

(No Model.)

A. G. COX.
NUT LOCK.

No. 485,174.

Patented Nov. 1, 1892.

Fig. 1.

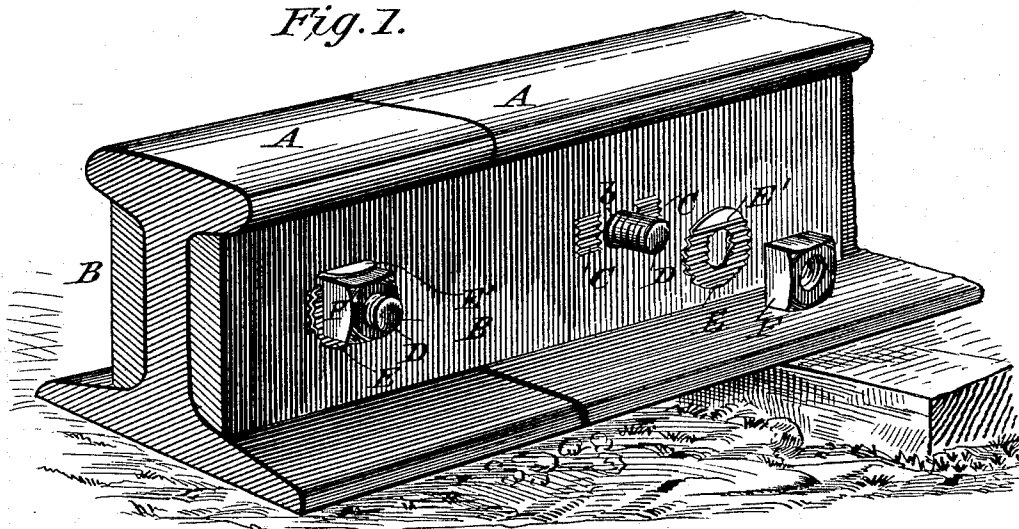


Fig. 2.

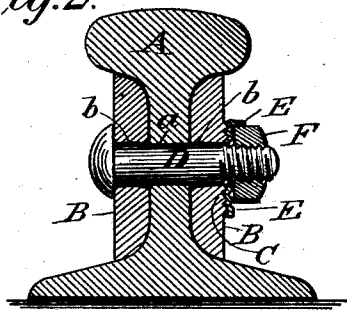


Fig. 4.

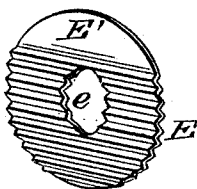
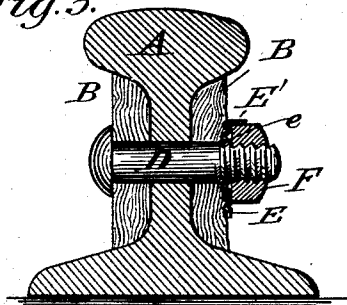


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

AUGUSTUS G. COX, OF GRATTON, VIRGINIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 485,174, dated November 1, 1892.

Application filed January 28, 1892. Serial No. 419,588. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS G. COX, a citizen of the United States, residing at Gratton, in the county of Tazewell and State of Virginia, have invented a new and useful Nut-
Lock, of which the following is a specification.

This invention relates to nut-locks; and it has for its object to provide a simple and improved article of this character which is applicable to the ordinary construction of bolts and nuts and without change or alteration thereof.

A further object of my invention is to provide an inexpensive and durable nut-lock of this class which will possess advantages in point of ease and rapidity of application, effectiveness in use, and general efficiency.

In the drawings, Figure 1 is a perspective view illustrating the application of my invention to railroad-rails. Fig. 2 is a vertical sectional view of the same, taken centrally through one of the bolts. Fig. 3 is a similar view illustrating a modification in the fish-plate or other surface with which the washer contacts. Fig. 4 is a detail perspective view of the washer.

Corresponding parts in the figures are denoted by the same letters of reference.

In the drawings I have shown my improved nut-lock as applied to railroad-rails for purpose of illustrating its application and function; but it will of course be understood that the invention may be used upon machinery and in all other places where a nut-lock is desirable.

Referring to the drawings, A A designate the meeting ends of two railroad-rails, and B B the fish-plates, the rails and fish-plates each being provided with the usual coincident bolt-apertures *a b*, respectively. The outer surface of one of the fish-plates is corrugated or serrated adjacent to the bolt-apertures, as shown at C, and for the purpose hereinafter explained. Bolts D are passed through the fish-plate at the opposite side through the rail and the second fish-plate, the threaded ends of the bolts being surrounded by the corrugations or serrations C.

E designates the washers, which also constitute the lock for the nut. These washers are preferably circular in form, provided with

a central bolt-eye *e*, and are corrugated transversely from side to side, as shown. One side of the washers is, however, not corrugated, forming a smooth edge *E'*, parallel to the corrugations. In manufacture the washers may be struck from smooth sheet metal and then corrugated from corrugated sheet metal, or they may be cast with the corrugation formed therein.

In practice the washers are placed upon the threaded ends of the bolt with their corrugations coinciding with the corrugations or serrations in the opposing fish-plate. Nuts F are then applied upon the ends of the bolts and screwed home, thus locking the washers in engagement with the opposing fish-plate. The nut is then locked against movement in either direction by bending up the uncorrugated portion *E'* of the washer against the adjacent side or sides of the nut, as clearly shown in Fig. 1.

In some instances the corrugations or serrations in the fish-plate may be dispensed with, (see Fig. 3,) as in the case of the use of wooden fish-plates, or in all instances where the washer contacts with a wood surface. In such cases when the nuts are screwed home the corrugated washers are forced sufficiently into the wood to prevent turning thereof.

I claim as my invention—

1. As an improved article of manufacture, a nut-lock consisting of a washer transversely corrugated and adapted when applied to have one of its edges bent up against the nut to be locked, substantially as set forth.

2. As an improved article of manufacture, a nut-lock consisting of a washer corrugated transversely and formed with a smooth uncorrugated edge parallel with the corrugations, said washer being adapted when applied to have said smooth edge bent up against the side or sides of the nut to be locked, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTUS G. COX.

Witnesses:

J. R. CROCKEN,
JAMES A. TILLER.