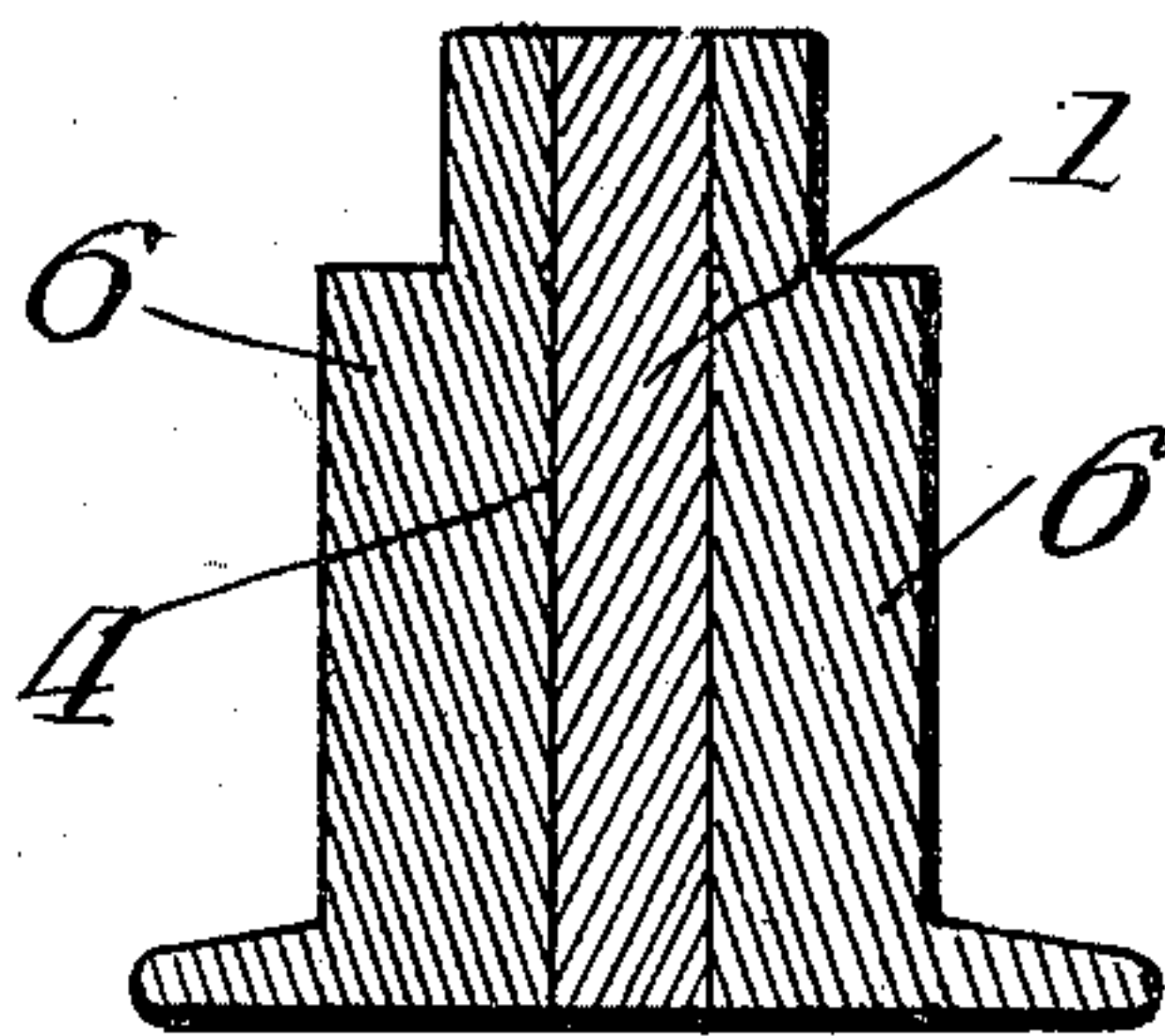
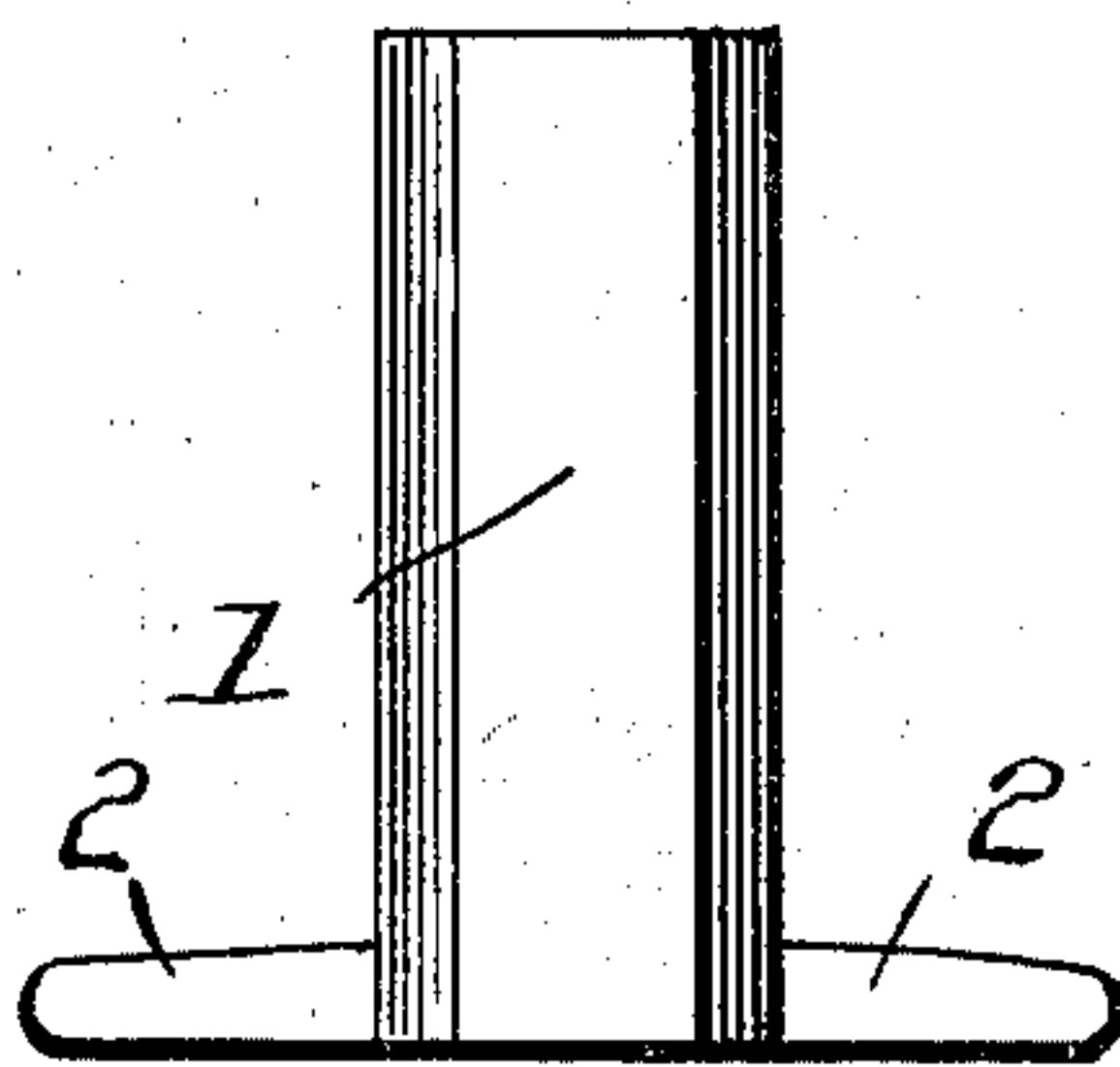
