

F. H. BRADLEY.

Improvement in Nut-Locks.

No. 129,710.

Patented July 23, 1872.

Fig. 1.

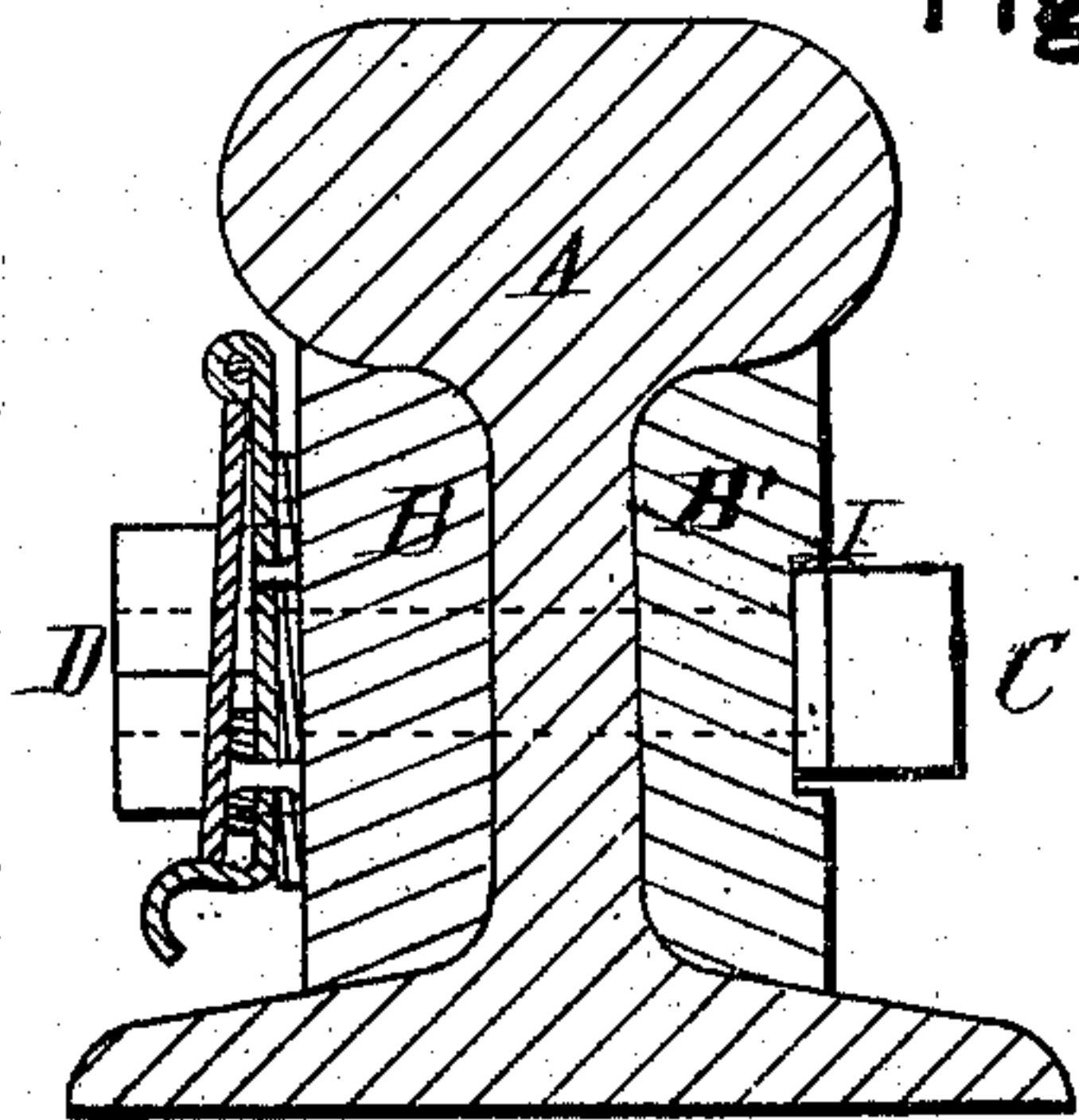


Fig. 2.

