

D. N. CLARK.
RAILWAY CHAIR AND FASTENING.

No 75,370.

Patented Mar. 10, 1868.

Fig. 1.

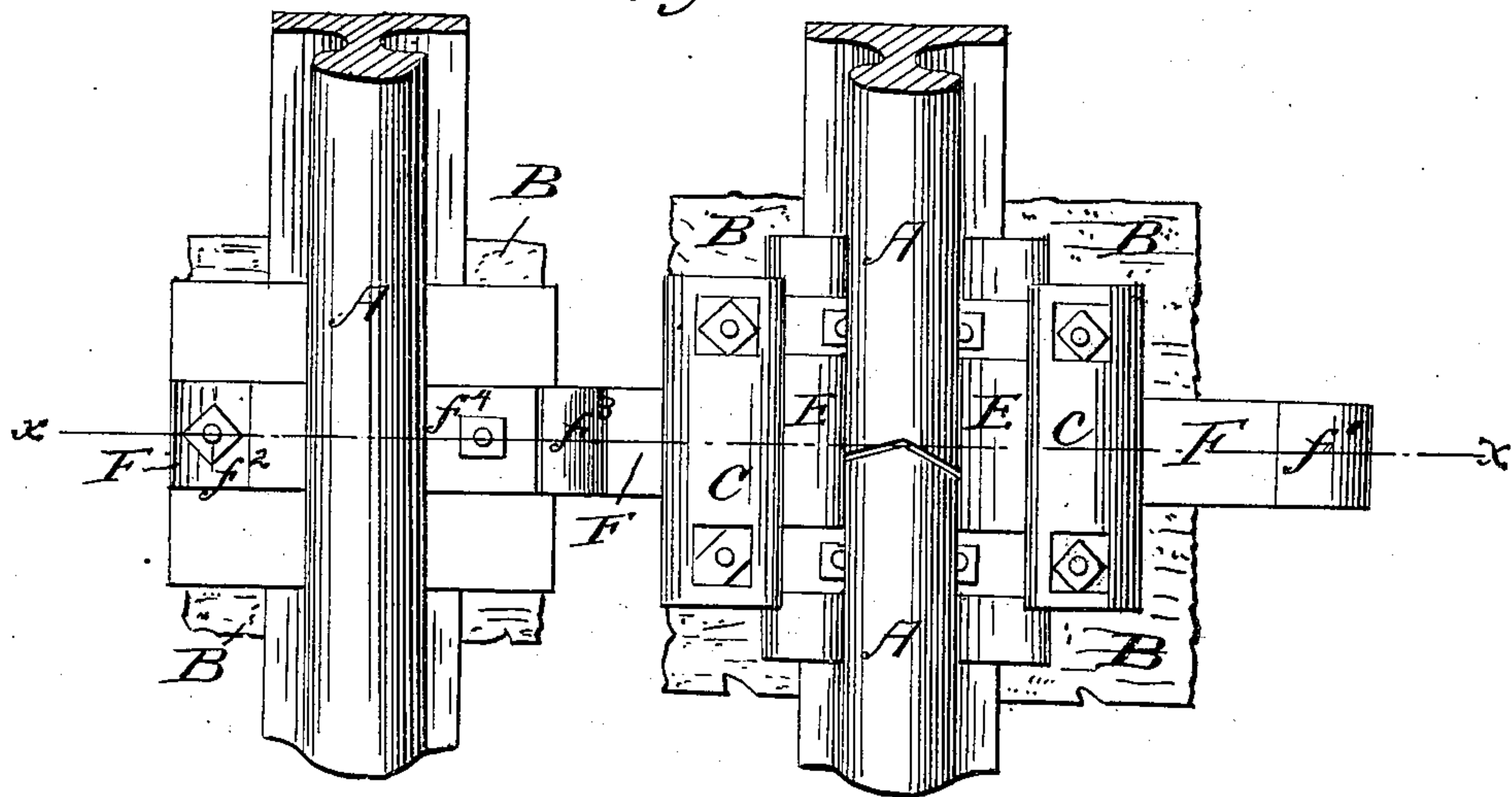
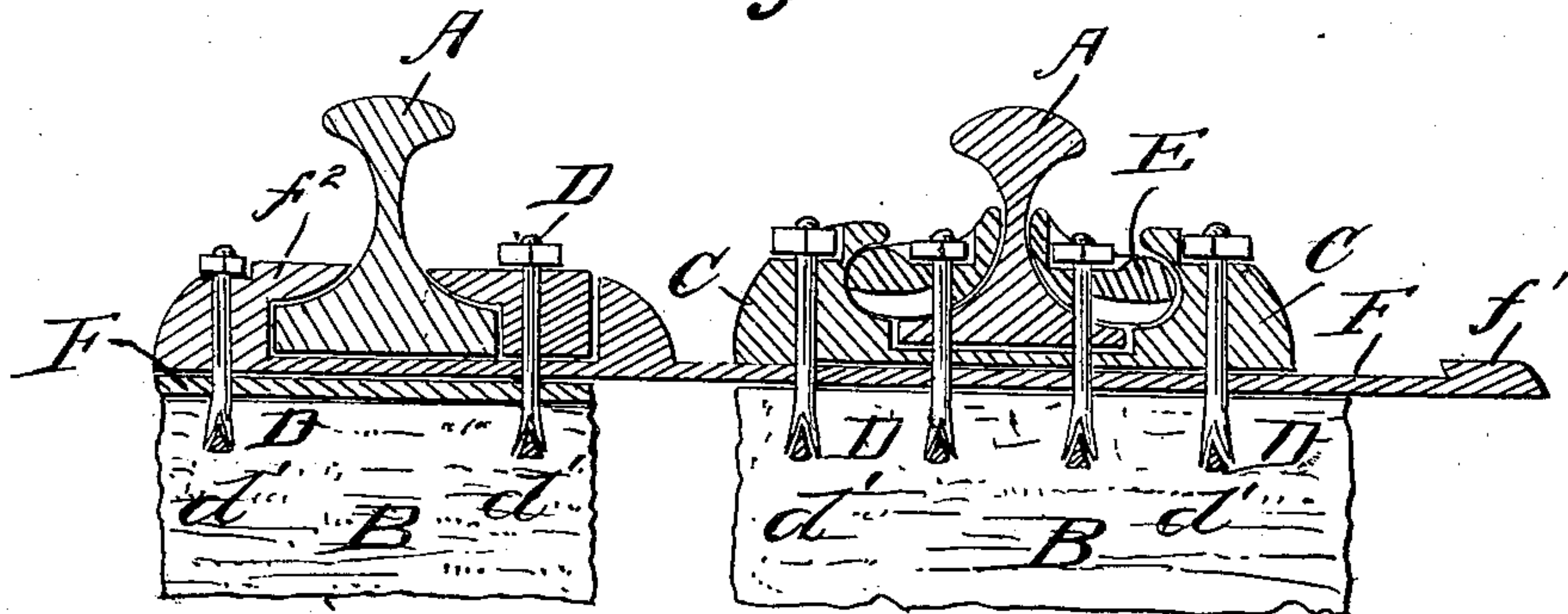


