

No. 883,714.

PATENTED APR. 7, 1908.

J. R. GOODE.
NUT LOCK.

APPLICATION FILED DEC. 23, 1907.

Fig. 1.

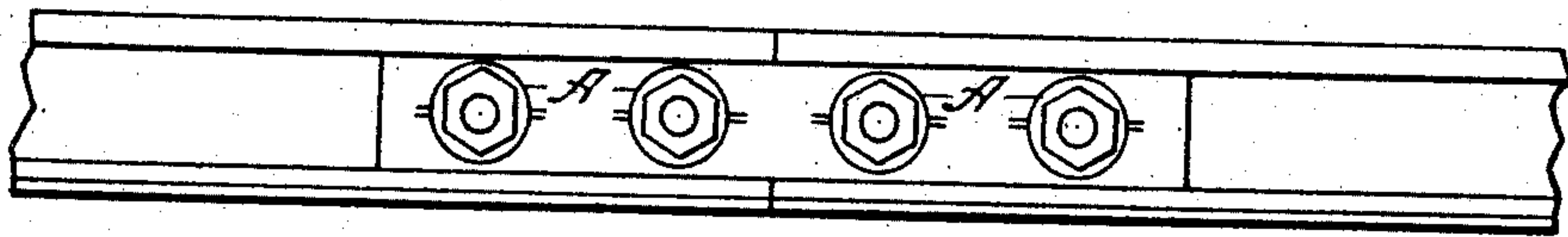


Fig. 2.

