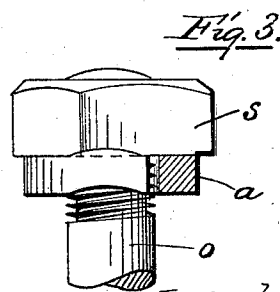
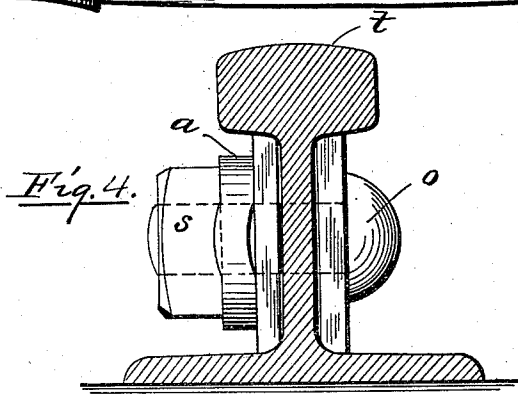
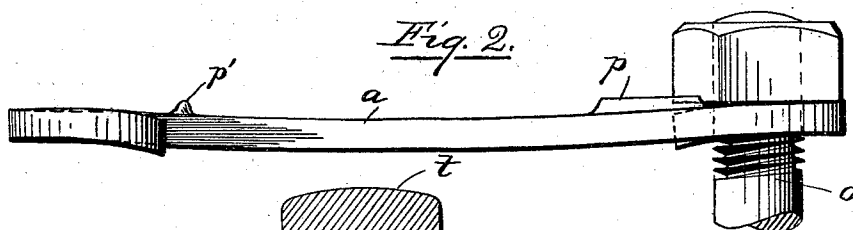
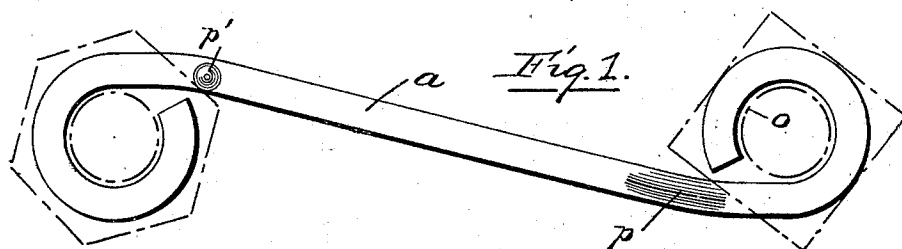


(No Model.)

J. G. PERRY.
NUT LOCK.

No. 561,604.

Patented June 9, 1896.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN G. PERRY, OF WAKEFIELD, RHODE ISLAND.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 561,604, dated June 9, 1896.

Application filed August 15, 1892. Serial No. 443,110. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. PERRY, of Wakefield, Washington county, Rhode Island, have invented certain new and useful Improvements in Nut-Locks and Bolt-Tighteners, of which the following is a specification, reference being had to the accompanying drawings, making part of the same.

This invention relates to a class of devices called "nut-locks and bolt-tighteners," intended to prevent nuts on bolts, especially those on railway-rails, from unscrewing, getting off, or becoming loose by the motion and jar from the trains thereon or otherwise. It is not of the kind that offers a positive resistance to the turning back of the nut, but only that amount of resistance necessary to prevent its turning without the application of a wrench or adequate power, that being considered the most desirable feature of the nut-locks, because the turning of the nut is done with the wrench without giving any attention to the nut-lock more than as if it were an ordinary washer.

It is fully illustrated in the following drawings, of which—

Figure 1 is a top view of the nut-lock, showing the right-faced projection made lengthwise of the bar at one end. Fig. 2 is an edge view of the nut-lock. Fig. 3 is a vertical cross-section taken just inside of the nut. Fig. 4 is an end view of the nut-lock applied to a rail, the latter being shown in section.

This form of nut-lock, as shown in the drawings, consists of a suitable rectangular metallic bar, bent into a circular form at each end, to inclose or partly inclose the bolts *o o*. This bar *a* has raised, square, or right-faced projections *p*, made on one or both sides by giving the bar a short turn up or down, or by

punching or otherwise at any part of or near by the circles at the ends of the bar, so that the corners of the nuts *s* will pass over when turned on or off of the bolts by the wrench or any adequate power applied. These projections *p* are made of sufficient height only to prevent the nuts from turning so easily as to be worked loose by the motion and jar of the rails or otherwise, and do not offer so much resistance to the turning of the nuts as to prevent turning them off when power is applied, as the edges of the nuts may be chamfered in case of the square projections, and the bar will yield at these raised points and the nuts give or cant and allow them to pass over the projections, and the locks can be used either side up or out and fit any size of nut used at either end of the bar. The ends of the circle of the bar are bent up or down or both out of the general plane of the nut-lock and fish-plates or sides of the rail to afford that amount of tension necessary to take up any looseness that may occur or be between the rail and nut caused by wear or otherwise.

Having thus described this improvement, I claim as my invention—

A nut-lock and bolt-tightener, consisting of a metallic bar, bent around at its ends, to encircle or partly encircle the bolts, with the ends of the bar bent out of the plane of the circle, and with right-faced projections on it, where the corners of the nuts pass over it, in combination with a nut beveled at its corners on the under side, and used that side down, substantially as and for the purposes herein set forth.

JOHN G. PERRY.

Witnesses:

H. B. PERRY,
H. P. PERRY.