Fig. 2.



Witnesses.
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DOMINICUS N. CLARK, OF EASTPORT, MAINE.

Letters Patent No. 75,370, dated March 10, 1868.

IMPROVED RAILWAY-CHAIR AND FASTENING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DOMINICUS N. CLARK, of Eastport, in the county of Washington, and State of Maine, have invented a new and improved Iron and Stone Railroad-Track; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a top or plan view of my improved railroad-track.

Figure 2 is a detail sectional view of the same, taken through the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved railroad-track, superior to those now in use in durability and safety; and it consists in the construction and combination of the various parts, as hereinafter more fully described.

A are the rails, which may be ordinary rails, or the ends of which may be made angular, as shown in fig. 1; that is to say, a re-entrant angle may be formed in the end of each rail, and the other end of each rail be made with a salient angle, so that the rails, whether contracted or expanded, may form a continuous surface for the wheels. B are stones, which are designed to replace the wooden ties, and which are securely embedded in the ground. In cases where the roadway is dug through rocks, the stationary rock of the road-bed may be used as the stones B.

C are the chairs, which are used where the ends of two adjacent rails meet, and which must be made of such a width as to receive and support the continuous ends of both rails. D are the bolts by which the chairs are secured to the stones B. The lower ends of the bolts D are slit, and have small wedges, *d'*, inserted in the said slits. The bolts D are inserted in holes drilled in the stones or rocks B, said holes being so drilled as to increase in diameter as they descend into the said stones B, and as the said bolts are driven down, the wedges *d'* strike against the bottom of said holes, and are forced into the said bolts, expanding their lower ends, and preventing them from being withdrawn. The chairs are then secured in place by nuts screwing upon the upper or projecting ends of the said bolts D. The inner sides of the shoulders of the chairs C are rounded out or grooved horizontally, as shown in fig. 1.

E are the clamps by which the rails are secured to the chairs C, and which are so formed as to fit upon the sides of the rails A, and the grooved shoulders of the chairs C, as shown in fig. 2, and are secured to the chairs and rails by bolts D, the lower ends of which pass down through the chairs C, and are secured to the stones B in the manner hereinbefore described, or they may have heads formed upon them, embedded in the lower part of the said chairs. The lower sides of the clamps E are grooved or slotted from the bolt-holes outward, as shown in fig. 2, so that the said clamps may be turned away from the rails A, and removed, freeing the rails without disturbing the said chairs.

F are iron ties passing through grooves in the lower part of the chairs C, and having their ends enlarged, as shown at the point *f*¹, figs. 1 and 2, so that they may not be withdrawn from the said chairs. The intermediate ties F are secured to the stones B by bolts D, in the manner hereinbefore described, and have jaws, *f*², formed upon their ends, which fit upon the outer sides of the rails. The intermediate ties F have shoulders, *f*³, formed upon them, upon the inner sides of the rails, against which the removable jaws *f*⁴ rest, by which the inner sides of the said rails are held, and which are secured in place by the bolts D, passing down into and secured to the stones B, in the manner hereinbefore described.

It should be observed that the bolts D should be set so far from the rails A that, when the removable jaws *f* are removed, the rails A may be turned to one side and slipped from their places without being obstructed by the said bolts. A strip of gutta percha, or other suitable substance, may, if desired, be interposed between the chairs C and the stones B, to deaden the noise.

I claim as new, and desire to secure by Letters Patent—

1. The chairs C, clamps E, ties F, and sleepers B, when said parts are constructed and combined with each other, substantially as herein shown and described, and for the purpose set forth.
2. The combination of the iron ties F, having an enlargement or shoulder, *f*¹, upon each end, with the chairs C, substantially as herein shown and described, and for the purpose set forth.
3. The combination of the intermediate ties F, constructed with stationary jaws *f*² and shoulders *f*³, formed upon them, and removable jaws *f*⁴, with the rails A and sleepers B, substantially as herein shown and described, and for the purpose set forth.

DOMINICUS N. CLARK.

Witnesses:

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