

A. P. FINLEY.
RAILWAY RAIL JOINT.
APPLICATION FILED JAN. 15, 1909.

938,467.

Patented Nov. 2, 1909.

Fig. 1.

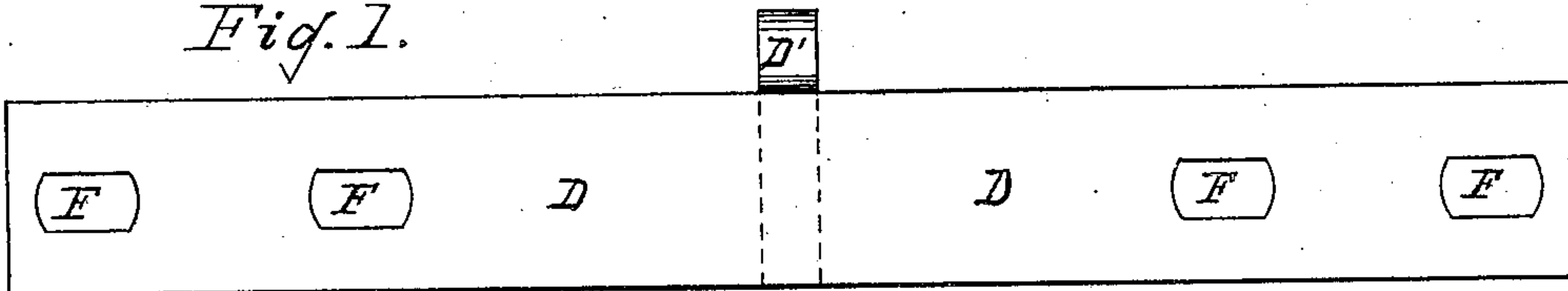


Fig. 2.

