No. 619,255. Patented Feb. 7, 1899.

J. W. HAWLE & J. M. FINLEY.

NUT LOCK.

(Application filed May 13, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

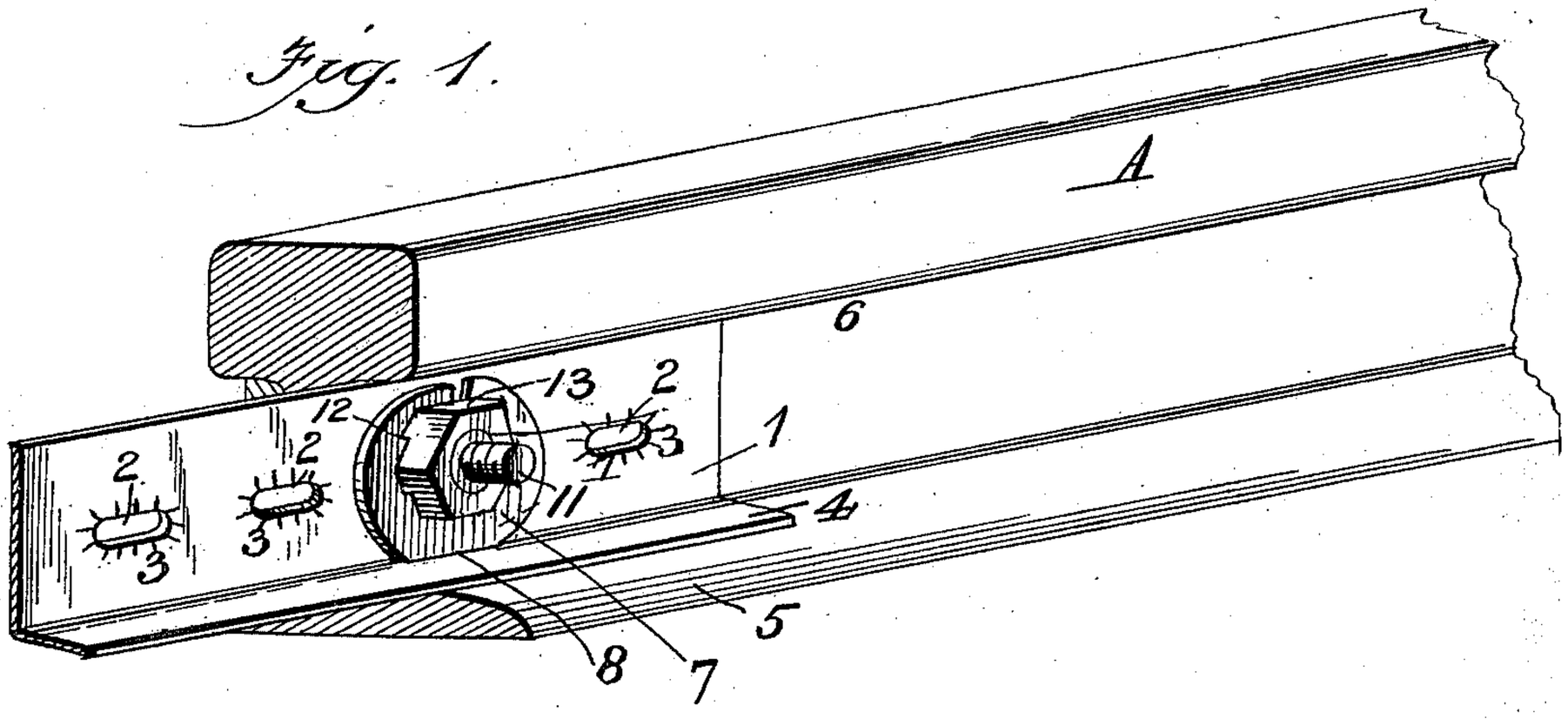


Fig. 2.