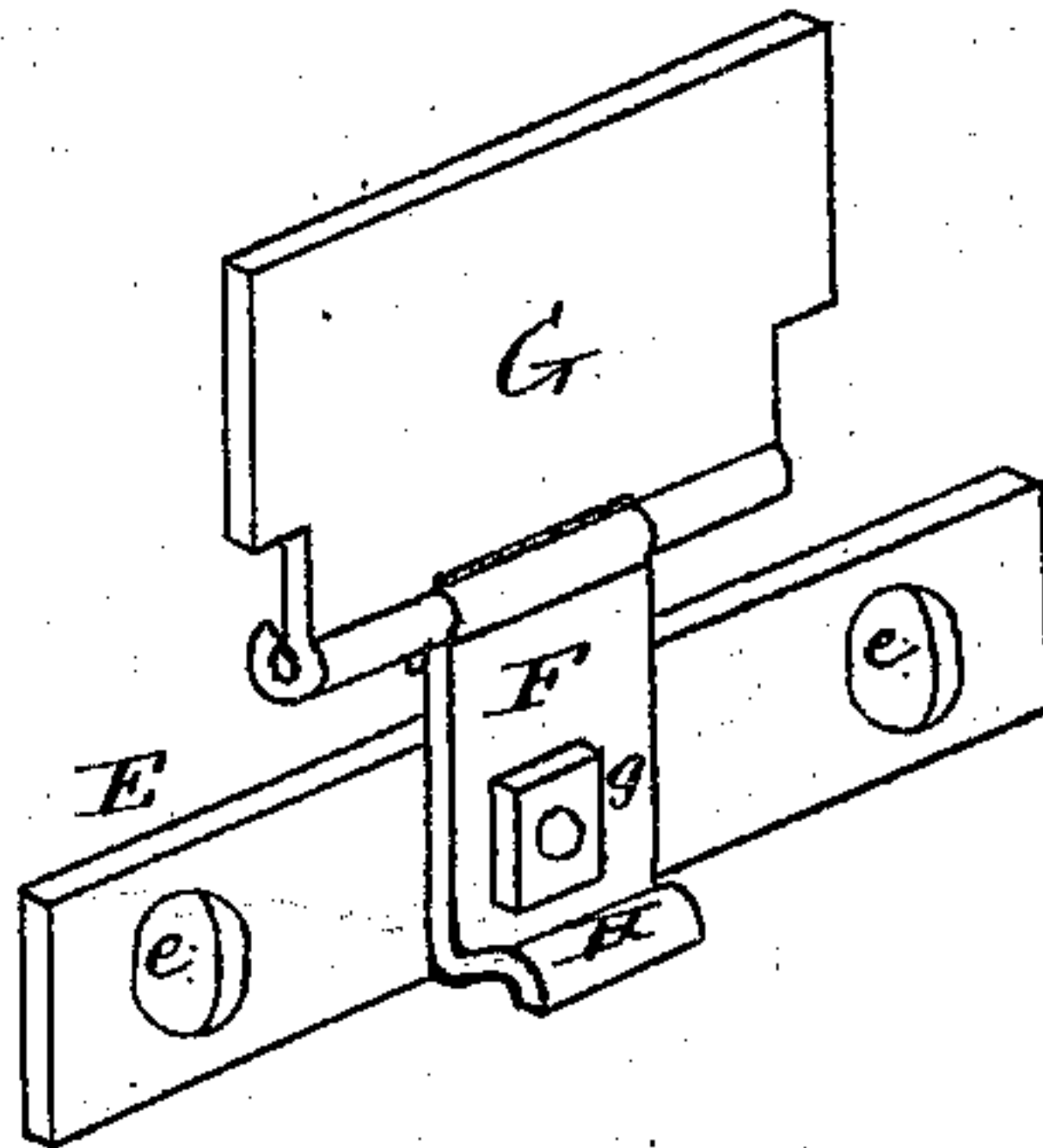
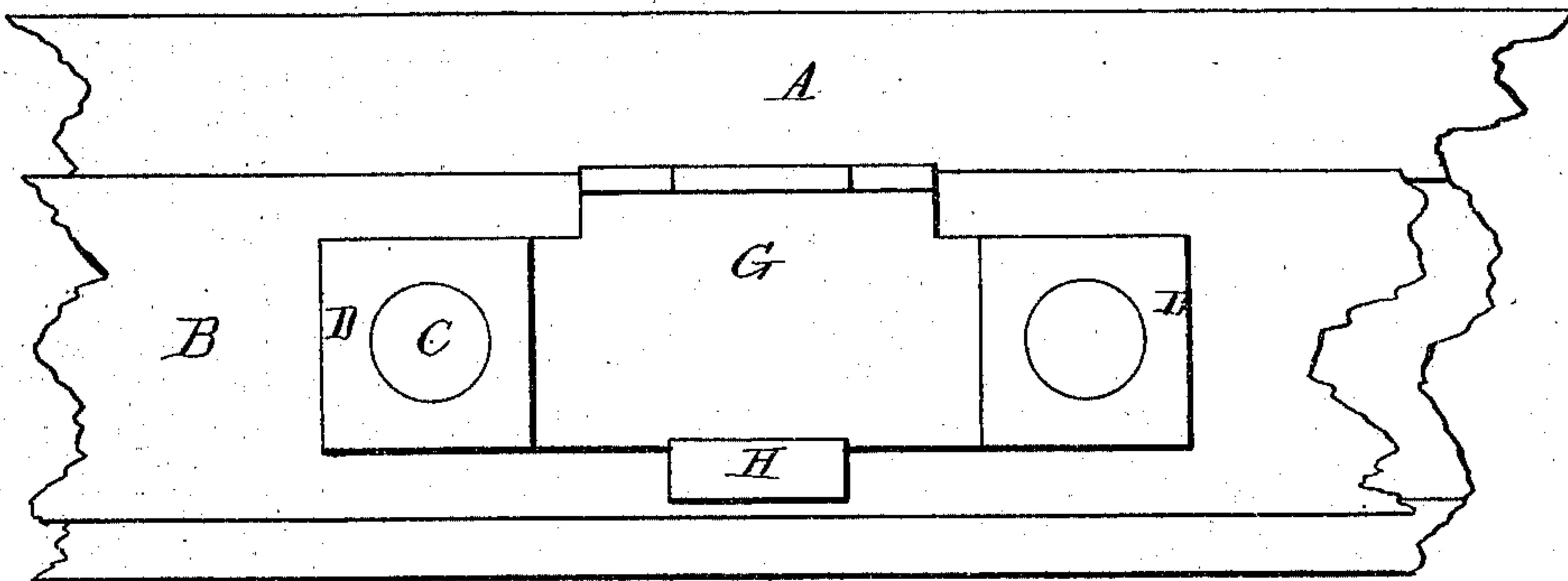


