

H. ROBINSON.
 NUT LOCK.
 APPLICATION FILED SEPT. 3, 1909.

957,576.

Patented May 10, 1910.

Fig. 1.

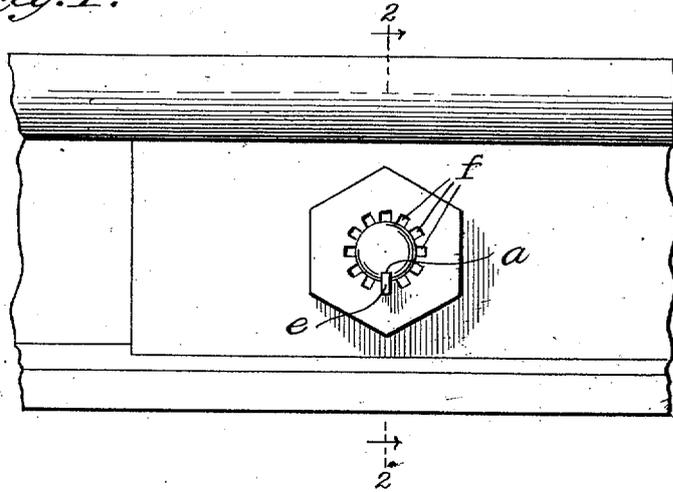


Fig. 2.

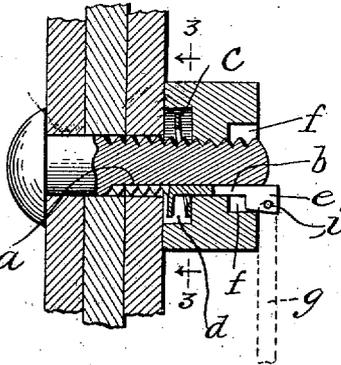


Fig. 3.

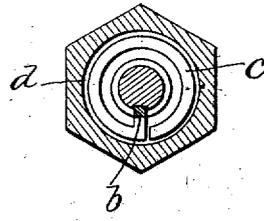


Fig. 4.

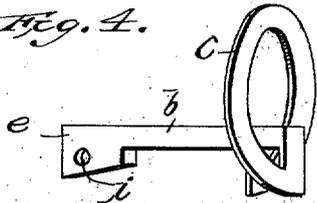


Fig. 5.



Witnesses
 Edwin L. Jewell
 Burrill L. Bridges

By

Inventor
 Harry Robinson
 Davis & Davis

Attorneys

UNITED STATES PATENT OFFICE.

HARRY ROBINSON, OF SHEFFIELD, ALABAMA.

NUT-LOCK.

957,576.

Specification of Letters Patent.

Patented May 10, 1910.

Application filed September 3, 1909. Serial No. 516,007.

To all whom it may concern:

Be it known that I, HARRY ROBINSON, a citizen of the United States of America, and a resident of Sheffield, county of Colbert, State of Alabama, have invented certain new and useful Improvements in Nut-Locks, of which the following is a full and clear description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation showing my device applied to a rail joint; Fig. 2 a vertical fragmentary section on the line 2—2 of Fig. 1; Fig. 3 a vertical section on the line 3—3 of Fig. 2; Fig. 4 a perspective view in detail of the locking key and its actuating spring, and Fig. 5 a detail perspective of a tool for drawing out the locking key.

The object of this invention is to provide a simple device for locking a nut to its bolt without materially weakening the nut or the bolt as more fully hereinafter set forth.

The nut and bolt are threaded as usual, and in addition the bolt is provided in its threaded portion with a longitudinal groove *a* which groove extends clear to the end of the bolt opposite its head. Working slidably in this groove is a key *b* which has attached to its inner end a circular spring *c* which is shown flat in cross section but which may be of other shapes and which surrounds the bolt and lies within an annular chamber *d* formed in the inner face of the nut. The key *b* is provided at its outer end with a radially extended head *e* whose inner end or edge is so shaped as to enter any one of a series of notches *f* formed in the outer face of the nut and opening into the threaded passage of the nut.

It will be observed that the spring nor-

mally tends to draw the key inwardly, so that when the head *e* registers with one of the notches *f* said head will be drawn into said notch and thus lock the nut to the bolt in its adjusted position. To turn the nut in either direction it is necessary to draw the key outwardly against the action of its spring sufficiently to disengage the head from the notch, whereupon the nut may be freely turned in either direction. The key may be withdrawn by any suitable tool but I prefer using a bar *g* such as shown in Fig. 5 and provide the same with a pin *h* at one end which is adapted to be inserted in a transverse hole *i* in the head *e*, in which position the bar may be used as a lever to draw out and hold out the key while the nut is being turned.

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

In combination, a threaded bolt having a longitudinal key-way cut in its threaded portion, a nut internally threaded and provided in its inner face with a chamber and in its outer face with a series of notches around its threaded opening, and a key slidably mounted in said key-way and provided with a spring at its inner end lying in said chamber and acting to normally pull the key inwardly and at its outer end with a head extending radially outward and adapted to be engaged in any one of said notches.

In testimony whereof I hereunto affix my signature in the presence of two witnesses this 30 day of August, 1909.

HARRY ROBINSON.

Witnesses:

B. R. SAYWELL,

H. A. PORTERFIELD.