

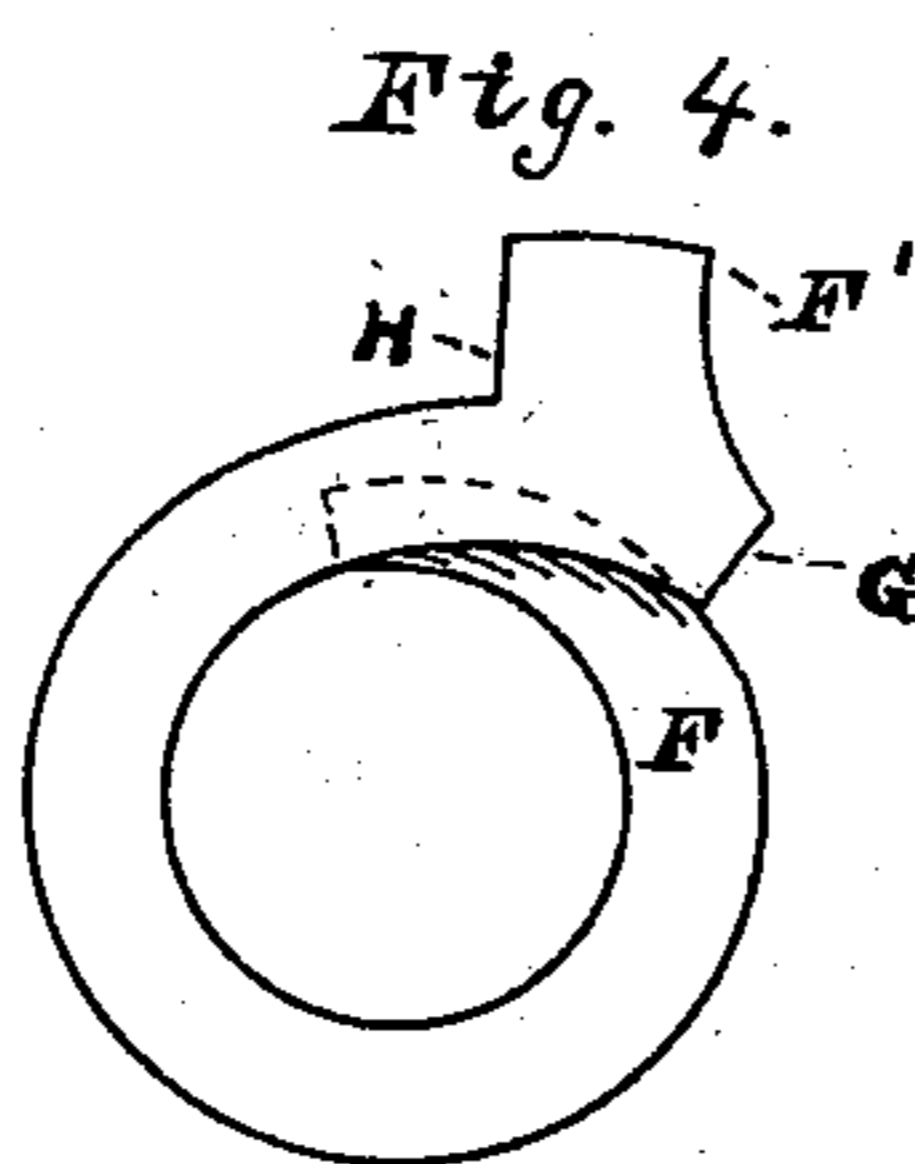