Fig. 3.



WITNESSES.

E. A. Bates.

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INVENTOR.

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# UNITED STATES PATENT OFFICE.

FRANCIS H. BRADLEY, OF MYSTIC RIVER, CONNECTICUT.

## IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. 129,710, dated July 23, 1872.

*To all whom it may concern:*

Be it known that I, FRANCIS H. BRADLEY, of Mystic River, in the county of New London and State of Connecticut, have invented a new and valuable Improvement in Nut-Locks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my invention. Fig. 2 is a perspective view, showing construction of my lock. Fig. 3 is a side view of my invention.

This invention has relation to nut-locks for the joints of railroad rails; and it consists in the construction and novel arrangement of a device designed to be attached to the fish-plates, and capable of being released from the nuts without being detached from the fish-plates. The object of my invention is to provide a nut-lock which shall be capable of easy and rapid manipulation, efficient for its purpose, and of comparatively slight cost.

Referring to the drawing, A designates the railroad rail; B B', the fish-plates fitting closely to the sides of the rails; C, the bolts; and D, the nuts placed thereon. E denotes a thin plate of metal, having holes *e* bored at intervals to let the bolts pass through. This plate is placed on the bolts before applying the nuts, and rests closely against the fish-plate B. F designates a strip or bar of metal secured to the plate E midway between the bolts, and in a vertical position. The ends of said strip extend above and below the edges of the plate E, as shown in the drawing. To the upper end of the strip F is hinged a plate, G, of just sufficient length to fill the space between two nuts, when the latter are arranged with their sides vertical. When the plate G is turned down between the two nuts the latter are locked. A

block of India rubber or other suitable material is attached to the base of the plate F, as shown at *g*, and tends to hold the plate G at a slight outward inclination when it is turned down. The ends of the plate G are therefore caused to extend diagonally across the sides of the nuts, and to thereby more effectually resist any tendency of the nuts to turn. The lower end of the strip F is bent outward and around in scroll form, as shown at H, and serves as a spring-catch to receive and hold the lower edge of the plate E. By pressing down this catch the plate E will be released, and may be raised so as to allow the nuts to be removed or tightened. The India-rubber block *g* should be sufficiently elastic to press the plate E outward, and assist in releasing it from the nuts. The plate or strip F may sometimes be dispensed with, and lugs formed on the plate E to serve the purposes of a hinging and catch. The plate E is not an essential feature of the invention when the strip F is used, as the latter may be secured directly to the fish-plate. I represents a longitudinal channel formed in the outer surface of the fish-plate B', to prevent the bolts from turning, the latter being constructed with oblong rectangular heads.

What I claim as new is—

1. The nut-lock, consisting of a hinged plate, G, perforated plate E, and strip F having spring-catch H, all combined substantially as specified.

2. The improved nut-lock having the hinged plate G, spring-catch H, and cushion *g*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRANCIS H. BRADLEY.

Witnesses:

W. H. PENDLETON,  
JOEL L. PROUTY.