

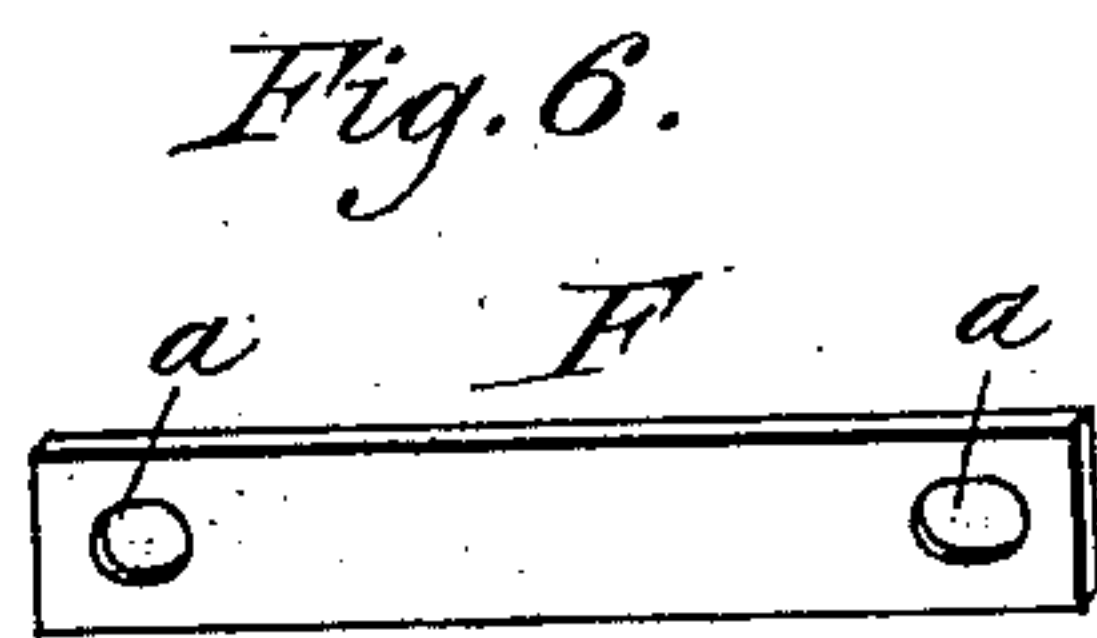