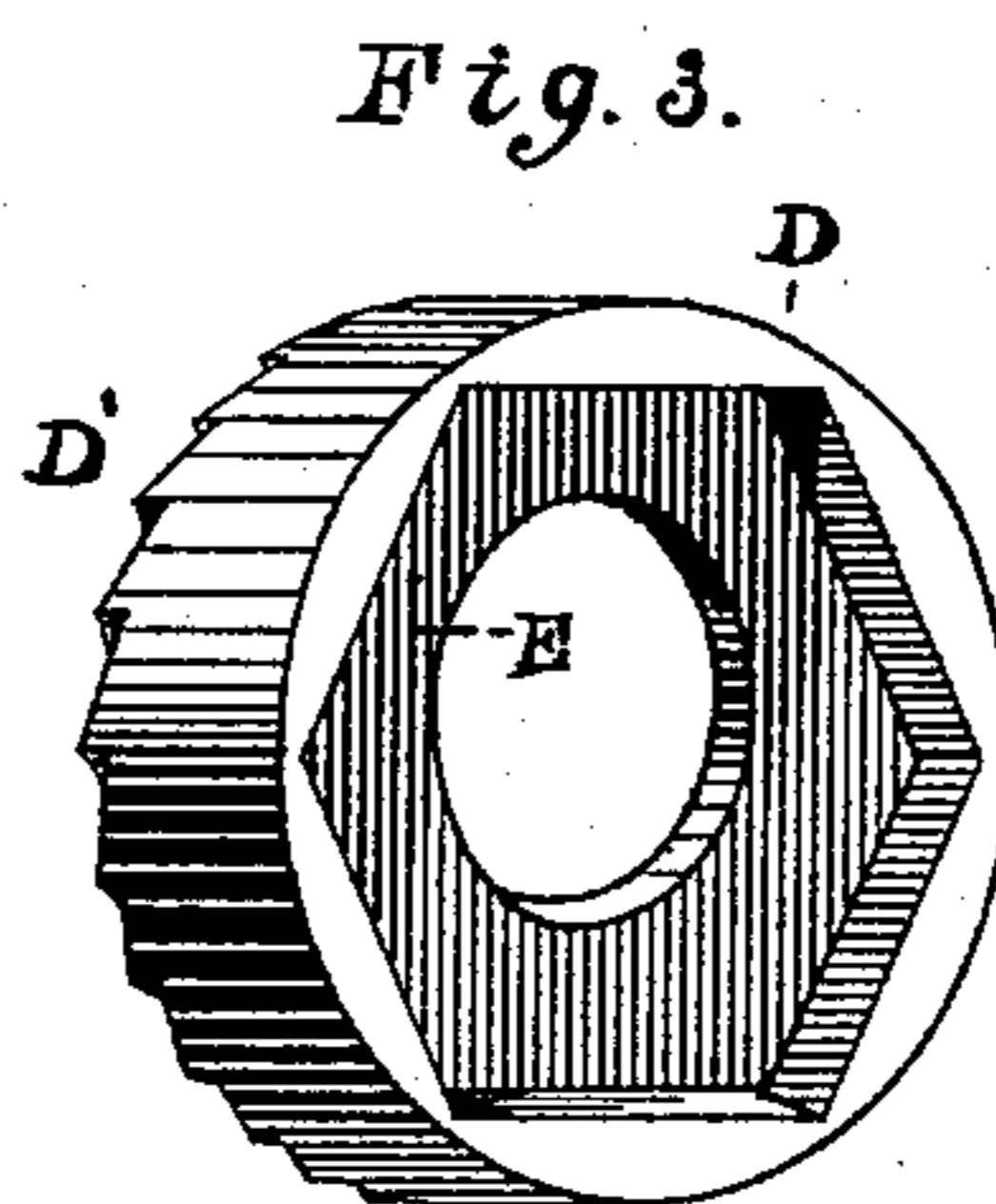