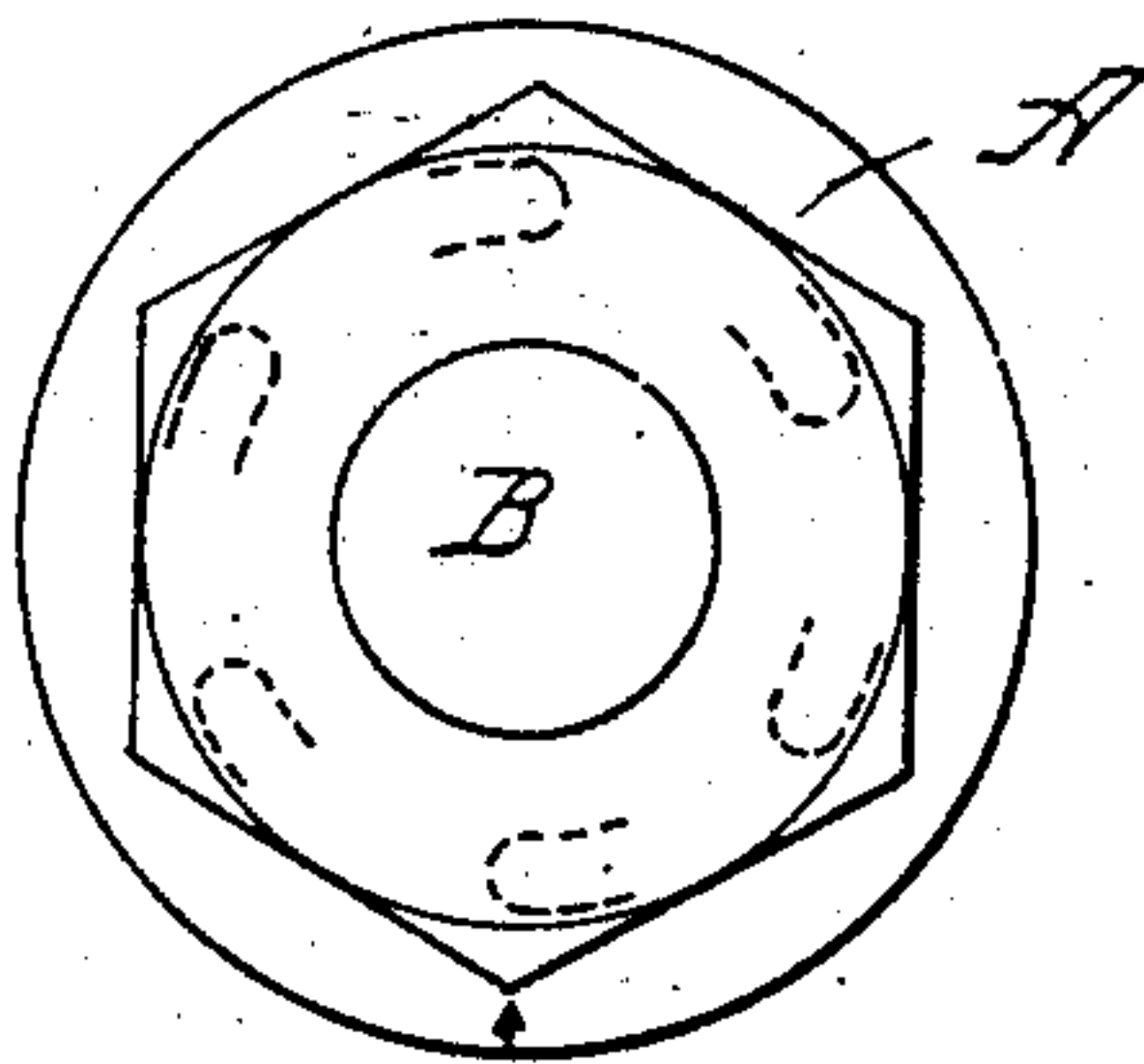


Fig. 7.

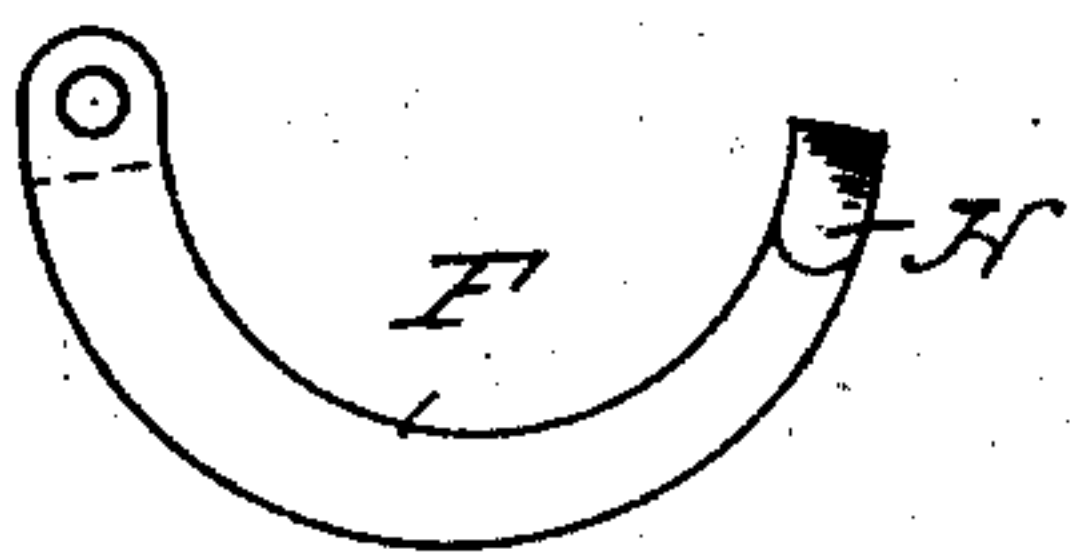


Fig. 8.

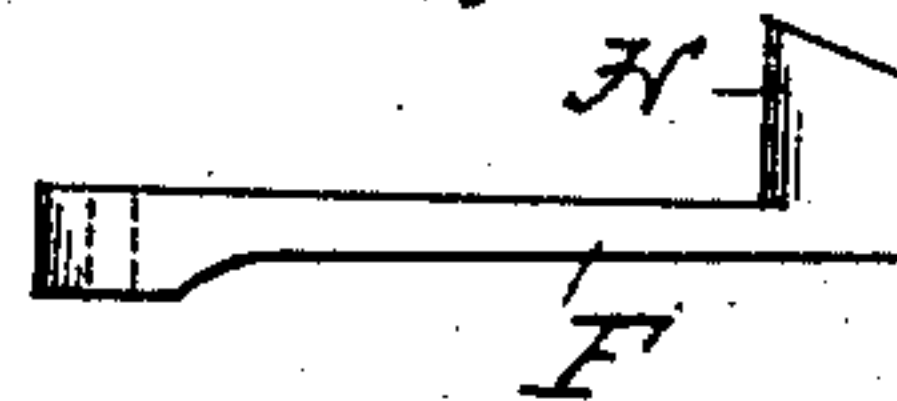


Fig. 3.

