

No. 765,269.

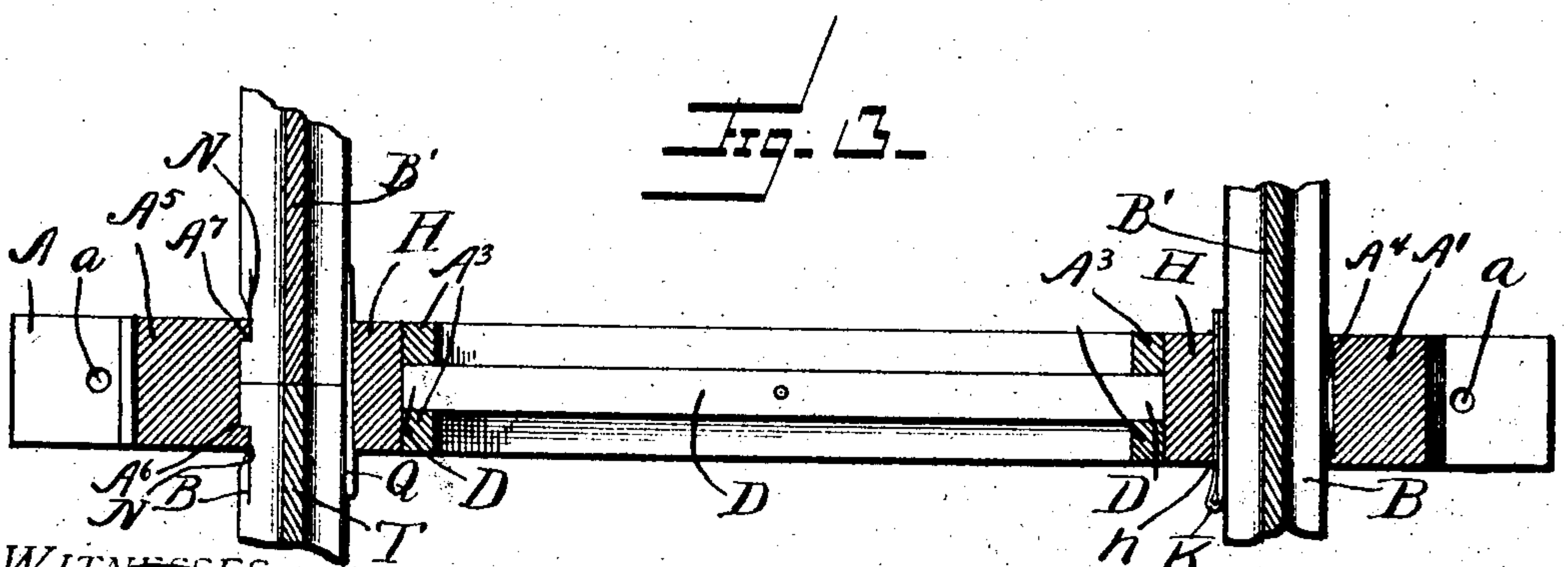
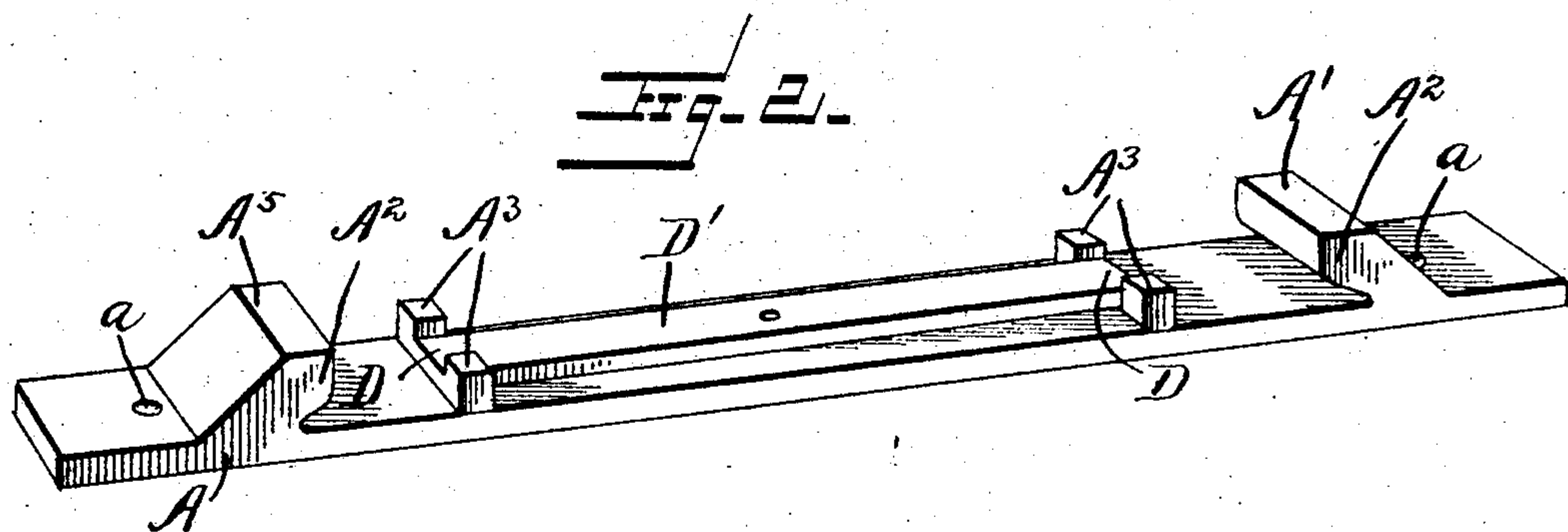
