## J. HOLLINGSWORTH. NUT-LOCKS.

No. 192,625.

Patented July 3, 1877.

Fig. 1.

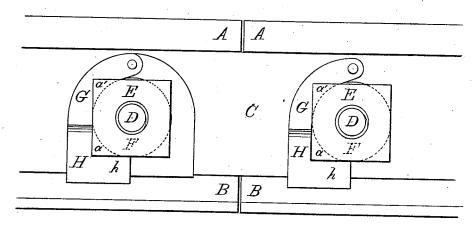
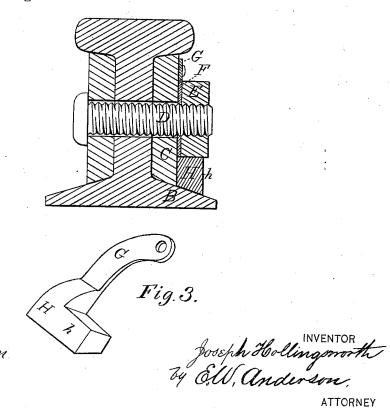


Fig. 2.



## UNITED STATES PATENT OFFICE.

JOSEPH HOLLINGSWORTH, OF JONESBOROUGH, INDIANA.

## IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. 192,625, dated July 3, 1877; application filed January 6, 1877.

To all whom it may concern:

Be it known that I, JOSEPH HOLLINGS-WORTH, of Jonesborough, in the county of Grant and State of Indiana, 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of this invention. Fig. 2 is a vertical transverse section of the same. Fig. 3 is a view of the swinging lock detached in

perspective.

This invention has relation to nut-locks for the burrs of railway fish plates; and it consists in the construction and novel arrangement of a depending arm pivoted above the burr, passing under a corner of the same, and having at its lower end an angular metallic enlargement, adapted to embrace one of the lower angles of the nut, and having a base or bottom designed to fit the upper surface of the flange of the rail when the nut is turned square, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the ends of the rails, and B the flange of the same. C represents the fishplates, and D the bolts passing through the same, and through the openings in the web of the rails. E represents the nuts, whereby the bolts are secured in place. These nuts are screwed up against washers F, which are interposed between said nuts and the outer surface of the fish plate. G indicates the arm of the nut-lock, which may be pivoted directly to the fish plate or to an independent thin plate, designed to rest against the surface of said fish-plate, and having a square lower edge, which rests against the flange of the rail. In either case the arm G is made about as thin as the washer under the nut,

and is arched or curved around the outer edge of said washer upward from the side of the nut to a point above the same, where it is pivoted.

The lower end of the arm is provided with a thick heavy enlargement or block, H, of angular form, whereof the inner or re-entering angle is designed to receive the lower corner a of the nut, and fit the same neatly, as shown in the drawings, the lower branch h of the block passing below the nut, and filling closely the space between its lower face and the upper surface of the flange of the rail when the nut is turned square. In this manner it has a broad bearing on the flange, and forms a kind of wedge between the same and the nut. This, added to the gravity of the block, serves to keep it in place until swung outward laterally, when it is required to turn the nut off.

In order to prevent the block from swinging away from the face of the plate, and to assist in keeping it in the locked position, the sweep of the curved arm is made short enough to pass under the upper corner a' of the nut, between the same and the face of the plate to which it is pivoted.

Having described this invention, what I claim as new, and desire to secure by Letters

Patent, is-

The nut-lock described, having the thin curved arm G, pivoted above the nut, and the angular base-block at its lower end, adapted to embrace a lower corner of said nut, and having a branch, h, to fit between the lower face of the nut and the upper surface of the flange of the rail, substantially as specified.

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

## JOSEPH HOLLINGSWORTH.

Witnesses:

WILSON CARTER, M. V. WHITSON.