

(No Model.)

C. D. WILEY.
NUT LOCK.

No. 467,107.

Patented Jan. 12, 1892.

Fig. 1.

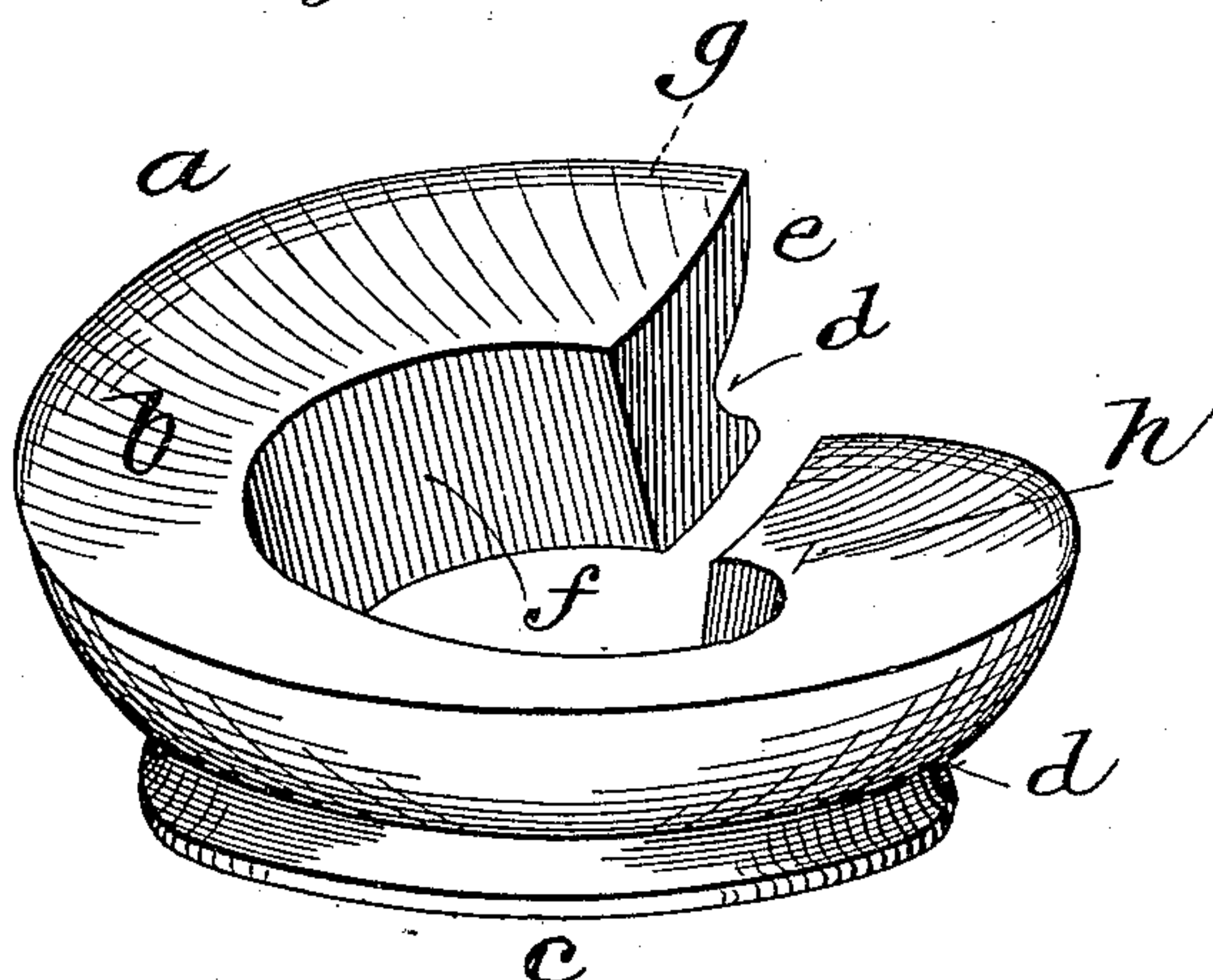
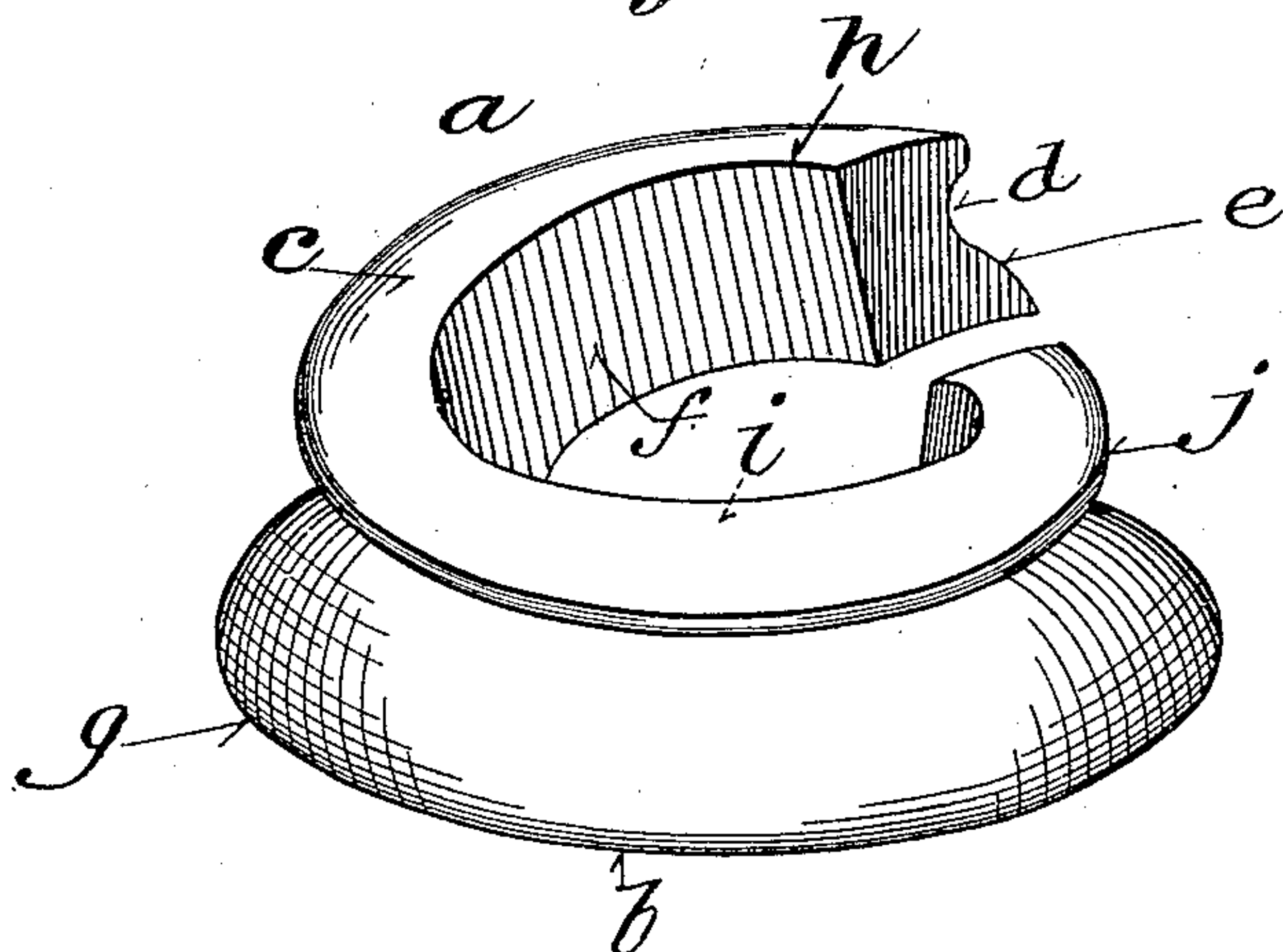