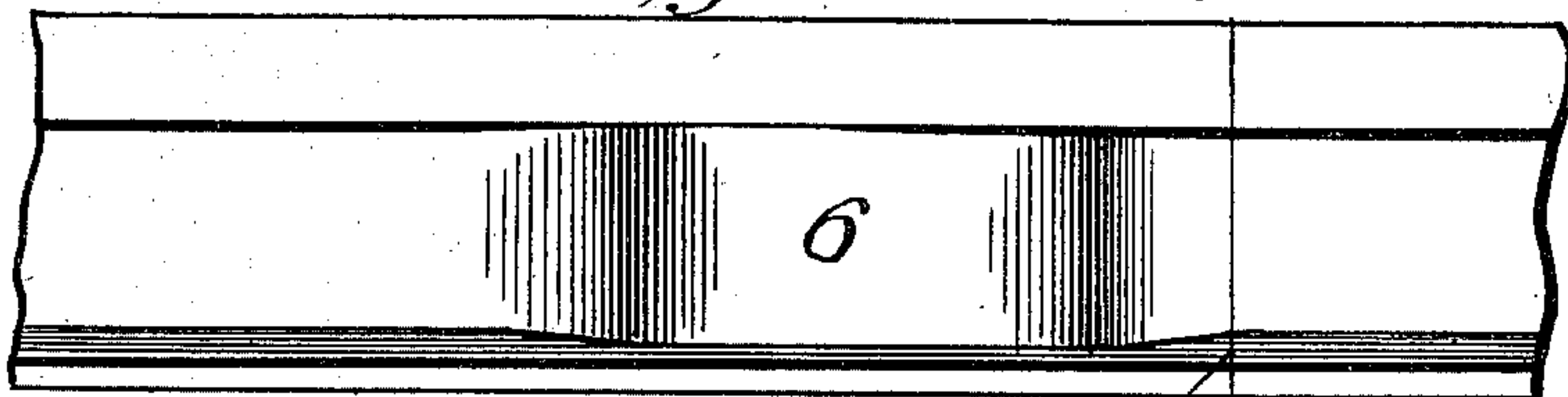
