

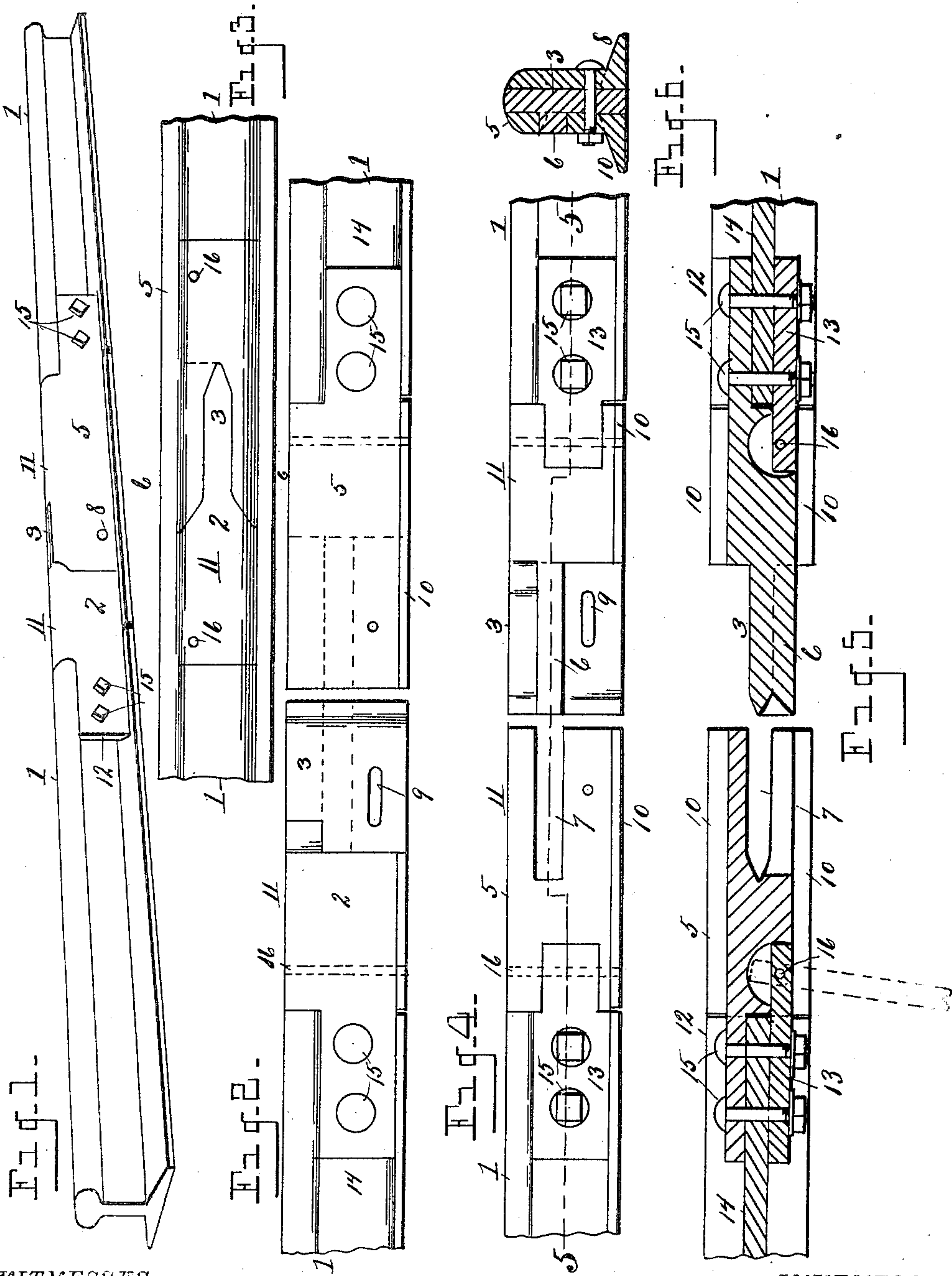
No. 667,945.

Patented Feb. 12, 1901.

W. W. LUGAR.
RAIL COUPLING.

(Application filed June 14, 1900.)