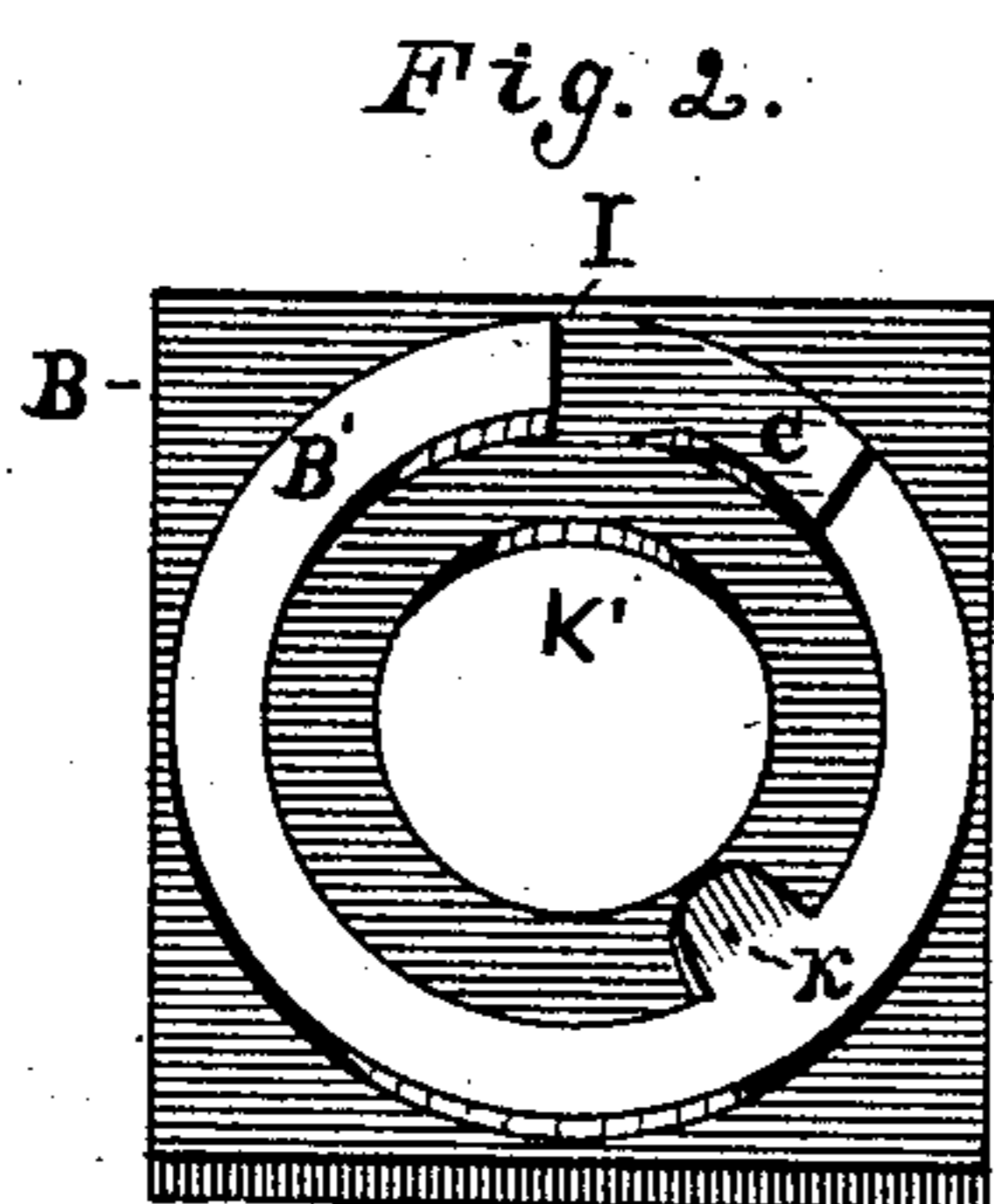