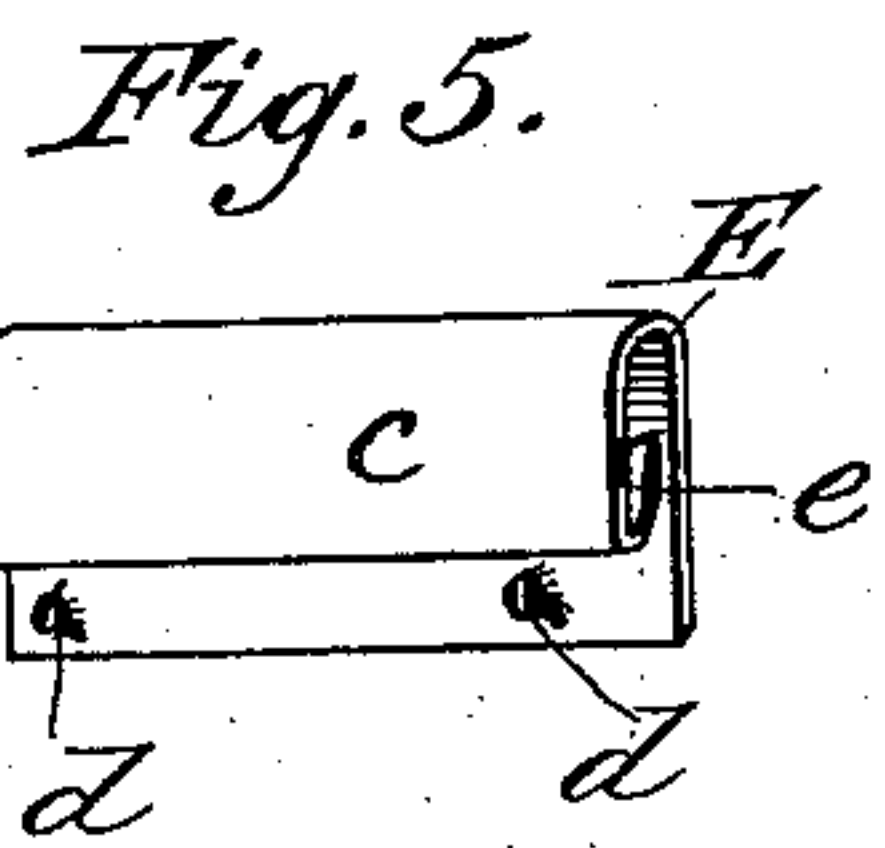
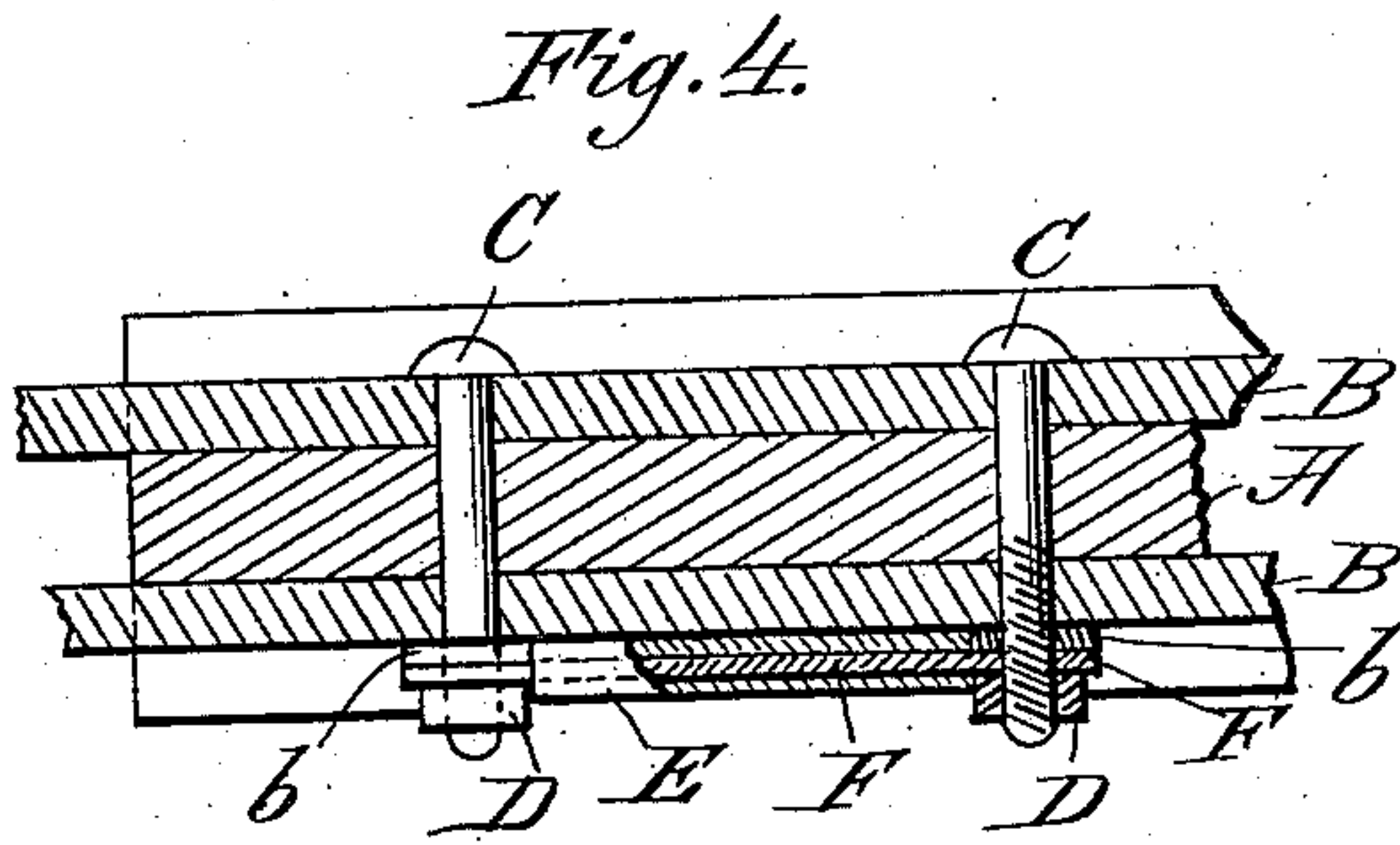