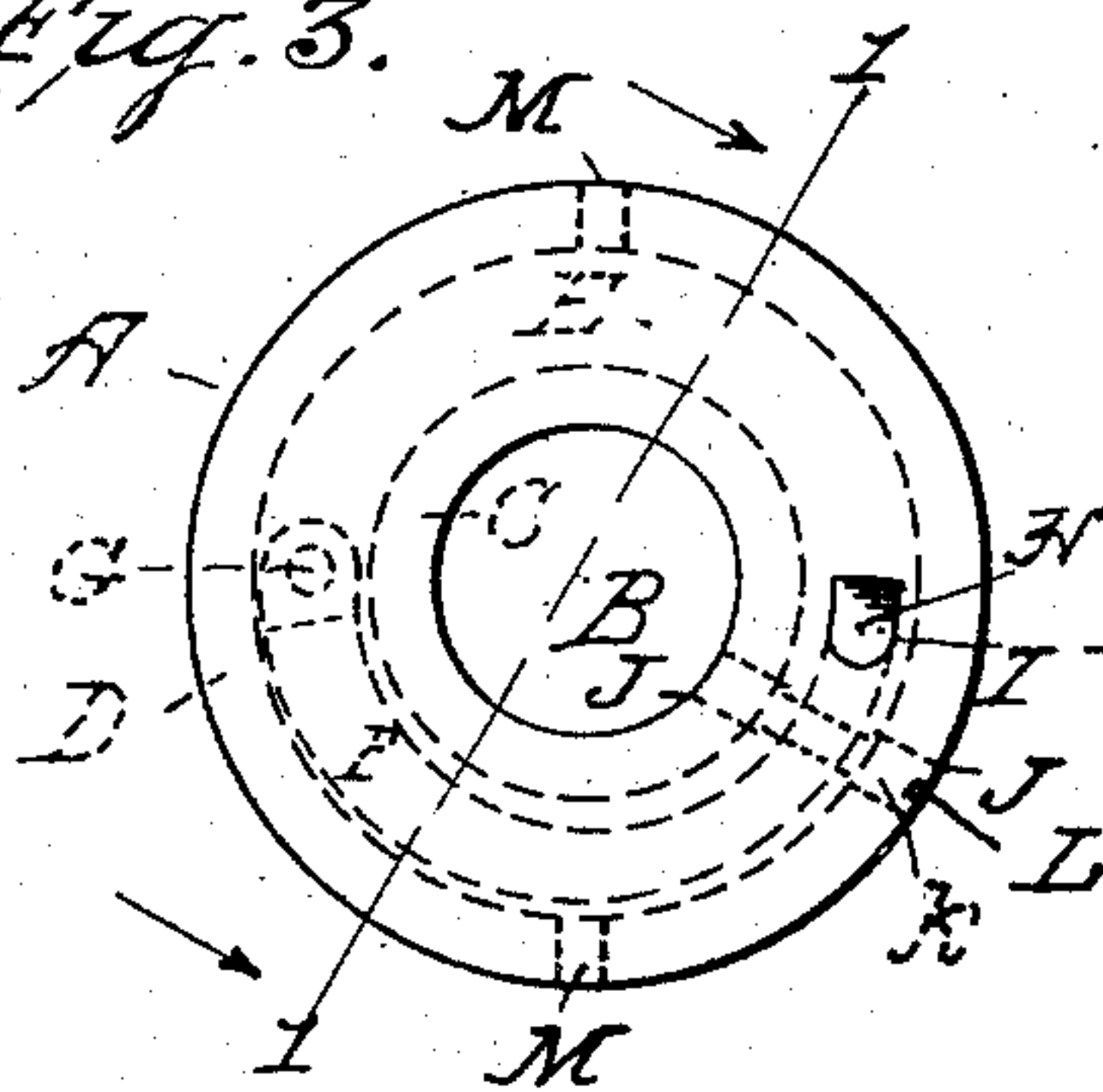


Fig. 9.