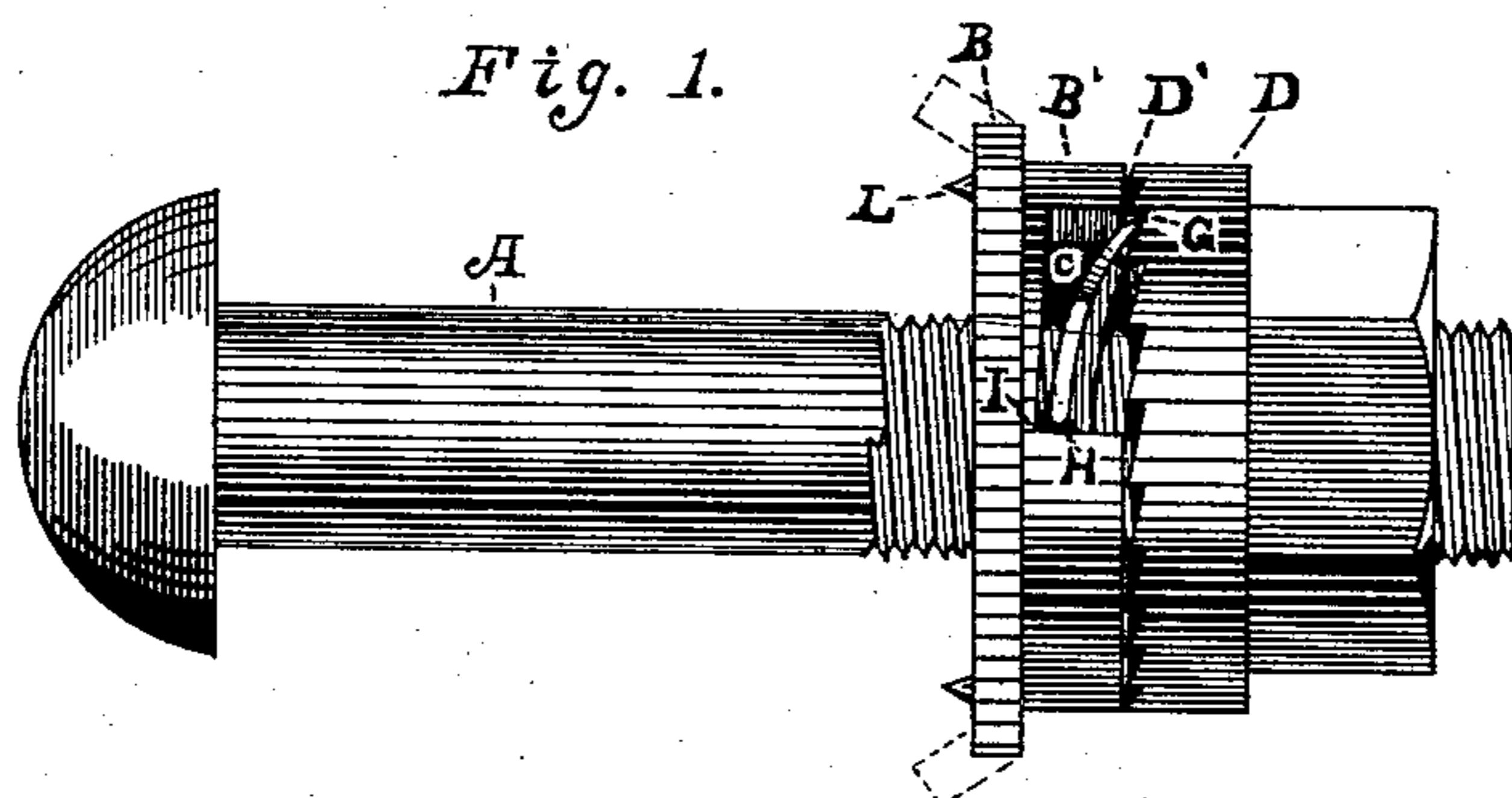
(No Model.)