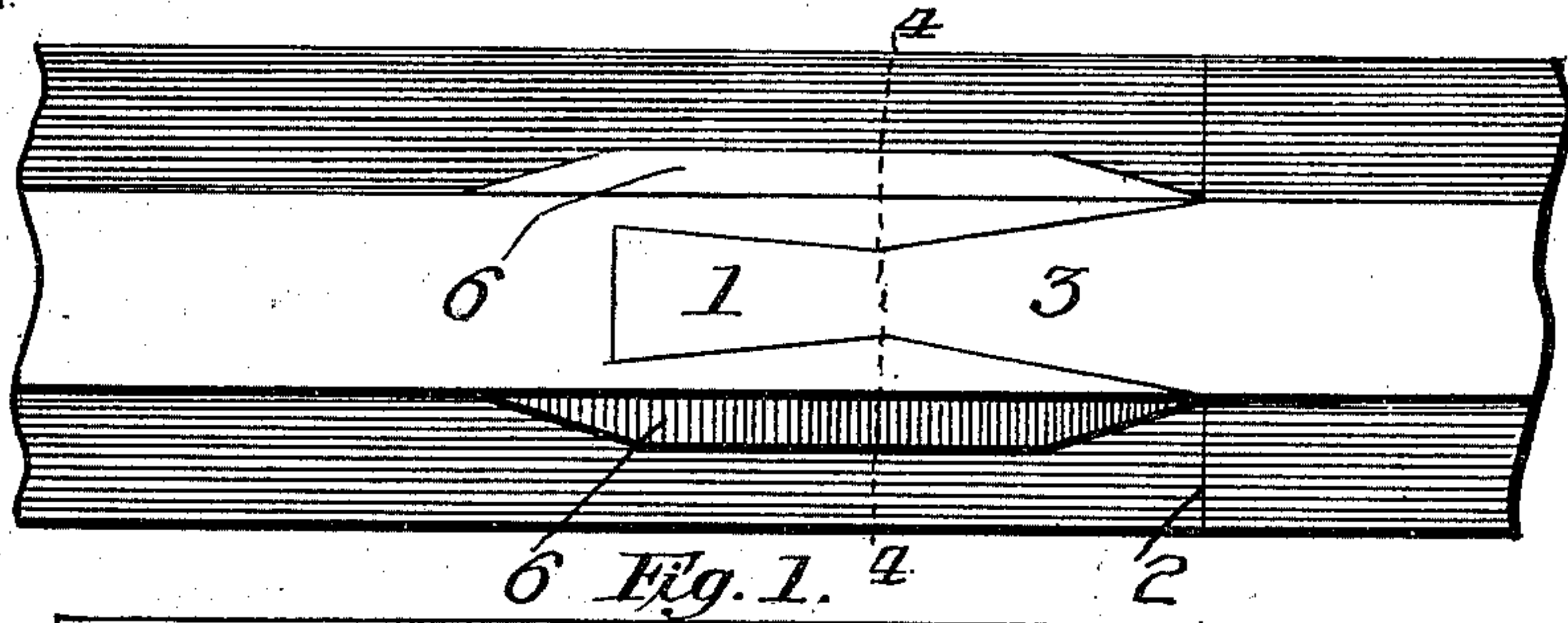
PATENTED JULY 28, 1903.