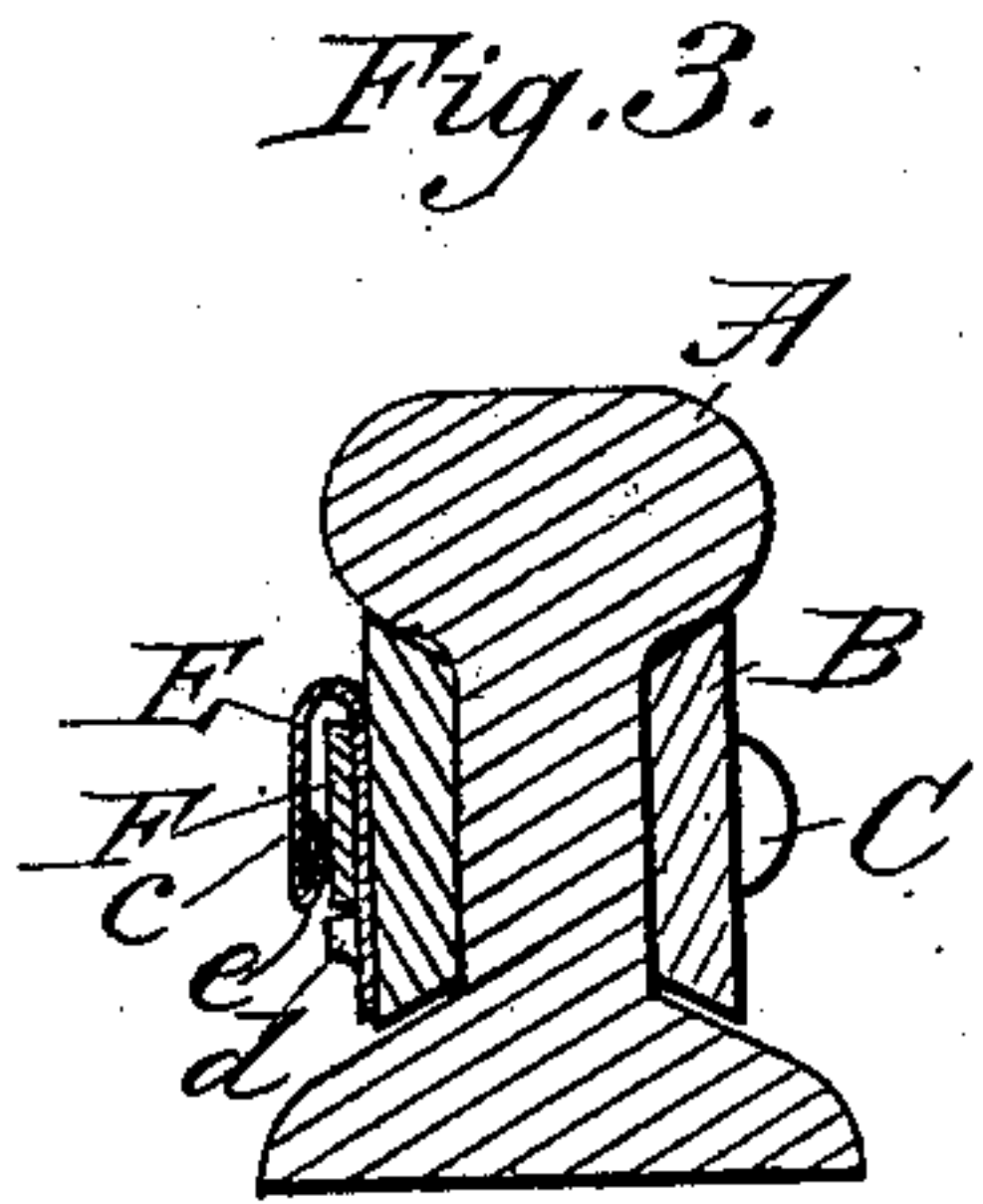
