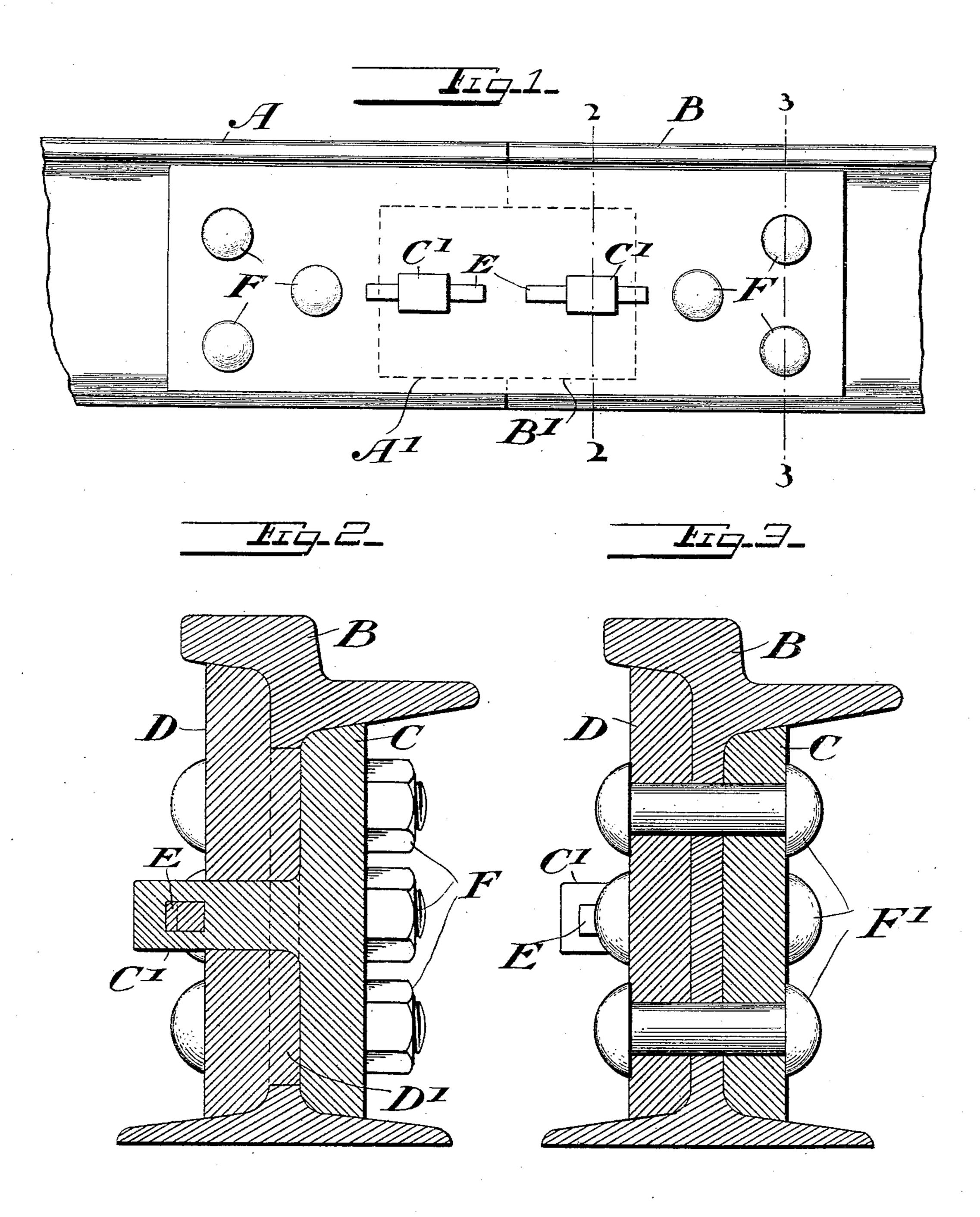
O. SMAY.

RAIL JOINT.

(Application filed Sept. 23, 1897.)

(No Model.)



United States Patent Office.

ORLANDO SMAY, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE LORAIN STEEL COMPANY, OF OHIO.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 616,440, dated December 20, 1898.

Application filed September 23, 1897. Serial No. 652,732. (No model.)

To all whom it may concern:

Be it known that I, Orlando Smay, of Johnstown, Cambria county, Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the fol-

lowing is a specification.

My invention (Case B) relates to rail-joints, and has for its object the provision of an improved form of joint in which the bars fit the contour of the rails and also serve to more firmly uphold the head of the rails by fitting into recessed portions of the rails. To these ends I remove for a suitable distance from the end of the rail the entire web thereof, and in the space thus formed I snugly fit a portion of one of the splice-bars.

My invention also consists in the improved arrangement, construction, and combination of parts which will be hereinafter described, due reference being had to the accompanying

drawings, in which—

Figure 1 is a side elevation of one of my improved joints, while Figs. 2 and 3 are transverse sections on the lines 2 2 and 3 3, respectively.

The rails to be joined are represented as A

and B.

A' and B' are the cut-away portions of the

webs of the rail.

gage the lower flange and the under side of the head and tram of the rails. I form the splice - bar D with a projection D', which snugly fits the recess in the rails formed by the removal of the webs. This projection serves to firmly support the upper portion of the rails and prevents the formation of the "low joint," which is ordinarily caused by passage thereover of heavily-loaded cars. It is evident that the projection aforesaid may be formed upon the bar C instead of the bar

D, if it is deemed desirable. These bars may now be secured in the position shown in any suitable manner. I prefer, however, to form lugs C' on the splice-bar C, which lugs pass .45 through suitable orifices in the bar D and are held in place by the keys E.

If a longitudinal movement of the rails A and B is desired, no further means of securing the bars together will be necessary. If, 50 however, it is desirable to form a continuous rail, either bolts F or rivets F' may be used.

I do not desire to limit myself to the precise details which I have shown and described, for it is clearly evident that modifications 55 within the scope of this invention will suggest themselves to those skilled in the art.

Having thus described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In combination, the rails A and B having the removed portions A' and B' of the webs, the splice-bar C formed with the lug C', the splice-bar D formed with the extension D' filling the said portions A' and B', and the 65

2. In a railway-joint, the combination of rails having a portion of their entire web removed, two splice-bars, one of which is formed with a projection and perforation, said projection serving in place of the said removed web and sustaining the head of the rails at all points necessitated by the removal of the web, a lug on the other of said splice-bars, said lug extending through said perforation, 75 and a key to engage said lug.

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

ORLANDO SMAY.

Witnesses:

MYRTLE E. SHARPE, RICHARD EYRE.