

No. 699,020.

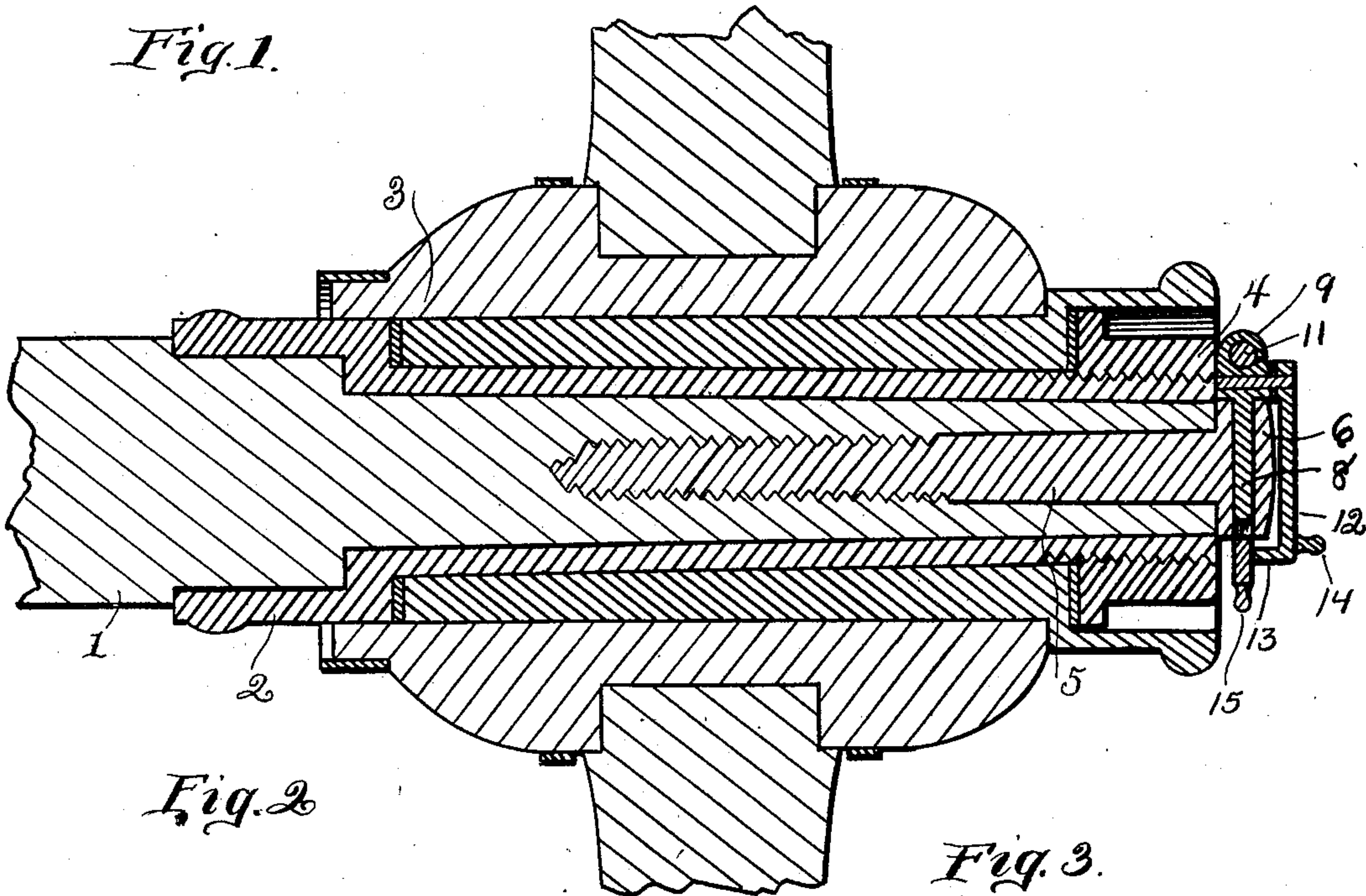
Patented Apr. 29, 1902.

