

(No Model.)

D. BRENNAN, J. JONES & E. GOLDTHWAIT.  
RAILWAY RAIL JOINT.

No. 435,729.

Patented Sept. 2, 1890.

FIG. 1.

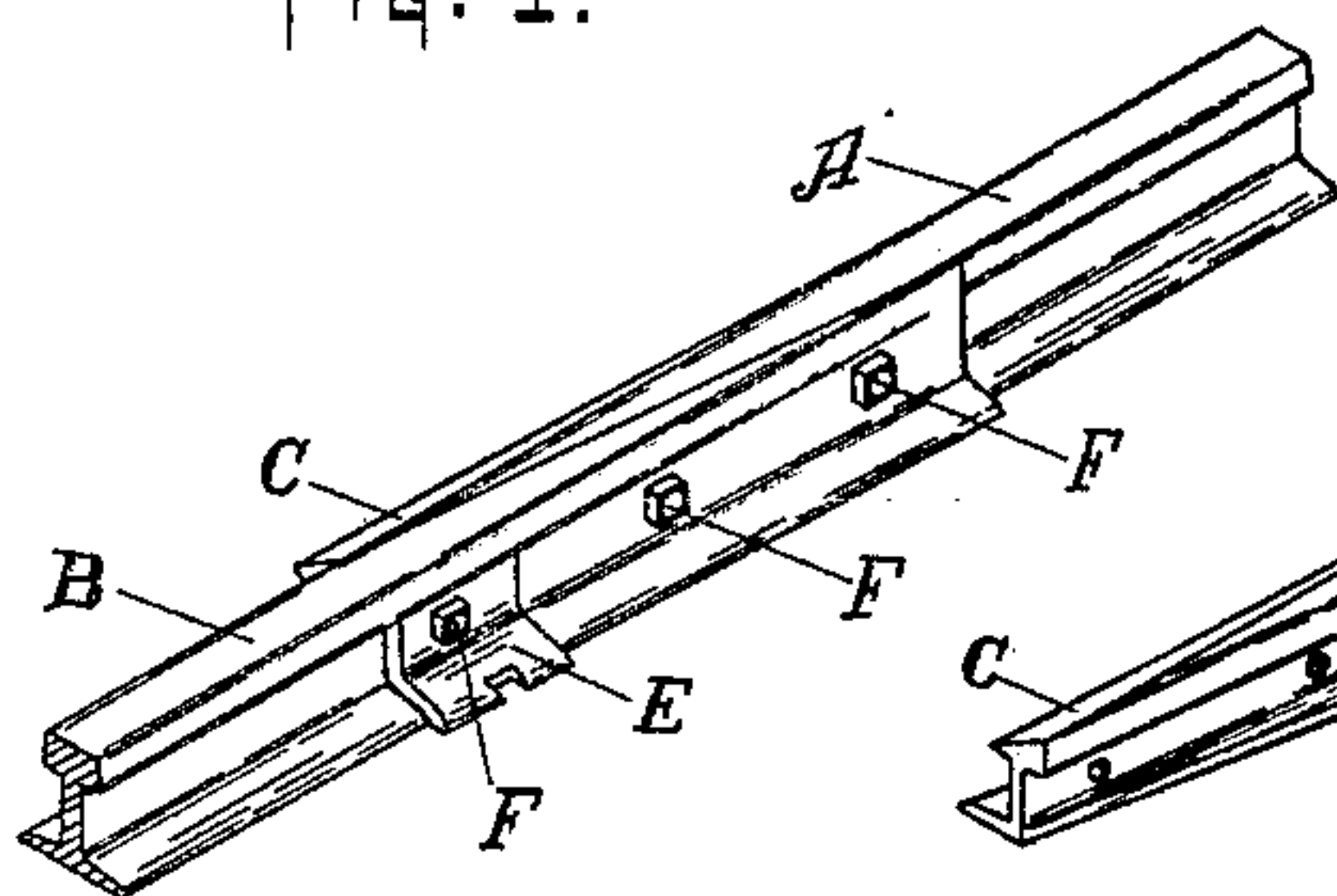


FIG. 2.

