(No Model.)

J. W. HINDMAN.

NUT LOCK.

No. 459,185. Patented Sept. 8, 1891.

FIG. 2

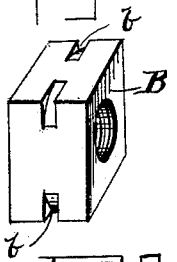


FIG. 1

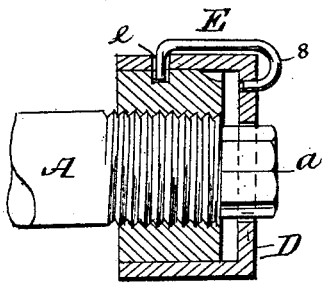


FIG. 3.

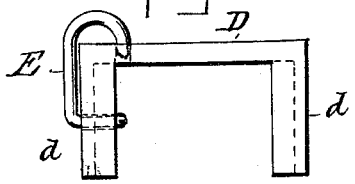


FIG. 4.

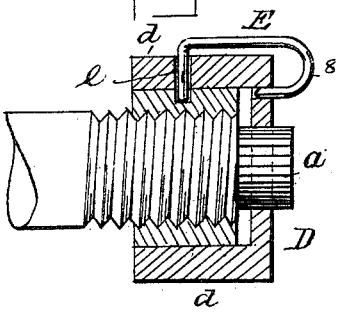


FIG 5

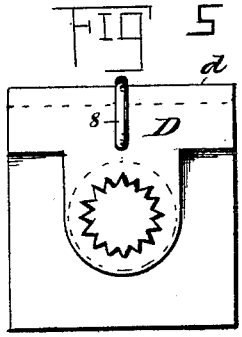
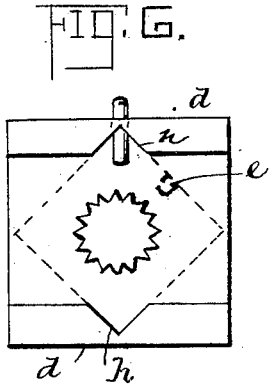


FIG. 6.



Witnesses
Sam'l R. Turner
H. J. Smith

Inventor
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By his Attorney
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UNITED STATES PATENT OFFICE.

JAMES W. HINDMAN, OF WEST ALEXANDER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN E. ALLUM, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 459,185, dated September 8, 1891.

Application filed September 30, 1890. Serial No. 366,667. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. HINDMAN, a citizen of the United States, residing at West Alexander, in the county of Washington and State of Pennsylvania, 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 letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to nut-locks; and it has for its object to provide a means whereby a nut may be securely and readily locked upon a bolt; and for these purposes it consists of a locking-plate adapted to be secured on the end of the bolt and having a lateral extension and of a spring-fastening having its one end bent and projecting through the said lateral extension and entering an opening in the nut and having its opposite end bent and secured within the plate, as will be hereinafter more fully described.

Having reference to the accompanying drawings, in which corresponding parts are designated by similar letters, Figure 1 is a view of the end of a bolt, showing the nut and the nut-locking plate in section and showing a form of spring-fastening. Fig. 2 is a perspective view of a modified form of the nut which is devised to be used with a form of nut-lock, such as that shown in Figs. 3 and 6. Fig. 3 is a side view of the nut-lock shown in Fig. 6. Fig. 4 is a view similar to Fig. 1, showing the application of a nut-lock to a bolt having a corrugated reduced portion. Fig. 5 is a front view of a form of a nut-lock shown in Fig. 4. Fig. 6 is an elevation of the lock shown in Fig. 3.

In the several figures of the drawings similar letters denote corresponding parts.

Referring to the drawings, A represents a bolt, of usual construction, threaded at one end to receive the nut B and having a portion *a* near the end reduced and so constructed as to interlock with the plate D. The end *a* may be angular, as shown in Fig. 1, or it may be corrugated, as shown in Fig. 4. Other forms may be devised, the purpose being to effect a locking between the bolt and the plate D, whereby the plate will be held from turning on the bolt. The plate D is provided with a lateral extension *d*, which projects therefrom and overlaps an edge of the nut, being held thereon when in position by a spring-fastening. This extension may project from one edge of the plate, as shown in Fig. 5, or from two edges, as shown in Figs. 1, 3, 4, and 6. By having the projection at one edge of the plate, as shown in Fig. 5, the nut-lock can be applied to nuts, the lower edge of which approaches close to the foot of the rail and in such places as the other forms cannot be conveniently applied.

Fig. 2 shows a form of nut, the corners of which are provided with slots *b* to receive the projecting end of the spring, which enters through the notches *h* of the plate shown in Fig. 6. This form of nut admits of a greater variety and nicety of adjustment over the ordinary square nut.

The spring-fastening is secured to the plate or its extension at one end, and its free end extends through the said extension and enters an opening *e* in the nut or one of the notches *b*. The spring-fastening is secured to the nut-locking device by having its end S bent to extend through an opening in the plate D. By the latter construction the spring-fastening can be quickly detached and easily replaced.

In Fig. 6 the plate D is provided with notches *h* intermediate the ends of the extension *d* to receive the corners of the nut, as indicated in dotted lines in Fig. 6.

The operation of the invention is manifest from the foregoing description. However it may be well to state that after the nut B is screwed home on the bolt the plate D is placed on the projecting end of the bolt and interlocked therewith in the manner hereinbefore specified, and the extension *d*, projecting over the edge of the nut, is secured thereto by the spring-fastening E.

Having thus described my invention, what I claim is—

The combination, with the bolt, the nut

having an opening, and the locking-plate having a lateral extension, of a spring-fastening having one end bent and inserted in the plate and having its other end bent and projecting through the said lateral extension and entering the opening in the nut, substantially as set forth.

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

JAMES W. HINDMAN.

Witnesses:
JOHN I. CARSON,
G. M. SIMS.