

G. A. MEAD.
RAIL-JOINT.

No. 169,717.

Patented Nov. 9, 1875.

Fig. 1

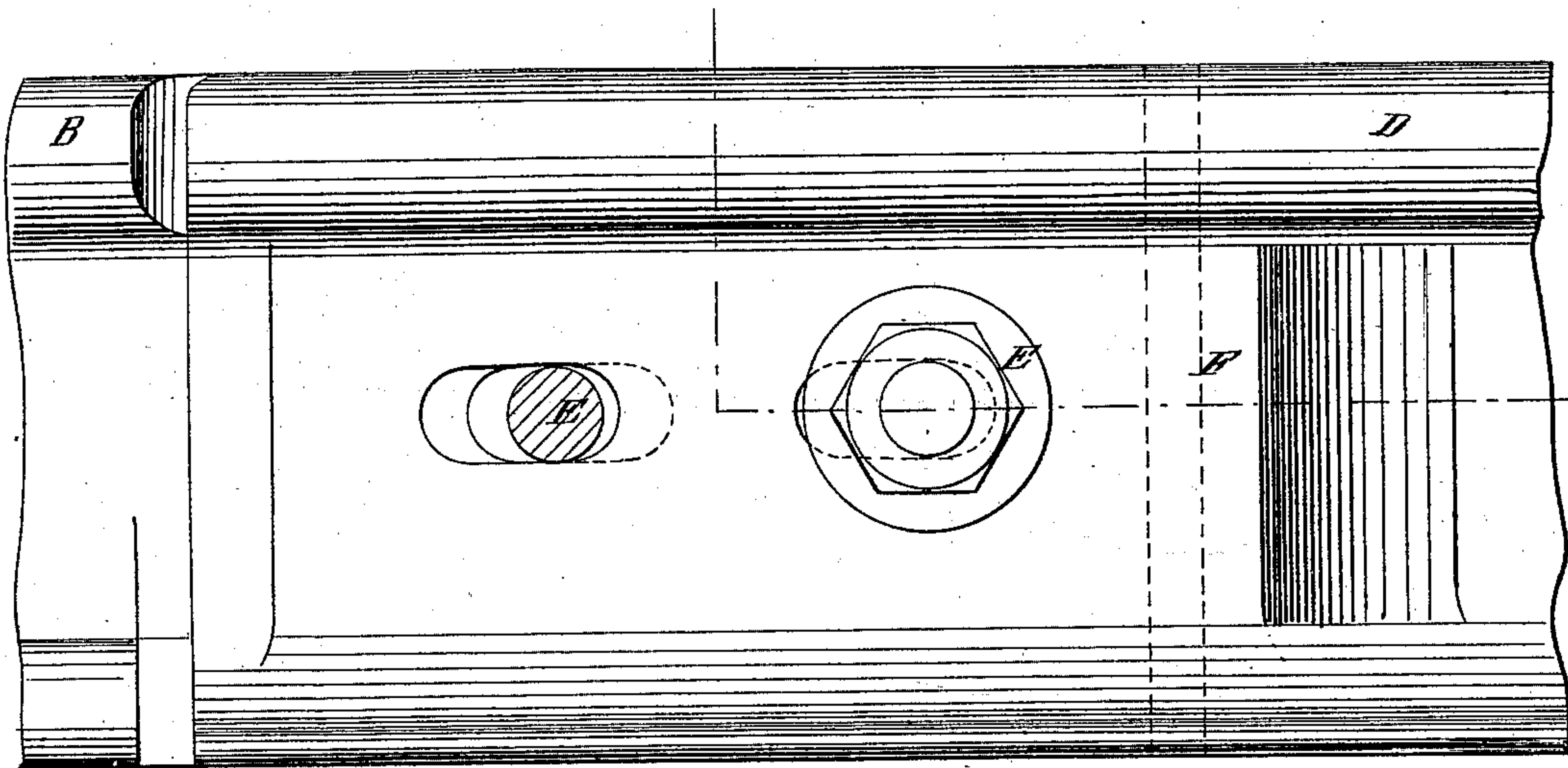
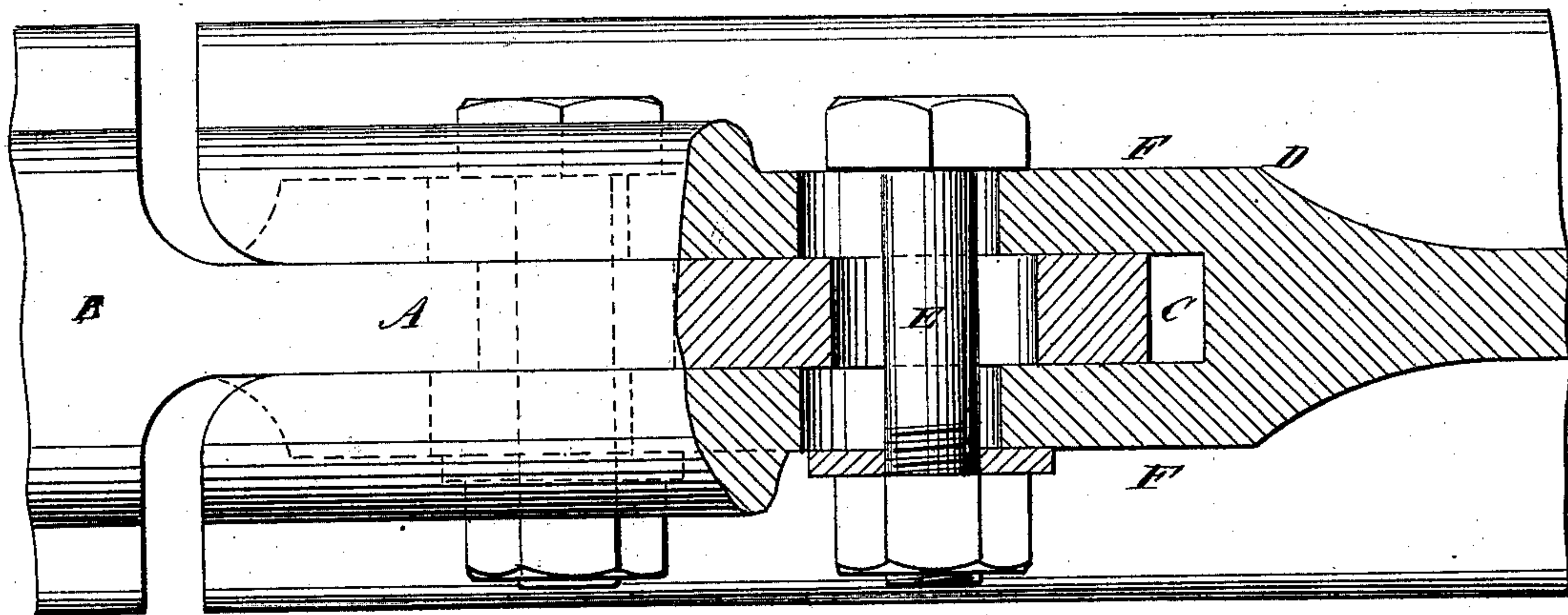