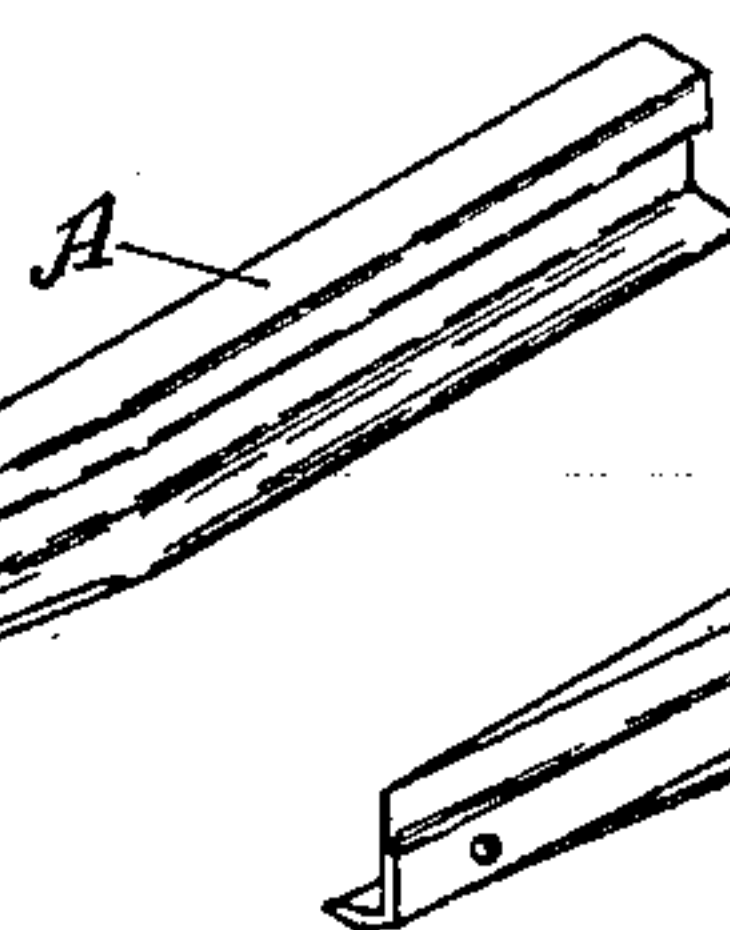


FIG. 3.

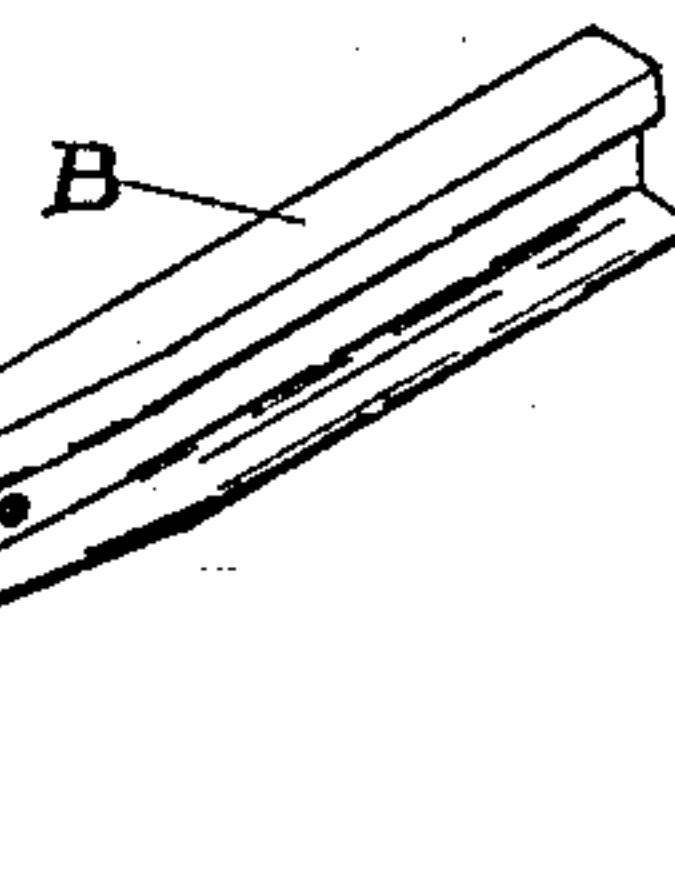


FIG. 4.

