

No. 888,314.

PATENTED MAY 19, 1908.

W. B. COOKE.
GUARD RAIL CLAMP.
APPLICATION FILED APR. 26, 1907.

Fig. 1.

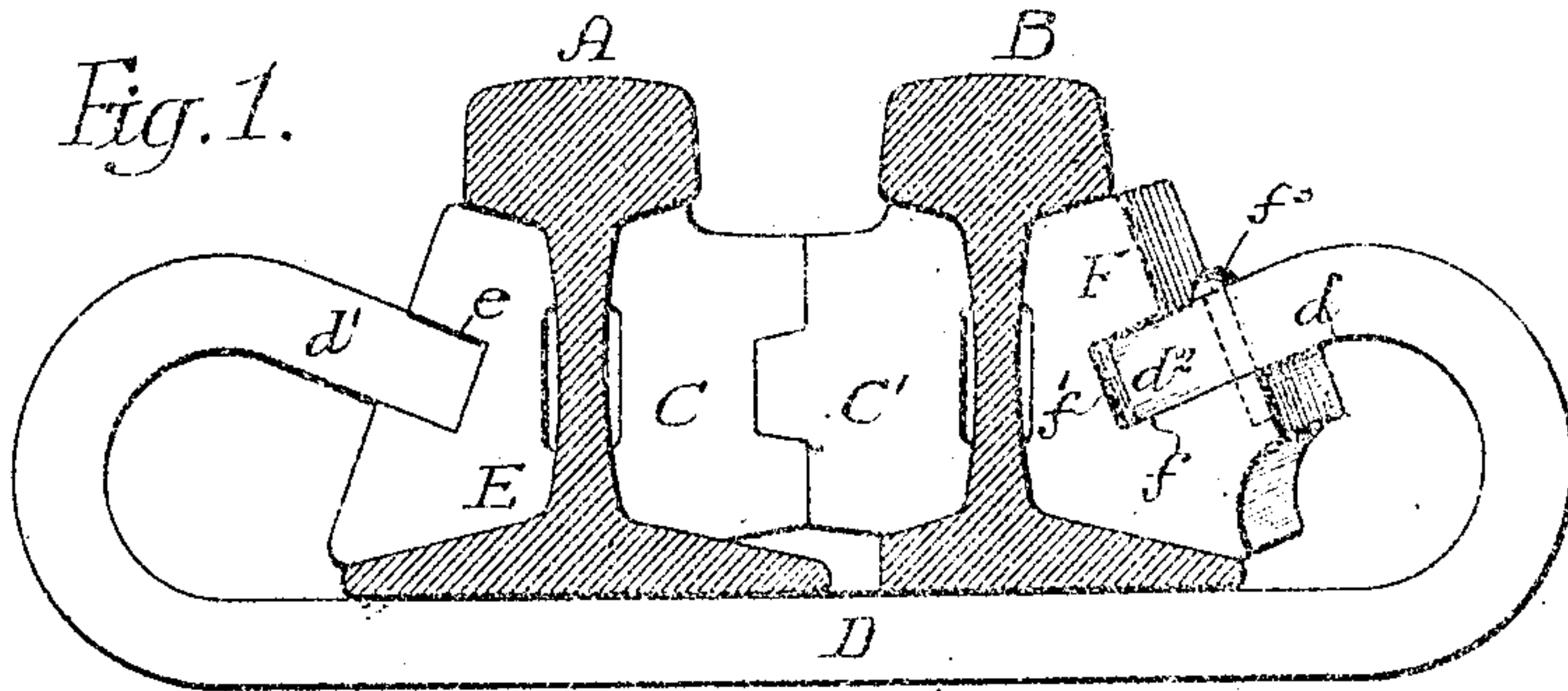


Fig. 2.