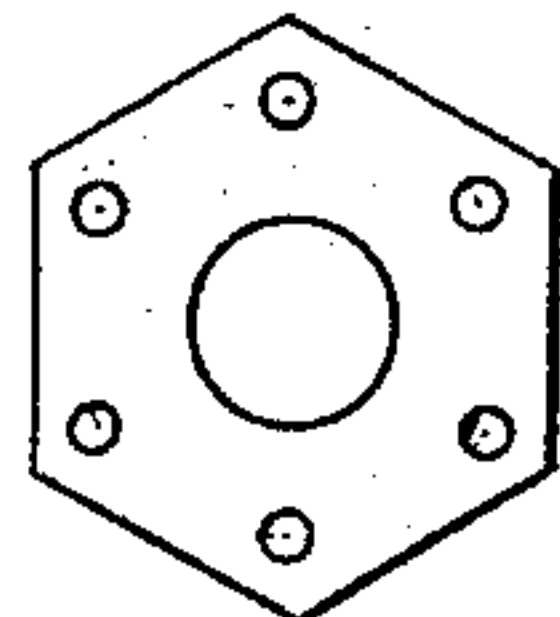


Fig. 4.

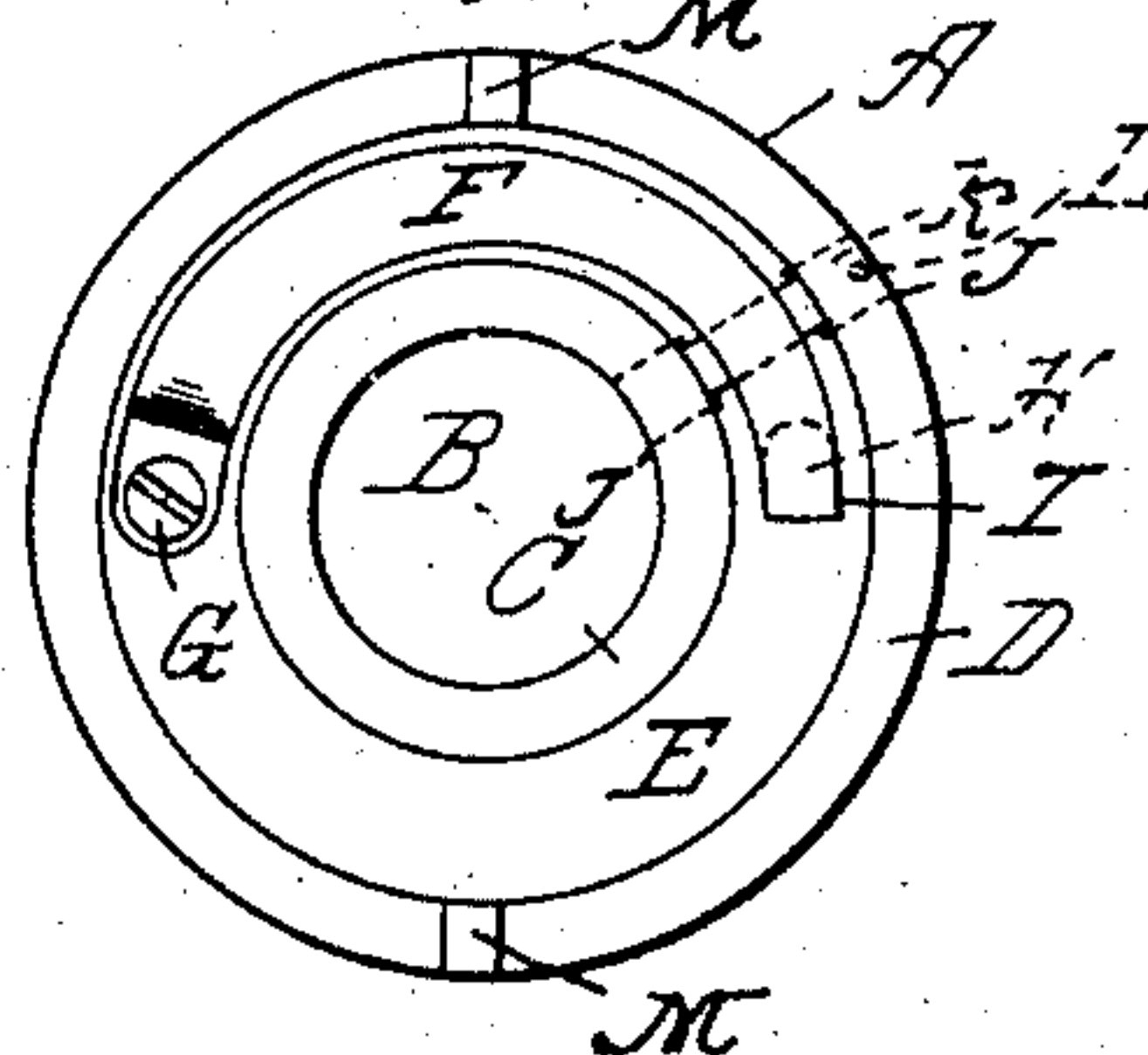


Fig. 5.

