

No. 763,932.

PATENTED JUNE 28, 1904.

J. M. SCHOFIELD.

NUT LOCK.

APPLICATION FILED SEPT. 21, 1903.

NO MODEL.

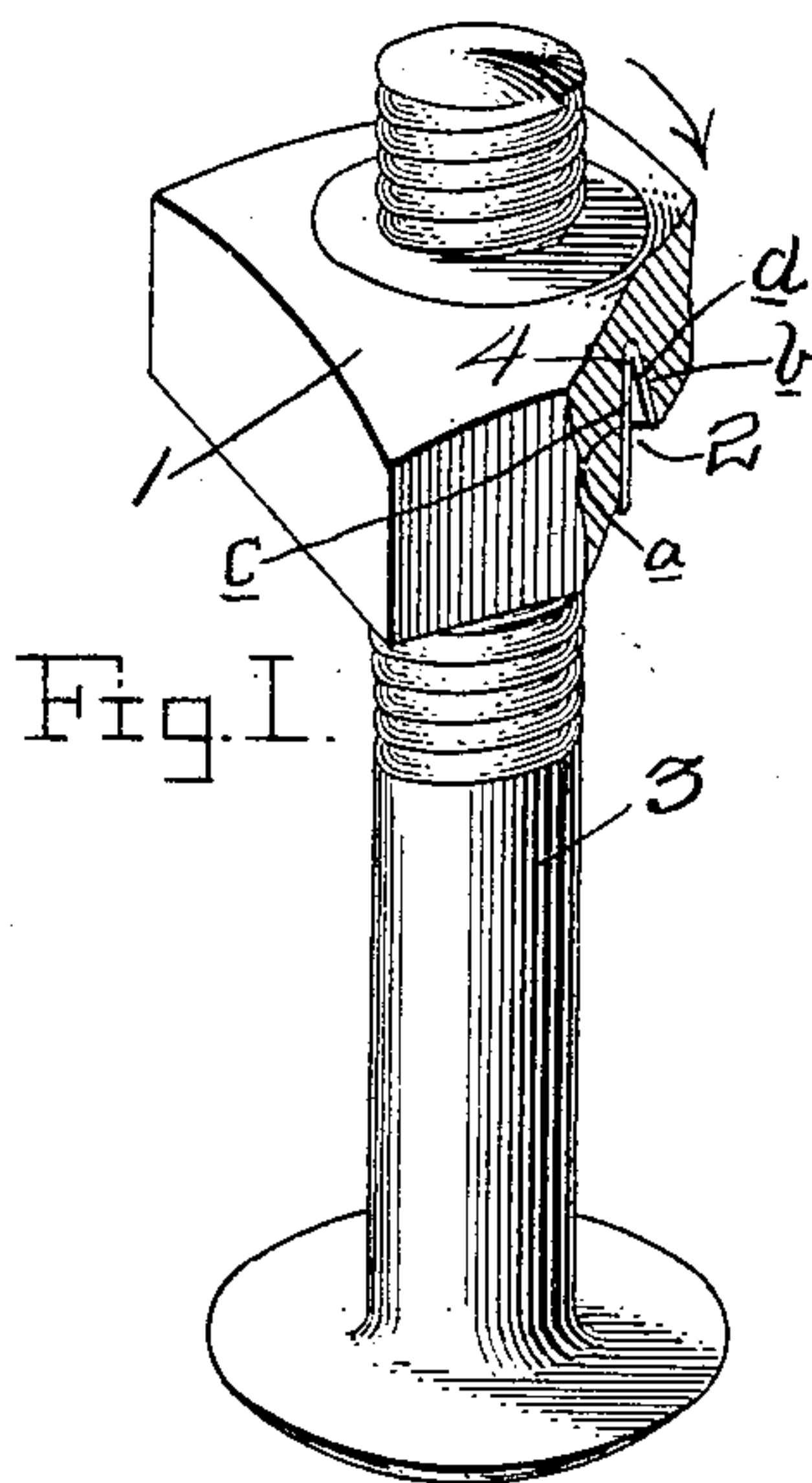


Fig. 3.