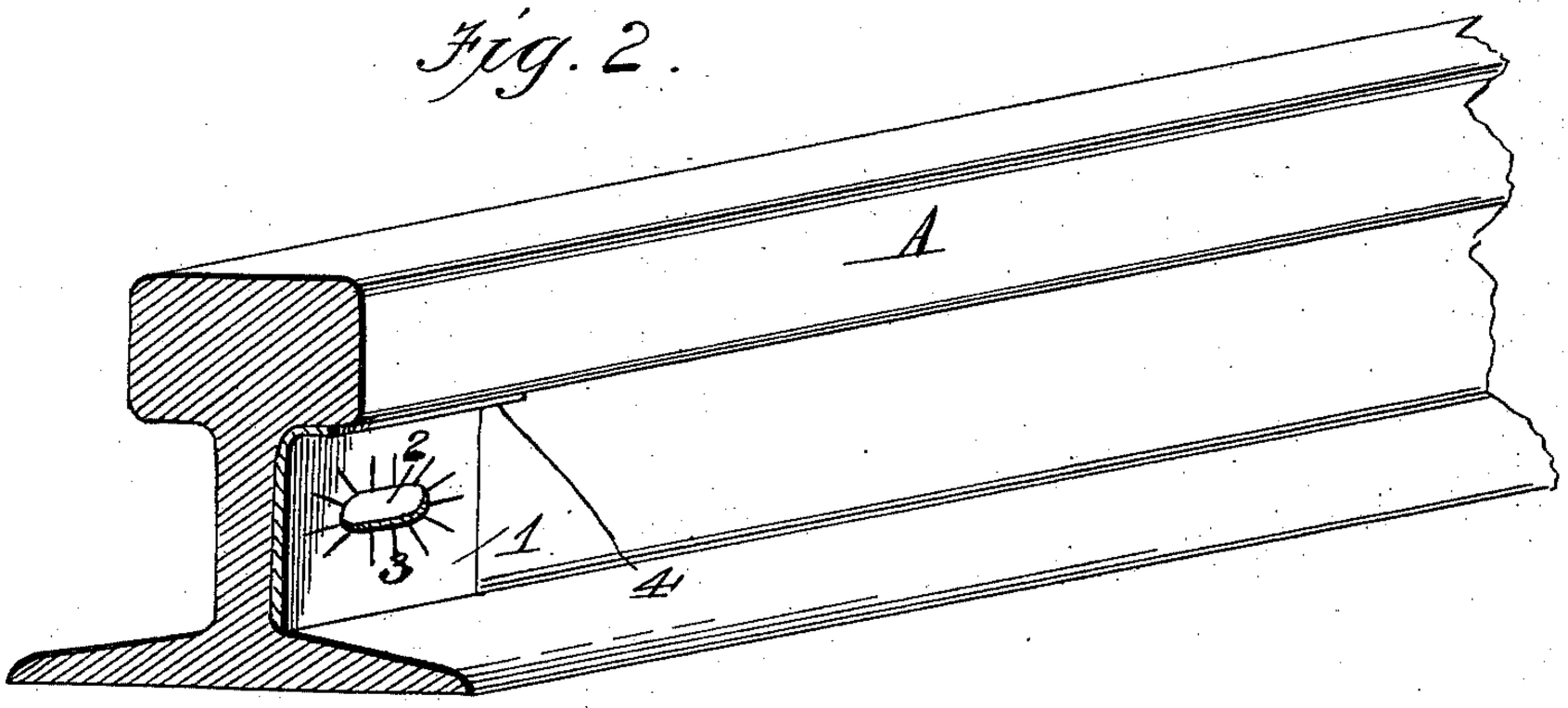


Fig. 3

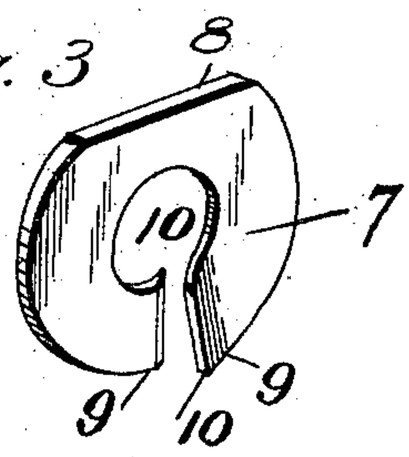
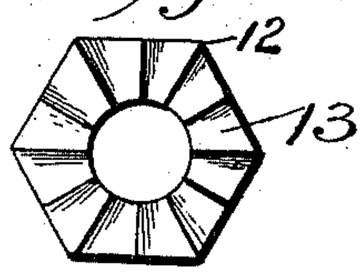


Fig. 4.