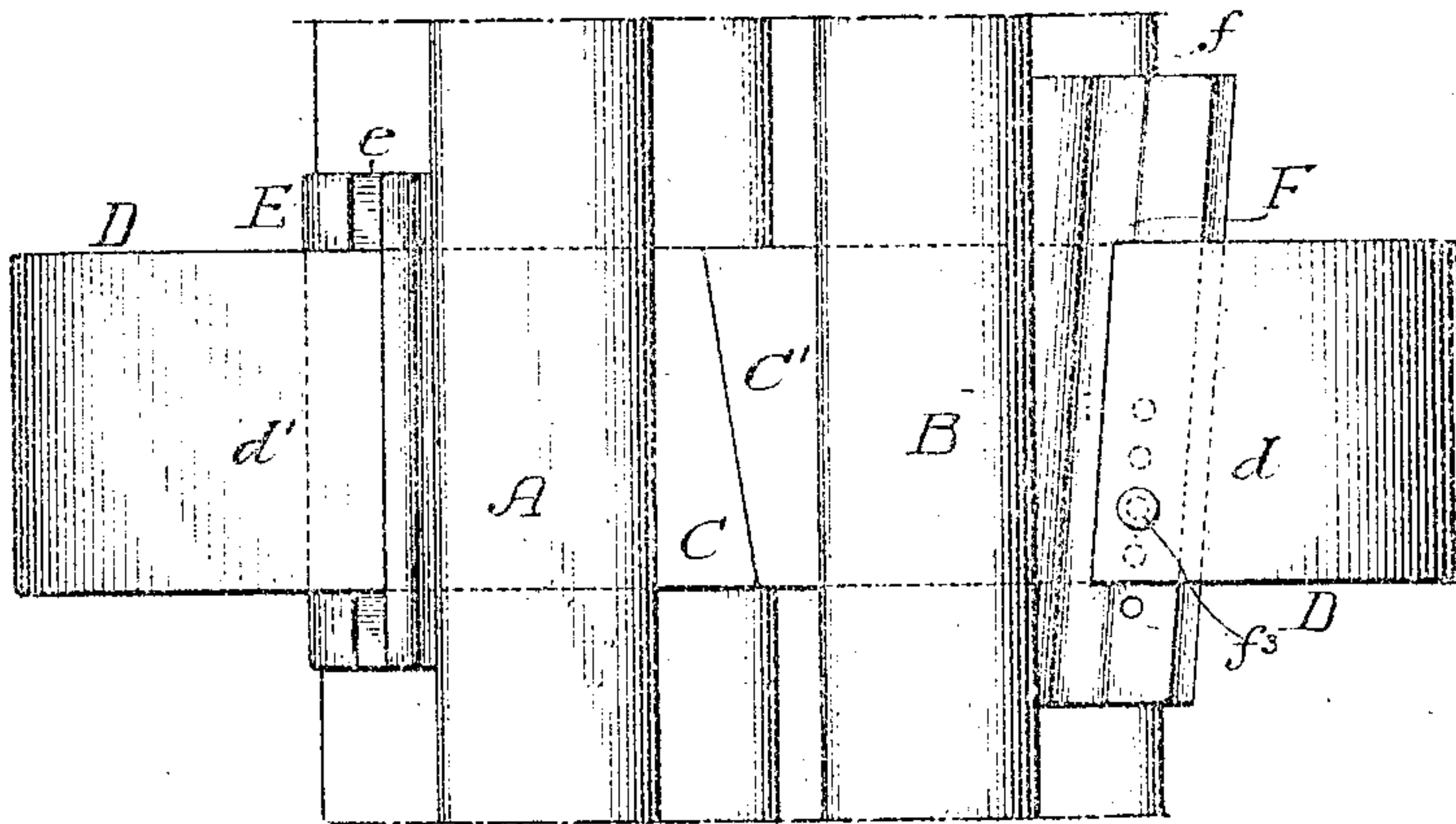
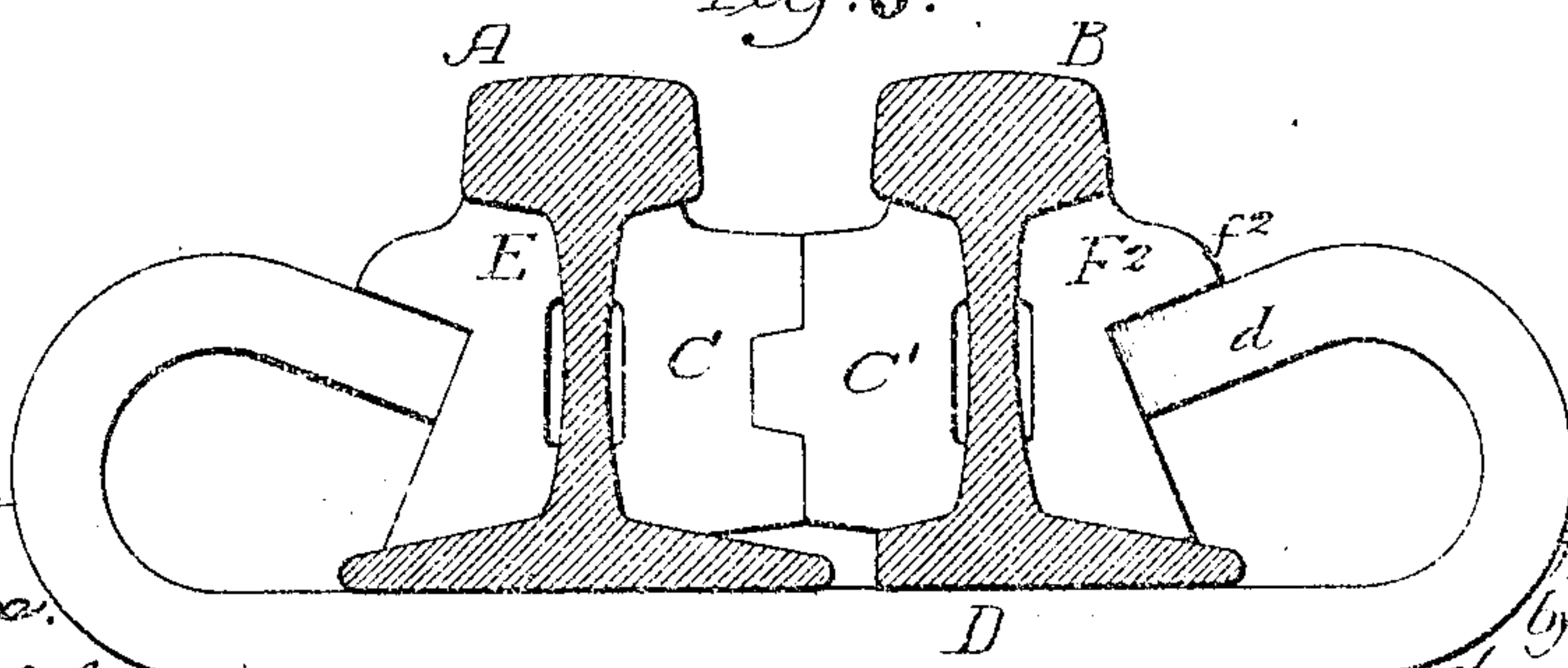