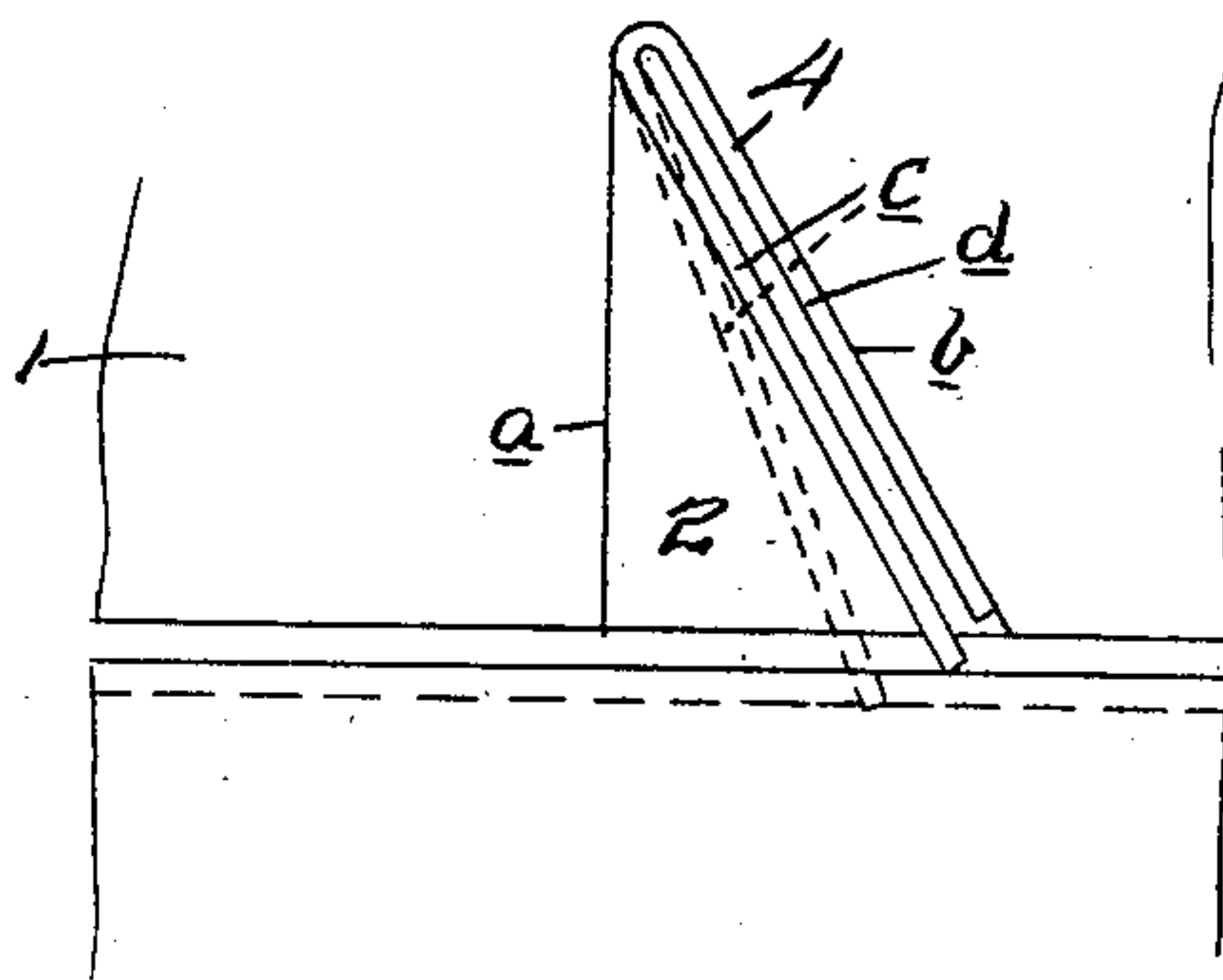
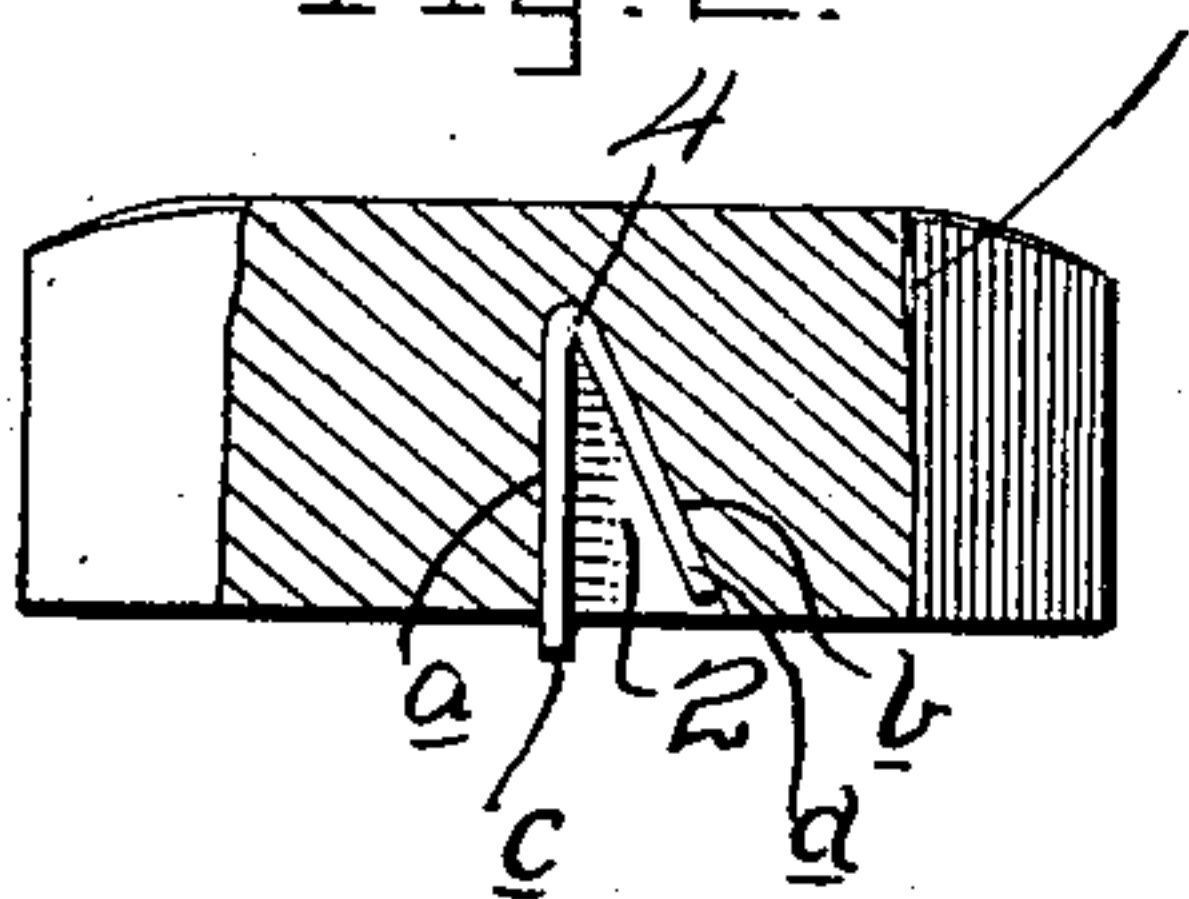