Fig. 2.



Attest;

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UNITED STATES PATENT OFFICE.

CHARLES D. WILEY, OF ST. LOUIS, MISSOURI.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 467,107, dated January 12, 1892.

Application filed July 31, 1891. Serial No. 401,304. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. WILEY, of St. Louis, Missouri, have made a new and useful Improvement in Nut-Locks, of which the following is a full, clear, and exact description.

My improved nut-lock relates to that class of nut-locks whose leading characteristic is a coil or spiral. It consists in a nut-lock in the form of a coil, the outer portion of one of its faces projecting outward beyond the inner portion thereof and the inner portion of the opposite one of its faces projecting outward beyond the outer portion thereof, substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification, and exhibiting not the only but the most desirable mode of carrying out the improvement, and in which—

Figure 1 is a view in perspective of the improved nut-lock, and Fig. 2 another view in perspective looking toward the opposite side of the nut-lock to that presented in Fig. 1.

The same letters of reference denote the same parts.

In carrying out the improvement but a single fake *a* need be used, and a spiral is preferred to a helical or an approximately helical form of coil. The cross-sectional form of the fake may also be varied considerably without departing from the principle of the improvement. The form shown is a desirable one—that is, in the place of having its opposite faces *b c* of equal or substantially equal width, the fake has faces of unequal width, substantially as shown, and in the illustration a groove *d* is shown in the outer edge *e* of the fake and the inner edge *f* is substantially flat. The distinguishing feature, however, of the fake is its being constructed to cause it in use not only to flatten as a coil, but also to twist more or less along or throughout its length and thereby subject the nut-lock to two distinct strains. This is accomplished, preferably, by causing the outer edge or portion *g* of the face *b* to project outward beyond or above the inner edge or portion *h* thereof and the inner edge or

portion *i* of the face *c* to project outward beyond or above the outer edge or portion *j* thereof, substantially as shown. The nut-lock as an entirety may be said to be approximately concave or dished on one side thereof and convex or rounded on the opposite side thereof.

In use the present nut-lock is applied to the bolt to come between the nut and the fish-plate or whatever surface or part the nut is being tightened toward, and the nut is turned up on the bolt in the usual manner. As the nut comes to a bearing the nut-lock flattens more or less and the described torsion is produced in the fake. The operation can be proceeded with until the nut-lock is flattened. The result is an improved hold obtained upon the nut. The nut-lock tends to recover not only into the form of a spiral, but also to untwist. Either force acts advantageously in gripping the nut, and the two forces in conjunction are still more effectual.

So far as the described torsion is concerned it is only necessary for one face of the nut-lock to come to its initial bearing at a different distance measured radially from the center of the nut-lock from that at which the opposite face of the nut-lock comes to its bearing, and hence I desire not to be restricted to any special cross-sectional shape or trend of fake so long as the described torsional effect is produced.

I claim—

The herein-described nut-lock in the form of a coil, the outer edge or portion of the face *b* thereof projecting outward beyond or above the inner edge or portion of said face and the inner edge or portion of the face *c* of said coil projecting outward beyond or above the outer edge or portion thereof, substantially as described.

Witness my hand this 27th day of July, 1891.

CHARLES D. WILEY.

Witnesses:

THOMAS C. JOHNSON,
C. D. MOODY.