

S. CALDWELL.

NUT-LOCK.

No. 191,309.

Patented May 29, 1877.

Fig. 1.

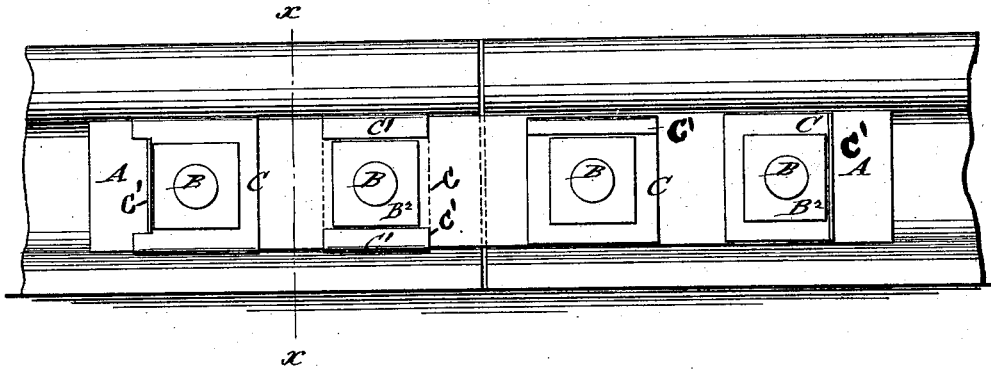


Fig. 2.

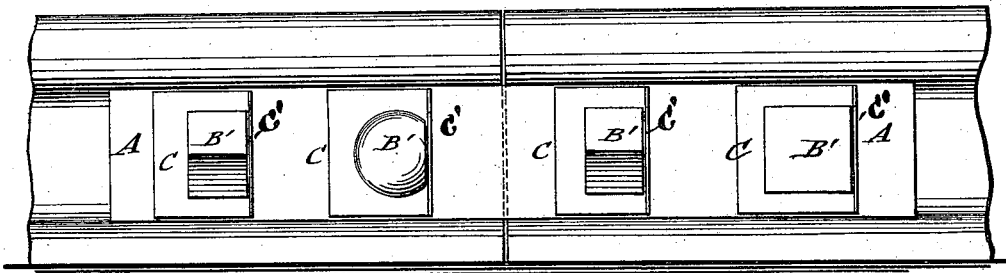
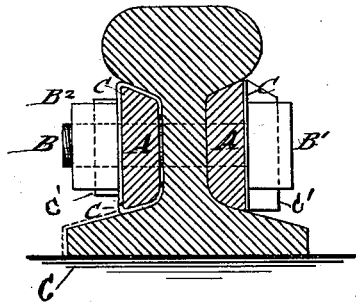


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL CALDWELL, OF GREENFIELD, OHIO.

IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **191,309**, dated May 29, 1877; application filed April 2, 1877.

To all whom it may concern:

Be it known that I, SAMUEL CALDWELL, of Greenfield, in the county of Highland and State of Ohio, have invented a new and Improved Nut-Lock, of which the following is a specification:

In the accompanying drawing, Figures 1 and 2 are side elevations of a rail-joint with my improved nut-lock, and Fig. 3 is a vertical transverse section of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the drawing, A represents the fish-plates of a railroad-joint; B, the fastening-bolts, and B¹ and B², respectively, the heads and nuts of the same.

The head B¹ is recessed at one or more sides, and provided with a washer, C, having one or more upturned flanges, C', as well as the nut B². The washers are turned up at one or more sides and extended over the top and bottom of the fish-plate, so as to be tightly re-

tained between the same and the head and base of the rail. The washers may also be extended back of the fish-plate and turned over in front of the same, bearing on opposite sides of the nut, or the washer may be extended downward under the base of the rail, as shown in dotted lines in Fig. 3, to produce the rigid position of the washer, and impart a double support or rest to the bolt and nut, which enables them to resist more effectually the vibrations of the rails without any chance for friction and wear by turning or of getting loose.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with bolts B¹ having recessed heads, nuts B², and fish-plates A, of the washers C extended over the top and bottom of fish-plates, and having one or more upturned flanges, C', substantially as and for the purpose specified.

SAMUEL CALDWELL.

Witnesses:

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