Fig. 2.



Witnesses

E. H. Reichenbach.

*[Signature]*

Inventor

J. M. Schofield.

By

*[Signature]*

Attorney

# UNITED STATES PATENT OFFICE.

JAMES M. SCHOFIELD, OF STOCKTON, CALIFORNIA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 763,932, dated June 28, 1904.

Application filed September 21, 1903. Serial No. 174,049. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. SCHOFIELD, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, 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 ap-  
 10 pertains to make and use the same.

My invention is an improved nut-lock; and it consists in the construction and combination of devices hereinafter described and claimed.

15 In the accompanying drawings, Figure 1 is a sectional perspective view of a nut-lock embodying my improvements. Fig. 2 is a sectional view of the same. Fig. 3 is a diagram illustrating the operation thereof.

20 In the embodiment of my invention I provide a nut 1 with a recess 2 on its inner or under side, which recess is contracted toward its inner end, so that its sides are disposed angularly with reference to each other, as at *a b*.  
 25 The said recess is parallel with the bolt-hole in the center of the nut. The side *a*, which I will call the "front" side, is perpendicular to the nut. The side *b* is oblique with reference to the side *a*. The nut is adapted to be  
 30 used on a bolt of ordinary construction, such as is shown at 3, and has the usual threaded bolt-opening. In combination with the nut I provide a locking device 4, which is a substantially V-shaped bar of steel or other suitable material having the legs *c d*, which are  
 35 normally obliquely disposed with reference to each other, the said locking device being adapted to be placed in the recess 2 of the nut and being a spring or having such resili-  
 40 ence as to cause its legs to frictionally engage the sides *a b* of the said recess to hold the locking device therein while the nut is being screwed up on the bolt. The length of the leg  
 45 *c* of the locking device is slightly longer than that of the wall or side *a* of the recess, while the length of the leg *d* is substantially the same as that of the wall or side *b* of the re-

cess. Hence when the nut is screwed up on the bolt, being rotated in the direction indicated by the arrow in Fig. 1, with the leg *c* 50 of the locking device foremost the outer or lower projecting end of the said leg engages the fish-plate or other surface against which the nut is caused to bear, and thereby the said leg is turned angularly and caused to lie 55 parallel, or substantially so, with reference to the leg *b*. On any attempt to turn the nut in the reverse direction to unscrew it on the bolt the locking device will tend to assume a position perpendicular to the inner and outer 60 faces of the nut, and the angular movement of the locking device causes the arm *d* thereof to be so forcibly compressed between the inner end of the recess in the nut and the surface of the fish-plate or other objects against 65 which the nut bears as to tend to embed the outer end of the arm *c* in the fish-plate or other object and to create such friction thereon as to prevent the nut from turning. Hence the nut is effectually locked in position when 70 screwed up on the bolt and is prevented from becoming casually loosened or displaced.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the inven- 75 tion will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the prin- 80 ciple or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is— 85

In combination with a nut having a recess on its inner side opposed to the surface of the substructure when the nut is in use, said recess being provided with a perpendicular front wall, and an inclined rear wall, a lock- 90 ing device movable angularly in said recess and comprising a substantially V-shaped spring-bar having a leg to bear against the front wall of the recess, and an inclined rear

leg to bear against the rear wall thereof, the  
length of the front leg exceeding that of the  
front wall of the recess, so that the outer end  
of said front leg may, on a reverse movement  
5 of the nut, be projected to frictionally engage  
the substructure opposed to the nut.

In testimony whereof I have hereunto set

my hand in presence of two subscribing wit-  
nesses.

JAMES M. SCHOFIELD.

Witnesses:

R. J. PERRIN,

ELIHU B. STOWE.