C. T. GREENWOOD & A. N. MARVIN.

RAIL JOINT.

APPLICATION FILED MAY 16, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES T. GREENWOOD AND ALBERT N. MARVIN, OF TARENTUM,
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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 734,853, dated July 28, 1903.

Application filed May 16, 1903. Serial No. 157,373. (No model.)

To all whom it may concern:

Be it known that we, CHARLES T. GREENWOOD and ALBERT N. MARVIN, citizens of the United States of America, residing at Tarentum, 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 has for its object the provision of novel means whereby said rails may be rapidly and easily connected together without the use of bolts
15 or nuts, as now generally used.

Another object of our invention is to provide a rail-joint which will be highly efficient in operation, strong and durable, and comparatively inexpensive to manufacture.

20 Briefly described, our invention comprises two rail-sections, one of said rail-sections carrying a double-wedge-shaped portion, which is adapted to be seated in the double-wedge-shaped recess formed in the corresponding section. To provide means for strengthening
25 said connection or joint, we form an enlarged portion upon each side of the rail and integral with the web of said rail, whereby when the same are joined together the lateral expansion
30 of the same will be prevented.

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 like
35 parts throughout the several views, in which—

Figure 1 is a top plan view of our improved rail-joint, showing two sections of a rail joined together. Fig. 2 is a side elevation of the same. Fig. 3 is an end view of one of the sections.
40 Fig. 4 is a cross-section taken on the line 4-4 of Fig. 1. Fig. 5 is an end view of the corresponding section. Fig. 6 is a detail perspective view of the end of one of the sections. Fig. 7 is a detail perspective view of the corresponding end.
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To put our invention into practice, we provide a section of the rail having an enlarged double-wedge-shaped portion 1, said double-wedge-shaped portion being formed integral
50 with the head, web, and base of said rail, the web of said rail portion or section being cut

away, as indicated at 2, and the head of said rail being cut away, as indicated at 3. In the corresponding section of the rail-section we provide a double-wedge-shaped recess 4, 55 formed in the head and base of said rail, also in the web of said rail, as indicated at 5. The web portion of this rail is strengthened or braced by the enlargements 6, said enlargements being formed on both sides of the web 60 and projecting over the base thereof, while the upper edge of said enlargements supports the head of said rail. When it is desired to join the two sections of the rail together, the section 1 thereof is placed in vertical alinement 65 with the corresponding section, when the double-wedge-shaped enlargements are carried vertically into the double-wedge-shaped recess 4 when the same is in position to be used.

While we have herein shown and described 70 our invention in detail, yet it is obvious that we may form the enlargements upon the sides of the web of a rail of any desired shape or size. It is also obvious that the angle of the double-wedge-shaped enlargements and recess employed in our invention may be of any angle found practical to our invention. It will be further noted that various changes may be made in the details of construction without departing from the general spirit of 80 our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A rail-joint comprising two sections, one 85 section of said rail carrying an enlarged double-wedge-shaped head or enlargement, said enlargement fitting into the double-wedge-shaped recess formed in the corresponding section of the rail, and supporting enlargements formed on each side of the web of the rail opposite said joint, substantially as described. 90

2. A rail-joint comprising two rail-sections, one of said sections having formed integral 95 therewith an enlarged double-wedge-shaped head or enlargement, said head or enlargement being formed from the head, web and base of said rail, a double-wedge-shaped recess formed in the head, web and base of the 100 corresponding section, the angles of said double-wedge-shaped recess corresponding with

the angles of the double-wedge-shaped enlargement carried on the other section, the base of the first-mentioned section being cut away to receive the base of the second section, and supporting enlargements formed opposite the recess formed in the second section, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

CHAS. T. GREENWOOD.
ALBERT N. MARVIN.

Witnesses:

C. N. REED,
FRANK DENNY.