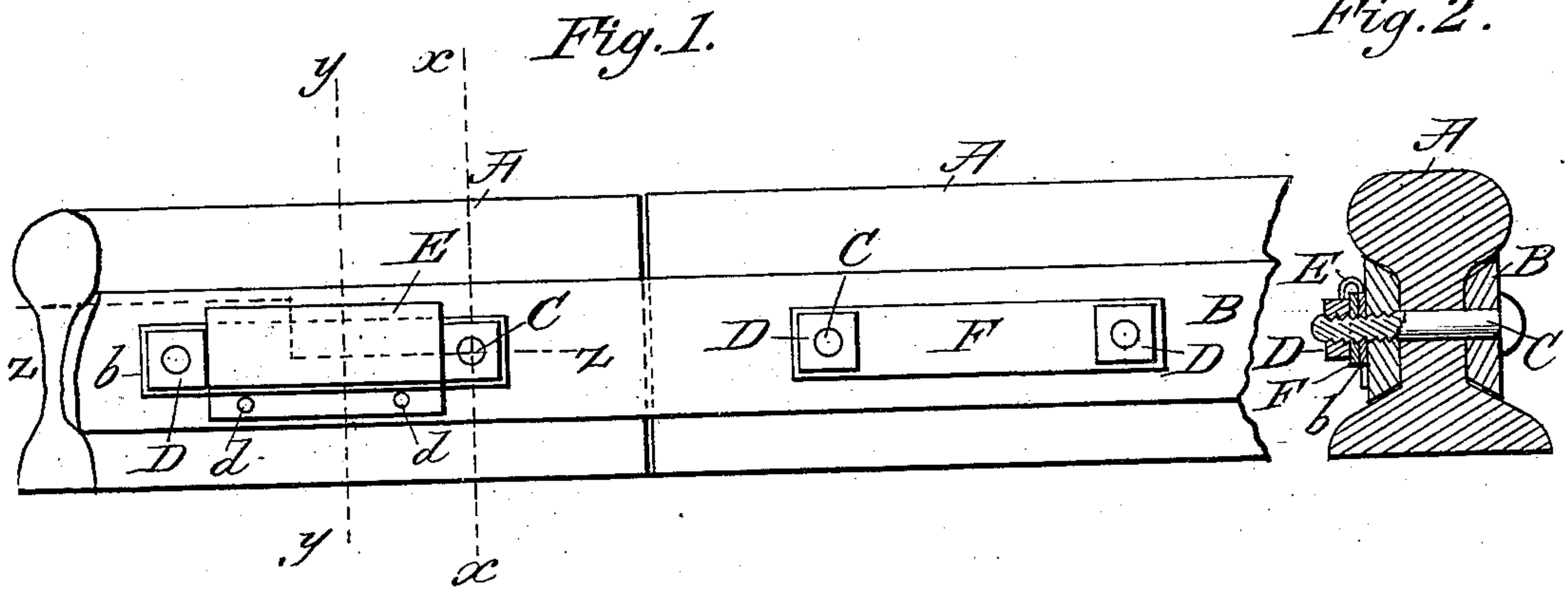
(No Model.)