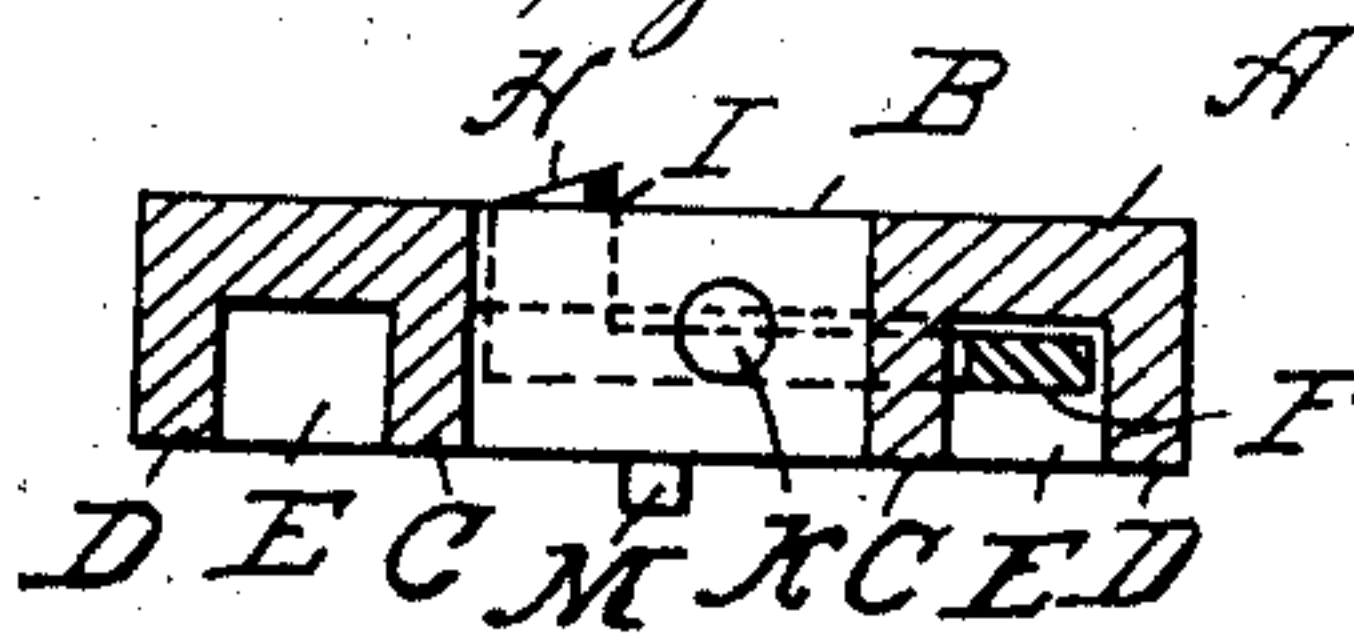


Fig. 6.



Witnesses:
C. M. Decker.
Chas. W. Coates.