C. SCHAEFER.  
NUT LOCK FOR VEHICLE AXLES.

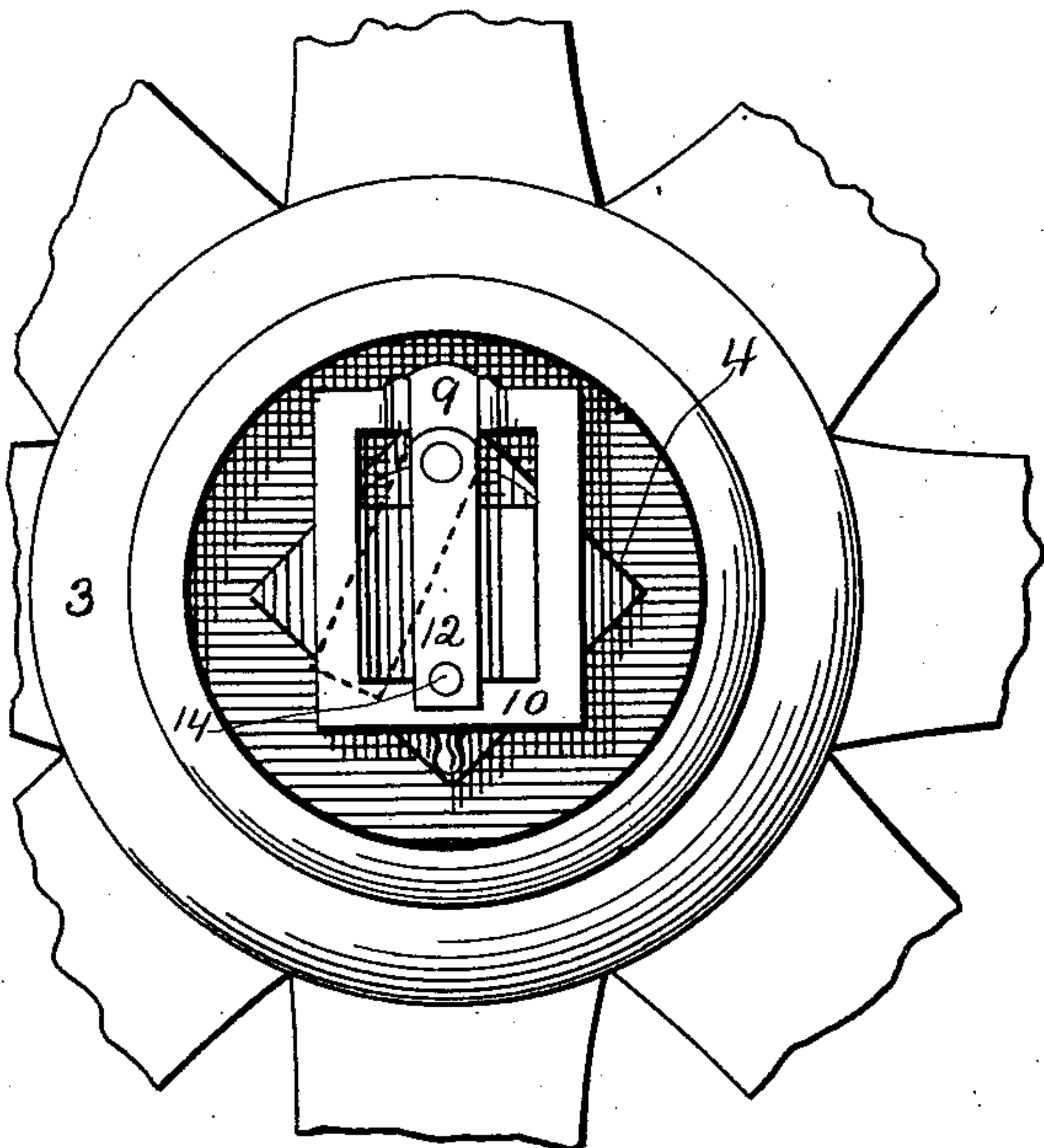
(Application filed Oct. 7, 1901.)

(No Model.)