Fig. 3.



Witnesses:

John H. Brown.

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by his Attorneys

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UNITED STATES PATENT OFFICE.

WARNER B. COOKE, OF JENKINTOWN, PENNSYLVANIA, ASSIGNOR TO WILLIAM WHARTON JR. & COMPANY, INCORPORATED, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

GUARD-RAIL CLAMP.

No. 888,314.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed April 26, 1907. Serial No. 370,519.

To all whom it may concern:

Be it known that I, WARNER B. COOKE, a citizen of the United States, residing in Jenkintown, Pennsylvania, have invented certain Improvements in Guard-Rail Clamps, of which the following is a specification.

My invention relates to certain improvements in guard rail clamps of the type made of a single piece of wrought metal bent into shape.

The object of the invention is to so construct the rail clamp that any lateral pressure exerted on the clamp will cause it to tighten rather than open and these lateral strains will be resisted in the best possible manner.

In the accompanying drawings:—Figure 1, is a transverse sectional view through a main rail and a guard rail illustrating my improved clamp; Fig. 2, is a plan view; and Fig. 3, is a view of a modification of the invention.

A is the main rail and B the guard rail spaced apart by the wedge-shaped blocks C—C' of any suitable type but capable of being adjusted one in respect to the other to decrease or increase the space between said two rails.

D is the guard rail clamp which is made of wrought metal bent at its ends to form two overlapping arms $d-d'$. The metal of the clamp is bent on a comparatively large radius so as to obviate the liability of fracture of the metal, either during the process of manufacture of the metal or on account of side strains occurring when the device is in use.

E is a block fitting snugly against the web of the rail A as well as against its head and base flange and provided with a longitudinal groove e in which rests the end of the arm d' . Bearing against the outer side of the guard rail B is a wedge block F, which fits against the web of the rail B, as well as against the under side of the head of the rail and the flange and this wedge block has a recess f . The base f' of said recess is inclined to form a wedge corresponding with the bevel of the end d^2 of the arm d of the clamp, as clearly illustrated in Fig. 2.

When the parts are assembled, as illustrated in Figs. 1 and 2, and the rails are spaced a given distance apart by the wedges C—C', the wedge block F is driven so as to firmly clamp the rails in position. Any suit-

able means such as a pin or bolt f^3 may be provided for retaining the wedge F in position in respect to the clamp D after the adjustment has been made. In some instances, the block E as well as the block F, may be slightly tapered to form a wedge, but in most instances a single wedge block F is all that is necessary.

It will be noticed that the two ends $d-d'$ of the clamp are inclined downwards towards the base of the clamp and rest against the block E. Said ends are preferably placed about midway between the base flange and the head of the rail and I find that any lateral pressure exerted upon the guard rail B, which would ordinarily tend to spread the clamp, causes these ends of the arms to move downwards, forcing the rails A and B tightly against the base of the clamp D owing to the fact that the strain tends to coil said curved ends rather than to spread them open. The inclination of the ends $d-d'$ may vary according to circumstances and will also depend materially upon the height of the rail.

In Fig. 3, I have shown a modification in which the wedge block F^2 has a projecting flange f^2 extending over the end of the arm d of the clamp D; and has its underside cut away, but I prefer, where possible, to use the construction illustrated in Fig. 1. It will also be seen that by this invention I am enabled to produce a guard rail clamp, which will be as substantial as those now in common use while being at the same time much lighter and which can be very readily and cheaply manufactured.

I claim:—

The combination of two rails spaced apart, a clamp turned up at each end to form arms extending over the body portion of the clamp the ends of the arms being turned down towards the body portion, a block fitted to the side of one rail and slotted for the reception of the end of one arm, a wedge fitted to the side of the other rail and having a beveled slot fitting the end of the other arm, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WARNER B. COOKE.

Witnesses:

JOS. H. KLEIN,
WM. A. BARR.