Inventor,
John R. Goode,
By Mark M. Decker
Attorney.

UNITED STATES PATENT OFFICE.

JOHN R. GOODE, OF WASHINGTON, PENNSYLVANIA.

NUT-LOCK.

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Specification of Letters Patent.

Patented April 7, 1908.

Application filed December 23, 1907. Serial No. 407,795.

To all whom it may concern:

Be it known that I, JOHN R. GOODE, a citizen of the United States, residing at Washington, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks; and I do hereby 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.

My invention relates to improvements in nut-locks or lock-washers, and the objects are to provide a lock for nuts which will be absolute in its workings, simple in construction and cheap to manufacture.

The invention consists in certain novel features and details of construction as will be more fully described hereinafter and finally pointed out in the claim.

I will now describe my invention reference being had to the accompanying drawings in which similar letters of reference indicate corresponding parts and in which,

Figure 1, is a side elevation of a rail-joint showing my improved lock in use. Fig. 2, is a plan view of one of my locks showing the recessed inclined depressions in dotted lines. Fig. 3, is a plan view of the lock or washer showing the interior construction in dotted lines. Fig. 4, is an inverted plan view of the same, Fig. 5, is a transverse sectional view taken on line 1—1 of Fig. 3. Fig. 6, is a perspective view of the cam for lifting the spring. Fig. 7, is a plan view of the spring. Fig. 8, is a side elevation of same, and Fig. 9, is a modified form of nut employed.

My invention consists of a washer shell or casing A, provided with an opening B, which permits it being placed down over the threaded portion of a bolt. A boss or flange C, is formed concentric with the opening B, and a rim or flange D, is formed on the periphery thereof. These flanges C and D, form a recess E, between them for receiving and containing a semi-circular spring F, which is held in position by a rivet or screw G, while the forward or loose end of the spring is provided with an upwardly projecting tongue H, which passes out through an opening I, in the top of the washer casing A. This tongue H, is beveled on top as best shown in Fig. 8, for the purpose of engaging the recessed in-

clined depressions formed in the underside of the nut.

As shown in Fig. 9, I may use a nut provided in its underside with a series of holes or circular depressions, instead of the recessed inclined depressions hereinbefore described, and indicate on the shell or casing by any suitable mark, the point where the tongue H, projects through the casing, so that the nut may be turned with one of the holes opposite the said mark when the tongue will be in position to enter said hole. A hole J, is formed in the flanges C, and D, for receiving and containing a cam K. This cam lies under the spring F, and is provided in its outer end with a groove L, the purpose of which will appear hereinafter. Formed on the flange D, are lugs or projections M, which are adapted to be inserted in depressions formed in the fish-plate or other article to which the lock is to be applied.

The manner of constructing my lock is preferably by the drop forging process and the cam is preferably of a different material than that used in the casing in order to prevent rust or corrosion.

I will now describe the operation of my invention, which is as follows: The lock is placed over a bolt in the manner of an ordinary washer with the lugs or projections M, inserted in the depressions formed for the purpose of receiving them. The cam K, being in the normal position permits the tongue H, to project up through the top of the casing for the purpose of engaging the recessed inclined depressions in the underside of the nut. The nut is then screwed down tight to its place and is rigidly held by means of the tongue H. When it is desired to remove the nut, turn the cam one-half turn by means of a screw-driver or key made for the purpose, which will pull the tongue down and out of engagement with the recesses in the nut, allowing the nut to be removed without destroying the locking device.

Having described my invention what I claim is:

In a nut-lock, the combination with a washer shell or casing having secured therein a semi-circular spring provided with an upwardly projecting tongue, of a cam carried by and journaled in said casing or shell,

said tongue being adapted to engage circular
depressions formed in the underside of the
nut through the resiliency of the spring and
withdrawn from engagement therewith by
5 means of said cam for locking and unlocking
the nut, all substantially as and for the pur-
poses shown and described.

In testimony that I claim the foregoing as
my own invention, I have hereunto set my
hand in the presence of two witnesses.

JOHN R. GOODE.

Witnesses:

D. M. DONEHOO,
MARK M. DECKER.