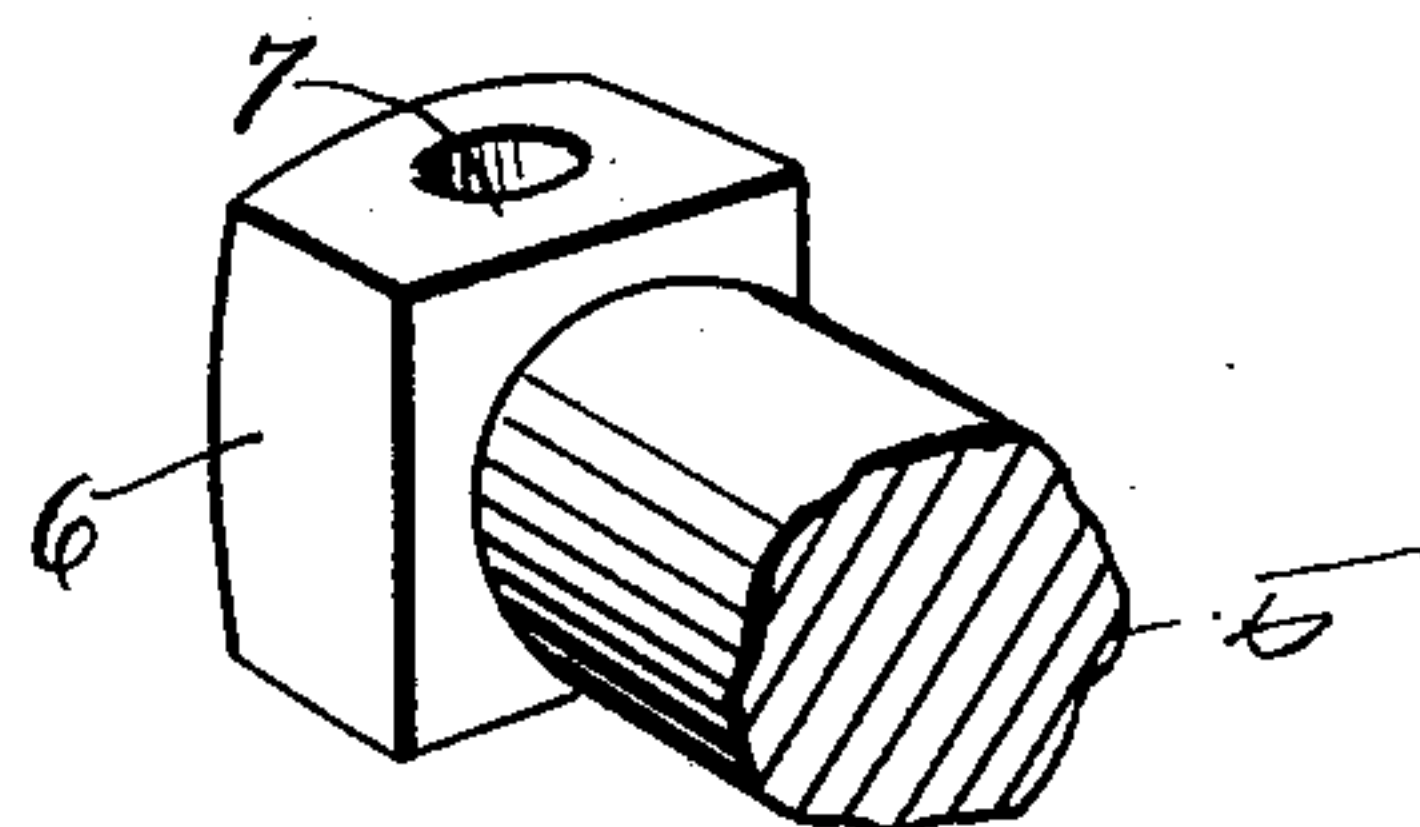
*Fig. 1.*



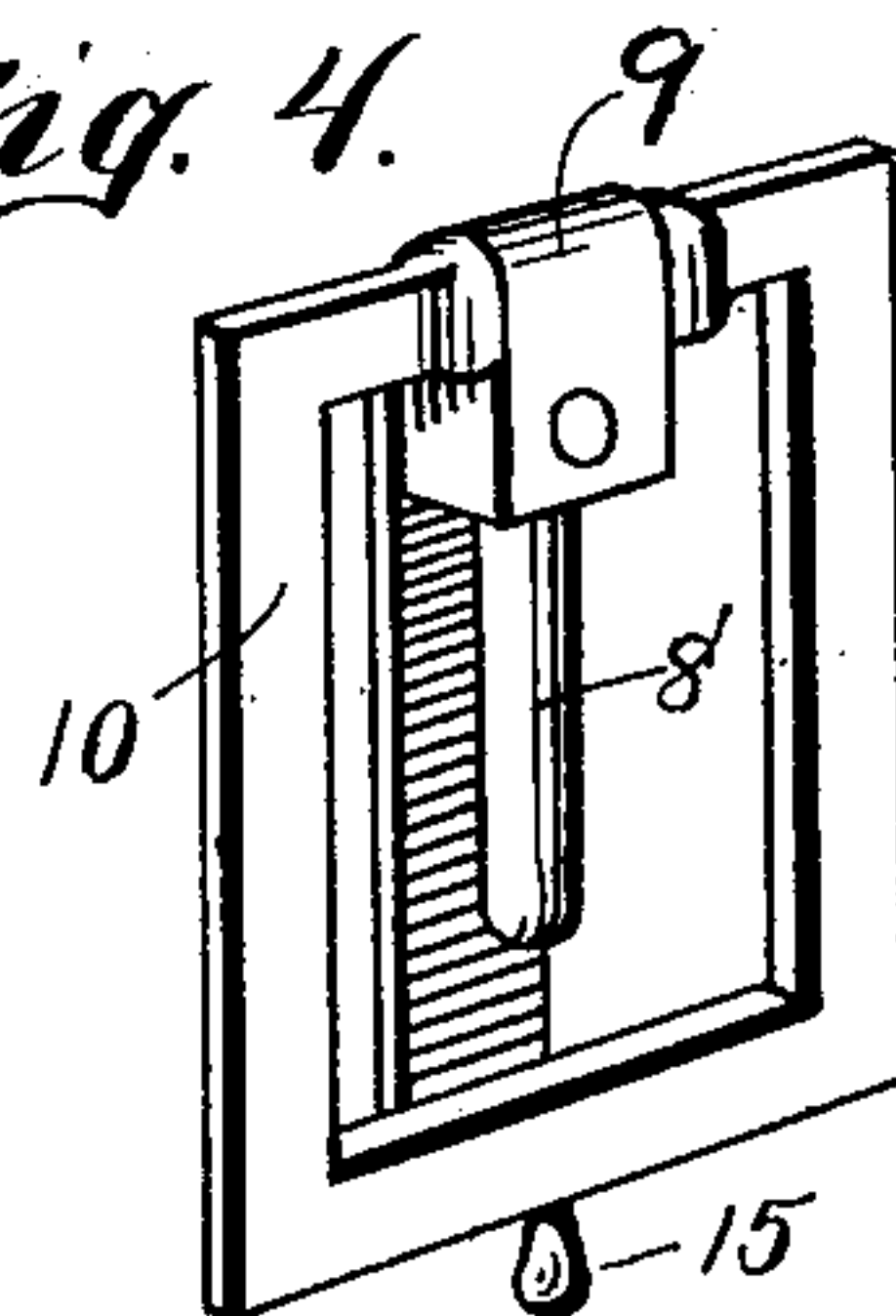
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
Wm. H. Stough  
J. R. Bond

Inventor  
Conrad Schaefer  
By J. W. Bond  
Att'y.



# UNITED STATES PATENT OFFICE.

CONRAD SCHAEFER, OF CANTON, OHIO.

## NUT-LOCK FOR VEHICLE-AXLES.

SPECIFICATION forming part of Letters Patent No. 699,020, dated April 29, 1902.

Application filed October 7, 1901. Serial No. 77,800. (No model.)

*To all whom it may concern:*

Be it known that I, CONRAD SCHAEFER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Nut-Locks for Vehicle-Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a horizontal section showing the different parts properly assembled. Fig. 2 is an end view showing my improved device properly located. Fig. 3 is a view showing the head portion of the bolt. Fig. 4 is a detached view of the nut-lock device, showing the back side thereof.

The present invention has relation to nut-locks designed for use for retaining in proper position hub-retaining nuts.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the portion of an axle to which is attached the metal skein 2, and upon which metal skein the hub 3 revolves. The construction of the hub-axle and its skein has no particular reference to the present invention so far as detail construction is concerned, and hence needs no particular description here.

The outer end of the skein 2 is provided with the screw-threads, which are for the purpose of receiving and holding the ordinary screw-threaded nut 4, which screw-threaded nut holds the hub 3 in proper position upon its axle.