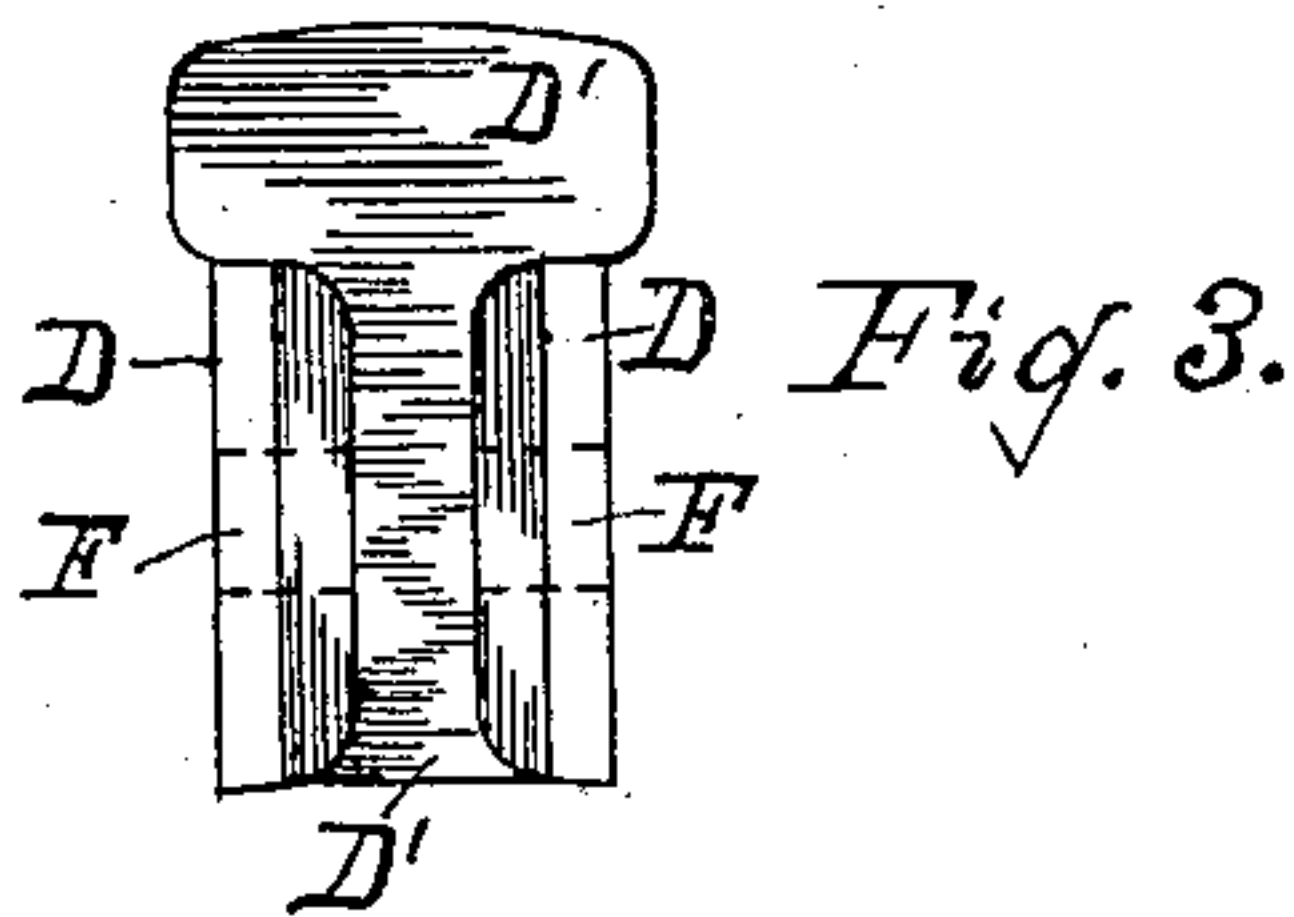
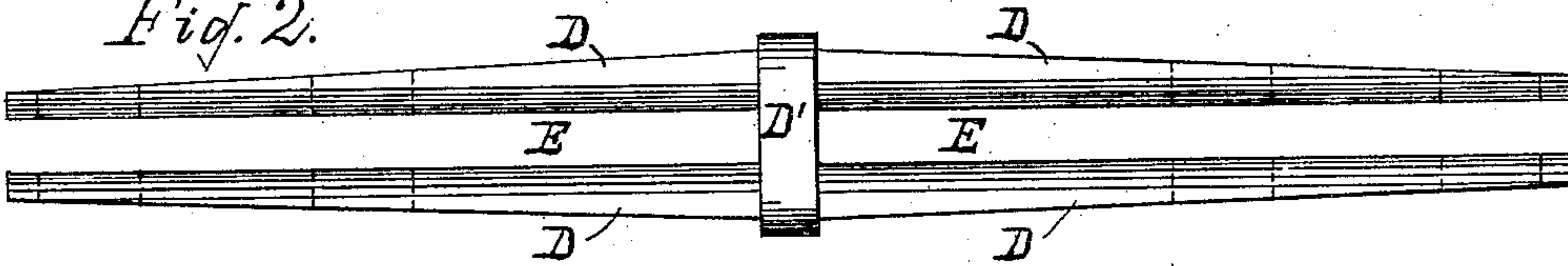


Fig. 4.