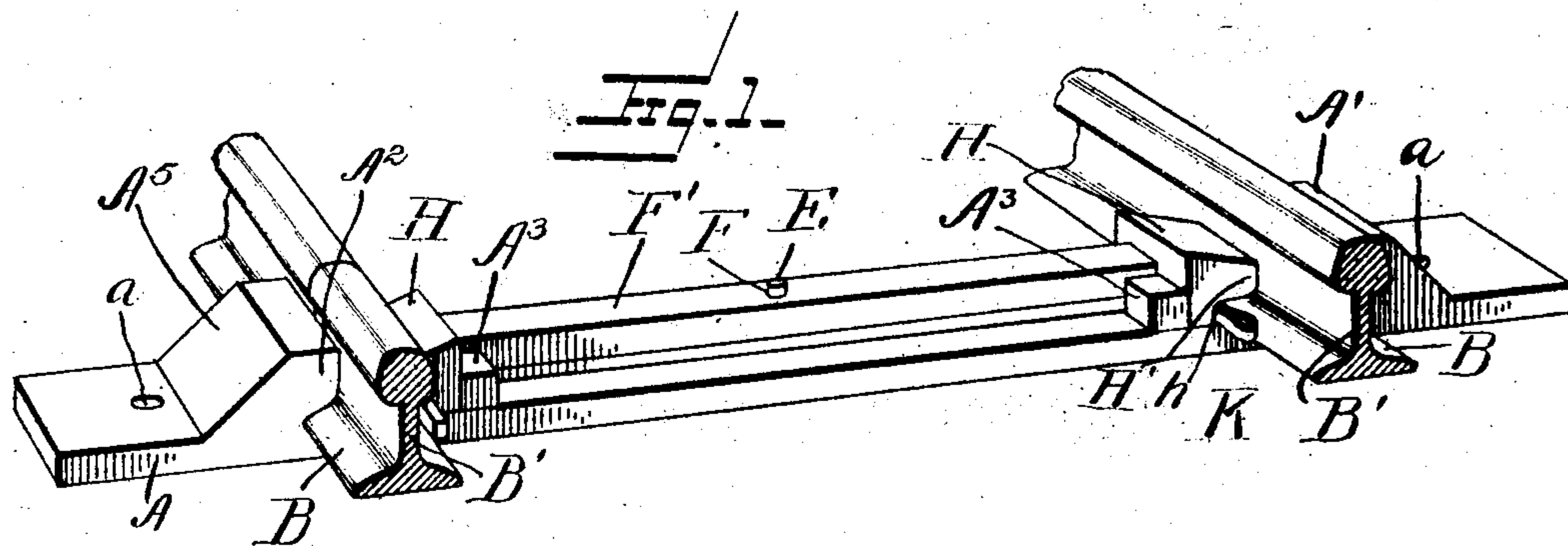
PATENTED JULY 19, 1904.