(No Model.)



WITNESSES.

O. P. Barnziger
E. E. E. E. E.

INVENTOR.

William W. Lugar.
R. P. M. M. M.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM W. LUGAR, OF HATBOROUGH, PENNSYLVANIA.

RAIL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 667,945, dated February 12, 1901.

Application filed June 14, 1900. Serial No. 20,257. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. LUGAR, a citizen of the United States, residing at Hatborough, in the county of Montgomery, State of Pennsylvania, have invented certain new and useful Improvements in Rail-Couplings; and I 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to a coupling for uniting the meeting ends of railway-rails; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide means for uniting the ends of railway-rails so as to effect a smooth joint and obviate jarring and the battering of the ends of the rails at the joint and at the same time provide for the expansion and contraction of the rails of the track.

The above object is attained by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of two rails united by my improved coupling. Fig. 2 is an enlarged side elevation of the coupling with the rails attached. Fig. 3 is a plan view of the coupling. Fig. 4 is a side elevation showing the members of the coupling drawn apart. Fig. 5 is a horizontal section as on line 5 5 of Fig. 4. Fig. 6 is a transverse section as on line 6 6 of Fig. 3.

Referring to the characters of reference, 1 designates the rail-sections, which are of ordinary construction. The coupling comprises two interlocking members of the same diameter as the rail, excepting their transverse diameter, which is thicker. The part 2 of the coupling is provided with a projecting tongue 3 in axillar alinement with the rail and adapted to enter a corresponding channel 4 in the opposite member 5 of the coupling. Extending longitudinally of the tongue and projecting laterally from one side thereof is a horizontal rib 6, which is adapted to lie in a horizontal way 7, opening through the side of the

coupling part 5 when said parts are forced together, as in Figs. 1, 3, and 6. When the coupling members are united, the interlocking tongue and rib effect a smooth joint between said members, which is supported against breaking down by means of said rib and which is of such a character as to obviate an open joint between said members.

To secure the members of the coupling when united, a bolt 8 passes through the sides of the member 5 and through the slot 9 in the tongue 3, whereby said members are united in a manner to allow of the longitudinal expansion and contraction of the rails. The coupling parts 2 and 5 really comprise a section of the rail of the track and are provided with a base 10 and a tread portion 11 to correspond with the rail. Each of said coupling parts is provided with parallel fish-plates 12 and 13, respectively. The plates 12 are formed integral with the coupling parts and lie against the web 14 of the rail between the flanges of the tread and base. The plates 13 embrace the opposite side of the web of the rail, and said plates are united and secured to the rail by means of transverse bolts 15, as clearly shown in Fig. 5. For the purpose of facilitating the removal and replacing of a rail the fish-plates 13 are hinged to their respective coupling parts by means of a bolt 16 passing downward through said parts and through one end of said plates 13, whereby upon removing the bolts 15 the hinged plate may be swung outward at its free end, as shown by dotted lines in Fig. 5, enabling a rail to be readily removed from and replaced in the coupling.

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

1. A coupling for railway-rails, comprising two members, one having a tongue projecting in axillar alinement therewith and a lateral rib upon one side of said tongue, the other of said members having a channel to receive the tongue and a horizontal way to receive said rib and each of said members having projecting plates for attachment to the ends of the rails.

2. In a coupling for railway-rails, the combination of the coupling members, one member having a projecting tongue carrying a

lateral rib, the other member having an open channel to receive said tongue and a horizontal way to receive said rib, said tongue having a horizontal slot therethrough and the
5 sides of said member having a registering aperture whereby said parts may be locked together by passing a bolt through said apertures and slots.

3. In a coupling for railway-rails, the combination of the coupling parts having interlocking members, each of said members hav-

ing parallel fish-plates adapted to embrace the web of the rail, one of said plates being hinged to the supporting member to enable it to be swung outward, substantially as and
15 for the purpose set forth.

In testimony whereof I sign this specification in the presence of two witnesses

WILLIAM W. LUGAR.

Witnesses:

SAML. J. GARNER,
GEORGE R. PALMER.