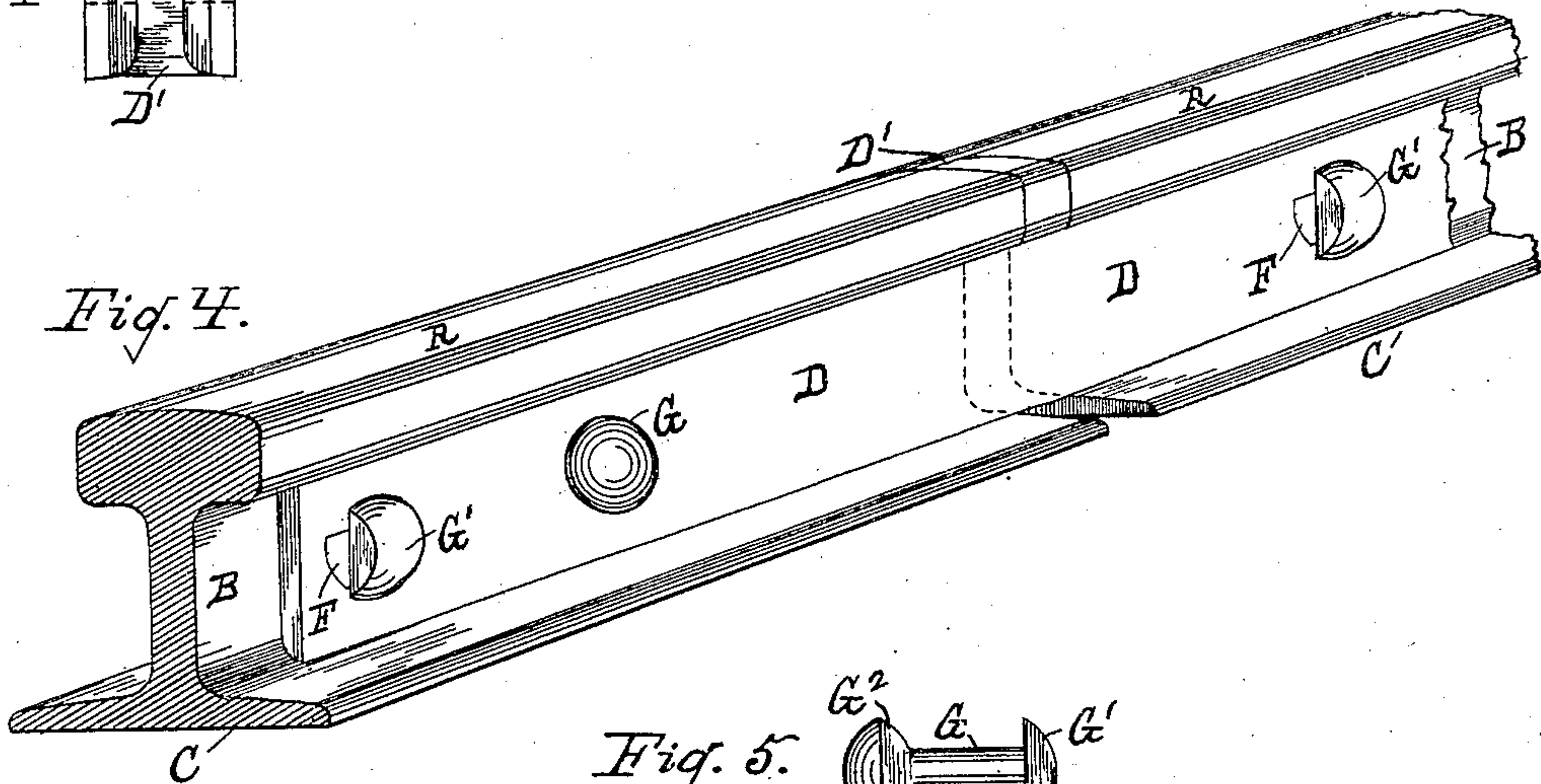


Fig. 5.

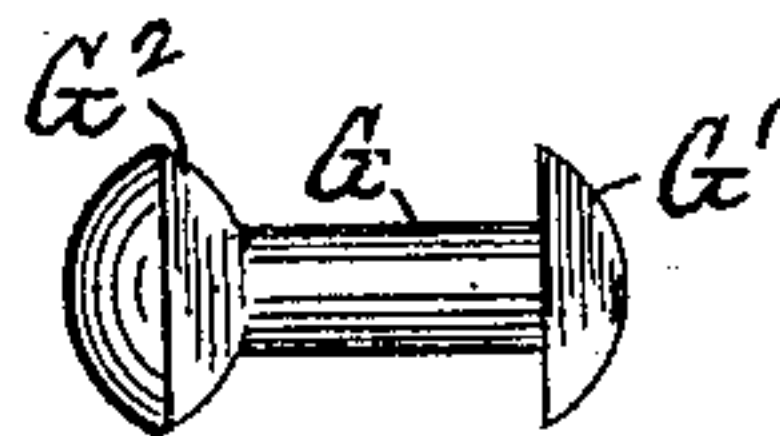


Fig. 6.