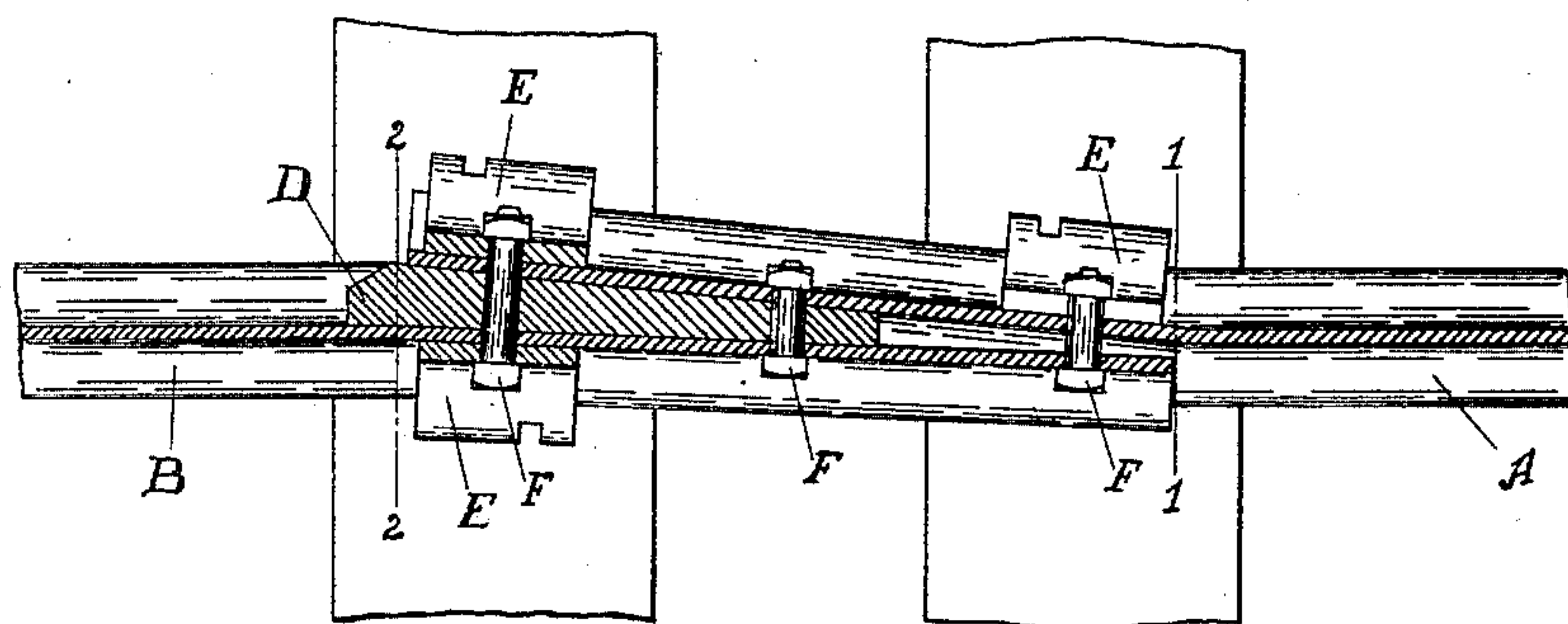


FIG. 5.