W. T. BROWN & W. C. WATSON.

RAIL JOINT FASTENING.

APPLICATION FILED MAY 13, 1904.

NO MODEL.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WATT T. BROWN, OF LOCK NO. 3, AND WILLIAM C. WATSON, OF RAGLAND, ALABAMA.

RAIL-JOINT FASTENING.

SPECIFICATION forming part of Letters Patent No. 765,269, dated July 19, 1904.

Application filed May 13, 1904. Serial No. 207,798. (No model.)

To all whom it may concern:

Be it known that we, WATT T. BROWN, residing at Lock No. 3, and WILLIAM C. WATSON, residing at Ragland, in the county of St. Clair and State of Alabama, citizens of the United States, have invented certain new and useful Improvements in Rail-Joint Fastenings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in rail-joint fastenings; and the object of the invention is to produce a simple and efficient means which will securely hold the ends of rails together, means being provided whereby jars on the track may be taken up and means also being provided to allow the rails to move slightly in case of increase of friction on compound curves.

The invention consists in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a perspective view of our improved railway-joint apparatus. Fig. 2 is a perspective view of one of the ties upon which the meeting ends of the rails are held, and Fig. 3 is a detail sectional view showing the manner in which the rail ends are held to the tie.

Reference now being had to the details of the drawings by letter, A designates a tie made, preferably, of metal and having its lower edge recessed away in a manner to fit bridge-trusses, and said ties are provided with apertures *a*, through which bolts or pins may be passed to fasten the tie to the bridge-trusses. Projecting from the upper surface of said tie are the lugs A' and A⁵, which have overhanging portions A², under which the flanges B of

the rails B' are adapted to engage. Also rising from the tie are the upwardly-extending projections A³, between which are recesses D, the bottoms of which recesses are continuous with the rib or raised portion D' upon said tie. E designates a pin which rises from said rib or raised portion D' and is midway between the projections A² and is provided to engage an aperture F, formed in the rail-engaging bar F'. Said bar F' has heads H, having overhanging portions H' at the ends thereof adapted to engage over the inner flanges of rails held to said ties. The shank portion of the bar F' is adapted to rest in said recesses D adjacent to the heads H, as shown clearly in the perspective view of the drawings. Lug A', which projects from the upper surface of the tie, has a spring A⁴ mounted therein and against which the outer flange of one of the rails is adapted to contact, and a flexible or spring key K is adapted to be inserted intermediate a shoulder $\frac{1}{2}$ and the flange of a rail, as shown in the perspective view of the drawings, and provided to allow a slight frictional movement intermediate said spring A⁴ and the spring-key incident to the variations of weather or strain coming upon the compound curves. The lug A⁵ has a recessed portion A⁶ in its side wall underneath the overhanging portion A² thereof, forming shoulders A⁷, which are adapted to be engaged by the shoulders formed at the ends of the recesses N in the outer edges of the flanges of the rail T, as shown in the sectional view of the drawings. After the meeting ends of two rails having recesses N in the outer edges thereof have been placed upon a tie and the shoulders in the flanges thereof inserted in said recess A⁶ wedges Q are driven intermediate the opposite edge of the flanges of the meeting ends of the rails and the upright wall of the head H of said bar F', thereby securely holding the rails with their shoulders engaging the shoulders in the ends of the lugs A⁵.

By the provision of the rail-joint and fastening apparatus, as shown, it will be observed that a simple and efficient means is provided for securely holding the meeting ends of the rails together, and mechanism is provided

whereby a slight frictional movement may be allowed to one of the rails upon a compound curve.

While we have shown a particular construction of apparatus illustrating our invention, it will be understood that we may alter the same as to details, if desired, without in any way departing from the spirit of the invention.

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

1. A railway-joint comprising a tie having overhanging lugs projecting from the upper surface thereof, a locking-bar having overhanging head portions, a pin projecting from said tie and passing through an aperture in said bar, projections upon the upper surface of said tie between which the shank portion of said bar is held from lateral movement, and wedging means adapted to hold the meeting ends of rails intermediate said flanges and locking-bar, as set forth.

2. A rail-joint comprising a tie having upwardly-extending and overhanging lugs thereon, a pin rising from said tie, a locking-bar having overhanging head portions, projections extending from the upper surface of said tie with recesses between the same in which the shank portion of said bar is adapted to rest,

a spring seated in a recess in one of said lugs and adapted to bear against the flange of a rail, and a spring-key interposed between the flange of a rail and one of the heads of said locking-bar, as set forth.

3. A rail-joint comprising a tie having lugs projecting from the upper surface thereof and notched on their inner faces, one of said lugs having a recess in a vertical wall of its notched portion, a pin rising from said tie, a locking-bar having notched heads, projections rising from said tie, with recesses between the same engaged by the shank portion of said locking-bar, rails having recesses in their outer portions, the shoulders of the notches in said flanges adapted to engage shoulders formed at the ends of the recess in said lugs, wedge members interposed between the inner edges of the flanges of the meeting ends of rails and the adjacent heads of said locking-bar, as set forth.

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

WATT T. BROWN.
WILLIAM C. WATSON.

Witnesses:

W. T. FLOYD,
SIDNEY GLENN.