Inventor

Witnesses

J. E. Rodgers
J. P. Green.

By

Alfred P. Finley.
J. P. Dederick.

Attorney

UNITED STATES PATENT OFFICE.

ALFRED P. FINLEY, OF SHERMAN, TEXAS.

RAILWAY-RAIL JOINT.

938,467.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed January 15, 1909. Serial No. 473,032.

To all whom it may concern:

Be it known that I, ALFRED P. FINLEY, a citizen of the United States, residing at Sherman, in the county of Grayson and State of Texas, have invented certain new and useful Improvements in Railway-Rail Joints, of which the following is a specification.

This invention relates to railway-rail joints, and has for its object to provide an improved device of this character in which the parts thereof are reduced to the minimum and the strength and durability of the joint are preserved and increased while admitting of proper longitudinal movement of the rail due to expansion and contraction or other natural causes; and at the same time rigidly securing the abutting rail ends or sections against either lateral or vertical movement under the heaviest strains; and, further, to provide for securing the parts by means of clamp-bolts, thus preventing them from becoming loosened thereon, with obvious increased efficiency.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like characters, Figure 1 is a side elevation of my railway rail splice. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse vertical section thereof. Fig. 4 is a perspective view of rail-sections and a rail-joint partly broken away and illustrating a joint embodying the features of the invention. Figs. 5 and 6 are views of a clamping bolt preferably used in securing the sections.

Referring to the drawings R designates the treads, B the webs, and C the base portions of opposite rail-sections, which are of common or ordinary form.

D represents the rail splice which engages opposite sides of the vertical webs B of the rails; it consists of two parallel sections joined at their centers by a ledge or tie D' that extends vertically from the bottom of the sections to the top of same, when it widens and extends upward, conforming with the tread portion of the rail ends. Between the two sections thus joined are formed longitudinal spaces E in which the web portions of the abutting rail ends are respectively placed; being, of course, slid into the spaces from the end. The upper edges of the sections rest against the lower part of the tread A of rail, and the lower edges against the upper side of the rail base C;

the inner edges of the sections being rounded and shaped to correspond with, and closely fit the usual curvatures of ordinary rails; and the sections may be reinforced by increasing their thickness at the center as shown in Fig. 2.

The rail splice and the vertical webs of the ends of abutting rails are provided with the usual registering transverse apertures F, preferably elongated longitudinally to receive the double-headed clamp-bolts G; the latter having, instead of the usual threaded nut, a secondary head G' corresponding in shape to the apertures F. These secondary heads are passed through the apertures in a horizontal position, when by a tool designed for the purpose they are twisted vertically as shown in Fig. 4; the flat surface G² under the primary or regular head preventing the turning of the bolt during the operation.

The device will be formed to fit different sizes and forms of rails, as will be obvious, and by this simple arrangement a rail-splice is produced containing but one piece—including the bolts, and by this means, in connection with my clamping bolt the objectionable features of the joints, nuts, and other parts becoming loosened by the severe jarring to which this class of devices are subjected is obviated, and the construction materially cheapened and its efficiency increased.

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

In combination with the meeting ends of the rail, a rail splice having a central ledge fitting between the ends of the rail and shaped to conform to the tread of the rail, the two pairs of splice bars extending from said ledge and resting against the web of the rail, said bars being provided with elongated bolt openings, the bolts having a circular shaped head at one end and a substantially semi-circular shaped head at the other end, part of the inner side of said circular head being cut away, said bolts passing through the openings in the bars and web of the rail and adapted to clamp upon said bars.

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

ALFRED P. FINLEY.

Witnesses:

J. E. RODGERS,
J. P. GREEN.