G. S. WYNN.

NUT LOCK.

No. 324,347.

Patented Aug. 11, 1885.



*Witnesses:*

*E. K. Campbell*

*M. Kernan*

*Inventor:*

*George S. Wynn.*

*per E. K. Campbell*

# UNITED STATES PATENT OFFICE.

GEORGE S. WYNN, OF HUNTSVILLE, OHIO.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 324,347, dated August 11, 1885.

Application filed February 18, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE S. WYNN, a citizen of the United States, and a resident of Huntsville, in the county of Logan and State of Ohio, have invented a new and useful Improvement in Nut-Locks, of which the following is a specification.

My invention consists in an improvement in nut-locks for fastening nuts securely on fish-plates, bails, machinery, or wherever from jolting they are liable to work loose, and essentially in adapting it to utilizing bolts and nuts in present use.

Figure 1 is a side view of my device as used on a bolt, the rail or intervening body being omitted. Fig. 2 is a front view of my backing-plate B, the sides of which are square and adapted to fit against the rail or other object bolted to. Fig. 3 is a front view of my ratchet-plate that fits on the nut. Fig. 4 is a view of my spring-lock that engages with the face of my ratchet-plate and shoulder I of my backing-plate.

A is a bolt; B, my backing-plate; C, an offset in raised rim B' of said plate, in which plays a shoulder of my spring-lock; B', a rim cast on the plate B, inside of which my spring-lock is located; D, a ratchet-collar that fits on the nut-head, the countersink being square, hexagonal, or other shape to fit the head of bolt to be used; E, countersink for reception of the end of the nut-head; F, spring-lock; F', thumb-piece projecting from top of same to operate it by; G, projecting end of spring-lock F; H, shoulder on thumb-piece that engages with shoulder I of the cut-away portion B'; K, a lip to keep the bottom of spring-lock F in position.

The object of my invention is to provide a nut-lock that shall prevent nuts jolting loose from exposed places—such as in the various uses on rails of railroads, and in machinery where they are exposed to shaking or jolting motion. For this purpose I have devised a lock and accessories that allow of the retention of the nuts and bolts in present use. For this purpose I furnish a backing-plate, B, adapted to set squarely against the rail, and having squared edges adapted to fit against the shoulders of fish-plates or other projections, so as to prevent turning, and also having small lugs to engage with depressions in

plane surfaces, and also being of material that can readily be made to overlap adjacent edges and hold the plate from turning. This backing-plate is made with squared projecting edges, as shown in Fig. 1, that rest against any shoulder or the flange of a rail or fish-plate. The back of it is provided with small projections L, adapted to set into depressions made in the rail or other structure with a punch or otherwise to keep the plate from turning. This backing-plate is made of malleable iron, and the four corners project in such manner that when the bolt passes through a narrow piece the corners can be bent down over the edge with a blow of a hammer. The plate can be set so as to bend the corners down on parallel sides, or so as to bend the diagonally-opposite corners down.

In many places in machinery a small shoulder can be cast on the same for the edges of the backing-plate to abut against.

Inside of the rim B' of my backing-plate is my spring-lock F. (Shown in Fig. 4.) The thumb-piece F', projects up through the cut-away portion C in the rim B'. The overlapping part of spring-lock F is given a twist or turn, so that the end G shall project beyond the face of the plate, while the back H of the thumb-piece F' shall engage with the shoulders H' of the rim B', as shown in Fig. 1.

By making the hole K' in face-plate B square, it will be adapted to use with journals having corresponding squared sides.

I also furnish face-plate D, having on one side a collar or countersunk part, adapted to fit snugly on the head of the nut, and on the other side a ratchet-face, as shown.

The operation is as follows: The backing-plate B is set securely on the rail or other piece, to be attached to and secured from turning by one of the means mentioned, and the spring-lock F inserted inside the rim B'. The bolt is passed through. The face-plate D is then secured on the nut and the nut run up tight against the backing-plate B. The front end, G, of the spring-lock F engages in one of the teeth of the ratchet-face, while the shoulder H of the thumb-piece F' engages with the shoulder I of the cutaway portion of rim B'.

What I desire to secure and claim as new is—

1. A nut-lock composed of the backing-plate

B, having projections L thereon to prevent it turning, the plate D, adapted to fit on the nut and having the ratchet-face D', and the spring-lock F, having shoulders G and H, substantially as set forth.

5 2. The combination, with an ordinary bolt and nut, of the plate B, rim B', having offset

C, and spring F, and the plate D, having teeth D', and countersink or collar E, as and for the purpose set forth.

GEORGE S. WYNN.

Attest:

H. H. GOOD,  
WILL McCORMICK.