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No. 619,255. Patented Feb. 7, 1899.

J. W. HAWLE & J. M. FINLEY.

NUT LOCK.

(Application filed May 13, 1898.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 5.

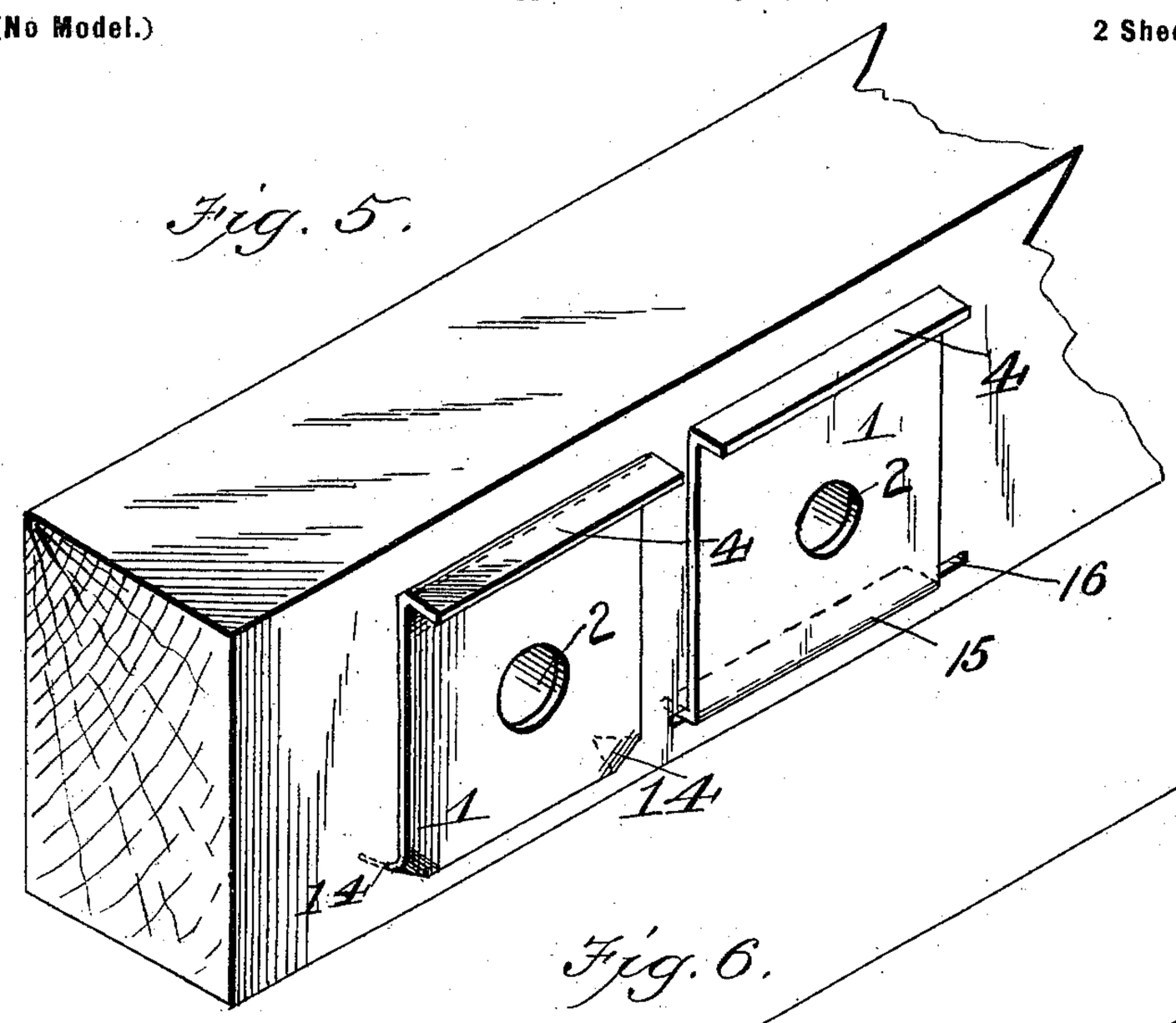
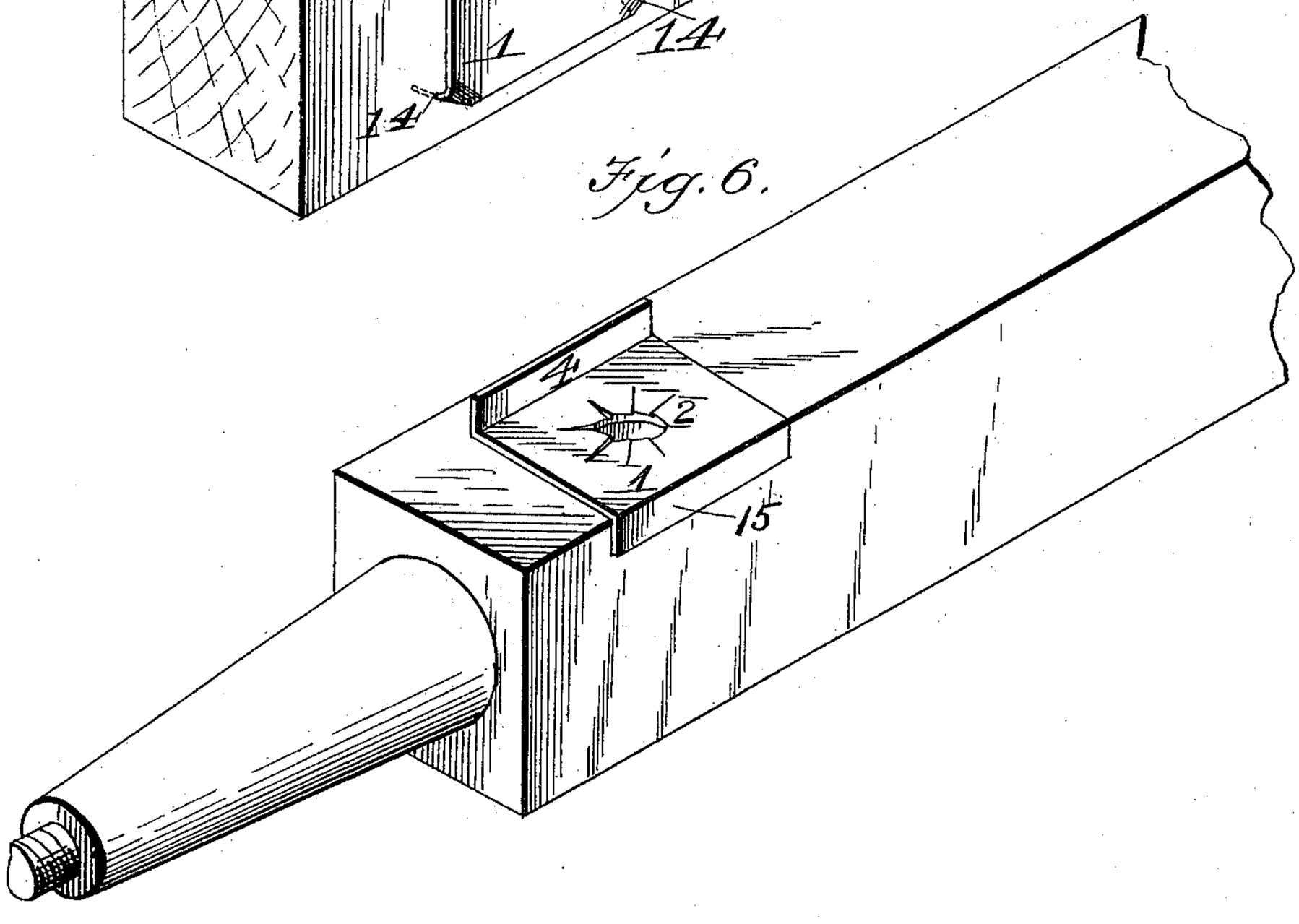


Fig. 6.