Fig. 2



WITNESSES:

C. Nereux
Alex F. Roberts

INVENTOR:

G. A. Mead
BY *Mumford*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE A. MEAD, OF SALEM CENTRE, NEW YORK.

IMPROVEMENT IN RAIL-JOINTS.

Specification forming part of Letters Patent No. **169,717**, dated November 9, 1875; application filed September 11, 1875.

To all whom it may concern:

Be it known that I, GEORGE A. MEAD, of Salem Centre, in the county of Westchester and State of New York, have invented a new and Improved Rail-Splice, of which the following is a specification:

My invention consists of a tongue or tenon of one rail entering a slot in the other, and the slotted part bolted together by a couple of bolts arranged the same as in fish-plate joints.

The object is to make an endless joint, and to dispense with the fish-plates commonly used. The tongue, in this case, is as wide as the full depth of the rail, and the other rail is slotted through for the tongue, but the slot may be closed at the bottom by a web, and the tongue made a little narrower, if it may be preferred to do so, to prevent the tongue from springing down into the tie below the bottom of the slotted rail; but it is believed the bolts will prevent this action so effectually that the slot and the tongue may extend to the bottom of the rails.

Figure 1 is a side elevation of my improved rail-joint, and Fig. 2 is partly a plan view and partly a horizontal section.

Similar letters of reference indicate corresponding parts.

A represents a tongue or tenon on the end of one rail, B, extending into a slot, C, in the other rail, D, a suitable distance, for making an endless joint; and E represents bolts through the tongue and the slotted portion, to bolt

them together, the holes for the bolts being suitably elongated to provide for expansion and contraction. The web of the slotted rail is thickened at F, to compensate for the strength lost by the slot. The bolts will hold the two rail ends against springing down under the weight of the car-wheels much better than the fish-plates do, and they will keep tight much better than they do in the fish-joints.

Instead of having the tongues the same width vertically as the slotted part of the rail with which it connects, or narrower, and resting on a web in the bottom of the slot, as above suggested, it may be a little wider, and have a flange or base under the base of the slotted part, both for strengthening the tongue and for keeping the joint even when the rails pass over.

These end pieces may be made separately from the rails, and be afterward welded on; but, if found best in practice, they may be formed on the rail ends at the time of or subsequently to the making of the rails.

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

A rail-joint in which a tenon or tongue of one rail fits in a slot in the other rail, and the tenon and the slotted portion are bolted together, substantially in the manner described.

GEO. A. MEAD.

Witnesses:

JAMES H. HUNTER,
C. SEDGWICK.