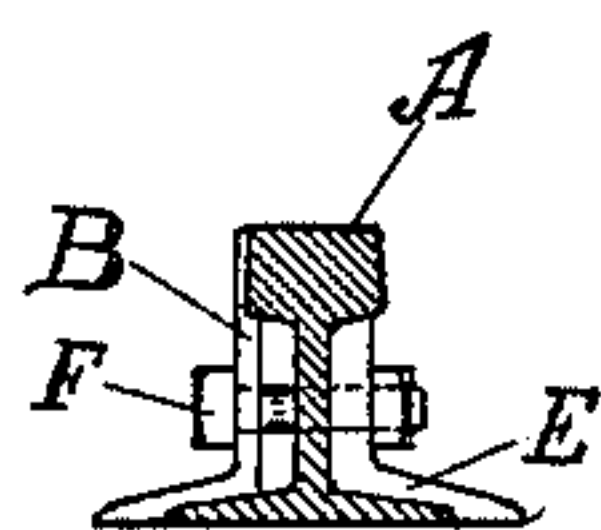
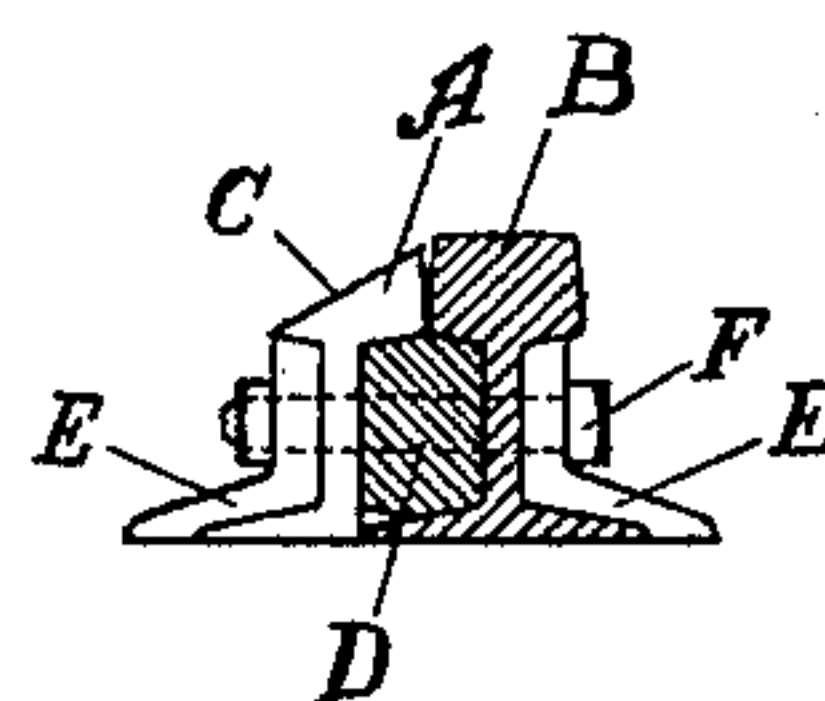


FIG. 6.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 435,729, dated September 2, 1890.

Application filed January 21, 1890. Serial No. 337,598. (No model.)

*To all whom it may concern:*

Be it known that we, DENNIS BRENNAN, JOHN JONES, and EVERETT GOLDTHWAIT, citizens of the United States, residing in the city of Elkhart, in the county of Elkhart, in the State of Indiana, have invented certain new and useful Improvements in Railway-Rail Joints, of which the following is a specification.

Our invention relates to improvements in railway-rail joints in which the joint is formed by the ends of the rails lapping each other, so as to produce a joint by which the wheels are carried gradually from one rail to the other; and the objects of our improvements are to produce a strong, durable, and smooth joint over which the wheels can pass from one rail to the other without the shock consequent upon passing over the ordinary butt-joint. We attain these objects by means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the joint when the rails are connected. Fig. 2 is a perspective view showing the manner of preparing one end of the rail. Fig. 3 is a perspective view showing the manner of preparing the other end of the rail. Fig. 4 is a sectional plan of the joint. Fig. 5 is a sectional view taken on line 1 1 in Fig. 4. Fig. 6 is a sectional view taken on line 2 2 in Fig. 4.

Similar letters refer to similar parts in all the figures.

A represents one end of the rail, which is bent outward and part of the flange cut away, so that rail end B will fit rail end A without cutting away the flange of rail end B beyond the end of rail end A, as shown in Figs. 3, 4, and 6, rail end B being planed, as shown in Fig. 3, to fit against the rail end A, the end of

B resting upon the flange and fitting under the head of A, as shown in Fig. 5.

D represents the key-block, which, being placed between the webs of rail ends A and B and resting upon the flange of B and fitting under the heads of both A and B, as shown in Fig. 6, in combination with the end of rail B fitting rail A, as shown in Fig. 5, and the bolts F, forms a strong, durable, and smooth joint over which the wheels are carried gradually from one rail to the other.

C in Figs. 1, 2, and 6 shows part of the head of the projecting end of rail A planed off to prevent undue strain upon rail end A by worn wheels passing over said joint; also, so that wheels will not jump when passing over the joint.

E represents braces for supporting the joint and to prevent the track from creeping.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In lapped joints for railway-rails, the combination of the key-block D, fitting between the webs of the rail ends A and B and resting upon the flange of B and fitting under the heads of both A and B, the end of rail B resting upon the flange and fitting under the head of rail A with the bolts F, the rail A having part of the head planed off, as shown at C in Figs. 1, 2, and 6, all substantially as described, and for the purpose specified.

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Witnesses:

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