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JOHN WILLIAM HAWLE AND JOHN MICHAL FINLEY, OF SEARCY, ARKANSAS.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 619,255, dated February 7, 1899.

Application filed May 13, 1898. Serial No. 680,581. (No model.)

To all whom it may concern:

Be it known that we, JOHN WILLIAM HAWLE and JOHN MICHAL FINLEY, citizens of the United States, residing at Searcy, in the county of White and State of Arkansas, have invented certain new and useful Improvements in Nut-Locks; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention is a nut-lock; and it consists of a threaded bolt, a plate having a right-angled flange, and its face may or may not have ratchet-teeth, a nut having on its inner face ratchet-teeth, and a spring-washer having a straight part to fit against the flange of the plate and turned up and down blade ends to catch in the ratchet-teeth of the plate and nut.

In the accompanying drawings, Figure 1 is a perspective view of a railway-rail A with our nut-lock applied thereto. Fig. 2 is a perspective view of a railway-rail A with our plate applied thereto, having, however, but one perforation. Fig. 3 is a perspective view of our washer. Fig. 4 is a face view of our nut, showing the ratchet-teeth. Fig. 5 is a perspective view of a beam of wood with our plate applied thereto. Fig. 6 is a perspective view of one end of an iron axle with our plate applied thereto.

Our invention is described as follows:

A represents one end of a railway-rail. To this railway-rail is applied our plate 1, which has along its center perforations 2, radiating from which in its outer face are ratchet-notches, indentations, or teeth 3, and either its upper or lower edge is turned out at an angle of ninety degrees to its face, forming a flange 4. This flange 4 fits down snugly against the upper face of the flange 5 of the rail A, or it may fit up against the under face of the flange 6 of the said rail A. When we use the short plate, as shown in Fig. 2, the simple straight fish-plate may be used under it.

Our washer 7 has a straight part 8, which fits against the face of the flange 4 of the plate 1. This washer 7 is cut through to its opening on the side opposite its straight part 8, leaving two ends. The washer is thinner at these two ends than at its straight part to allow for the curves 9 and its notched spring ends 10. This washer is slipped over the bolt 11, its straight part against the flange 4, and one of its ratchet ends 10 catching in the ratchet-teeth of the plate 1, its other ratchet end turned up to catch in the ratchet-teeth 12 of the threaded nut 13. The nut 12 is then screwed on over the threaded end of the bolt 11.

The flange 5 of the rail keeps the plate 1 from turning. The flange 4 of the plate keeps the washer 7 from turning, and the washer 7 keeps the nut 13 from slipping backward.

This nut-lock may also be used on wood by turning in and sinking the corners 14 into the wood, or the edge 15 may be turned into a slot 16, cut in the wood, or it may be used on iron axles or other pieces of iron by turning the lower edge 15 of the plate 1 over the edge of the iron. The plate 1 may or may not have the ratchet-teeth 3, as when the plate is heavy the flange 4 will keep the washer 7 from turning without the aid of the ratchet-teeth.

The operation is so apparent that we deem it unnecessary to further describe it.

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

1. The combination of the threaded bolt 11; perforated plate 1, having ratchet-teeth 3, and turned-out flange 4; spring-washer 7, having the straight part 8, curves 9 and spring ends 10; and threaded nut 13, having ratchet-teeth 12, substantially as shown and described and for the purposes set forth.

2. The combination of the threaded bolt 11; perforated plate 1, having a turned-out flange 4, its opposite edge adapted to be turned in; spring-washer 7, having the straight part 8, adapted to fit against the flange 4 and spring ends 10; and threaded nut 13, having ratchet-teeth 12, substantially as shown and described and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN WILLIAM HAWLE.
JOHN MICHAL FINLEY.

Witnesses:
J. T. KEY,
S. W. DEENER.