J. W. HAWK.

NUT LOCK.

No. 299,640.

Patented June 3, 1884.



Attest:

H. H. Schott  
A. R. Brown.

Inventor.  
John W. Hawk  
per J. L. Tasker  
Atty.

# UNITED STATES PATENT OFFICE.

JOHN W. HAWK, OF HUNTSVILLE, ALABAMA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 299,640, dated June 3, 1884.

Application filed March 6, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. HAWK, a citizen of the United States, residing at Huntsville, in the county of Madison and State of Alabama, have invented certain new and useful Improvements in Nut-Locks; and I 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.

This invention relates to certain new and useful improvements in nut-locks; and it consists in a peculiarly-formed locking-plate and supporting-strap and washers, whereby nuts are prevented from turning upon the bolts, as will be hereinafter more fully described and claimed.

In the annexed drawings, which fully illustrate the invention, Figure 1 is a side view of two adjacent railroad-rails secured by fish-plates and bolts, and provided with my improved nut-lock. Fig. 2 is a cross-section on the line *x x* of Fig. 1. Fig. 3 is a similar section on the line *y y* of Fig. 1. Fig. 4 is a horizontal section taken on the line *z z*, Fig. 1. Fig. 5 is a perspective view of my improved nut-locking plate, and Fig. 6 shows a perspective view of the supporting-strap.

Like letters designate like parts.

A A represent the rails, and B B the fish-plates. The rails and fish-plates are secured by bolts C C and nuts D D in the usual manner.

To prevent the nuts D D from turning or working loose on their bolts C C, I construct a metallic nut-locking plate, E, which is snugly secured between the opposite edges of the two nuts to be locked, in a manner to be hereinafter described.

The letter F represents a connecting and supporting strap of metal or other suitable material. This strap F is provided at each end with an oblong perforation or hole, *a*, as shown in Fig. 6, through which holes the bolts C C pass when the strap is placed in position.

Around each bolt C on the nut side of the

rail A, and bearing against the fish-plate B, is a washer, *b*, as shown in Figs. 2 and 4. After the washers *b b* are in place, the connecting and supporting strap F is placed over a pair of bolts, C C. The nuts D D are next screwed on tightly, which will hold the strap F securely in place alongside the fish-plate B, but separated from said plate by a space equal to the thickness of the washers *b b*. Through this space the nut-locking plate E is sprung, in order to hold the nuts from turning back or working loose on their bolts. The locking-plate E is formed of a piece of metal rectangular in shape, and bent or turned over in front, as shown in Fig. 5. The locking-plate is long enough to fit snugly between two adjacent nuts, and is provided on its face below the turned-over portion or lip *c* with two or more small lugs or projections, *d d*, which prevent the locking-plate from slipping or working out of its proper position when sprung into place between the supporting-strap F and the fish-plate B. Instead of the lugs *d d*, a slight flange, corrugation, or rib may be formed on the locking-plate to serve the same purpose as the lugs. The nut-locking plate, when sprung into position, as shown in Fig. 1, is supported on the strap F, and prevents the nuts from turning in either direction. The lip *c* of the locking-plate is shorter than the plate proper, and serves as a handle for inserting and removing the locking-plate. The turned-under portion *e* of this lip *c* bears against the strap F and further aids in holding the locking-plate in position, as shown in Fig. 3. Thus it will be seen that my invention affords a simple, effective, and cheap device for locking nuts on fish-plates, and in other situations where such devices are applicable.

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

1. In a nut-locking device, the combination of a spring locking-plate, E, supporting and connecting strap F, washers *b b*, nuts D D, bolts C C, fish-plates B, and rails A A, substantially as shown and described.

2. A nut-locking device consisting of a locking-plate, E, provided with lugs *d d* and



lip *c*, a supporting-strap, *F*, for holding said locking-plate in place, and washers *b b*, for affording a space for the insertion of said locking-plate, substantially as shown and described.

5 3. A spring nut-locking plate, *E*, formed from one piece of metal so bent as to form a lip, *c*, and spring *e*, and provided with lugs *d d*, or equivalents, for the purpose described.

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

JOHN W. HAWK.

Witnesses:

BURWELL J. CURRY,  
THOMAS C. BARCLAY.