To the axle 1 is attached the bolt 5, which bolt is preferably screw-threaded and is provided with the apertured head 6, which apertured head is located just beyond the end of the axle 1, as illustrated in Fig. 1.

Through the aperture 7 is located the pin 8, to which pin is attached the head 9, said head being pivotally attached to the angular frame 10 by means of the rounded portion 11, and upon which rounded portion the angular frame 10 is free to swing or move.

The angular frame 10 is formed of a size somewhat larger than the size of the aper-

tured head 6—that is to say, it is so formed that said frame will fit over the head, as illustrated in Fig. 2, compensation being made for the head 9.

To the head 9 is pivotally attached the arm 12, which arm is located directly in front of the apertured head 6 and its bottom or lower end provided with an inturned flange 13, which inturned flange comes directly under the under edge of the bolt-head 6, and thereby prevents any upward movement of the pin 8, except when the downward-extending arm 12 is swung to one side, so as to clear the bottom or under side of the nut.

When it is desired to remove the angular frame 10, together with the different parts attached thereto, the arm 12 is moved or swung so as to clear the flange 13 from the bolt-head 6, after which the angular frame 10 is brought from the bottom or under side of the apertured head 6 by a swinging movement and the pin 8 withdrawn from the aperture 7, formed in the head 6.

It will be understood that by my peculiar arrangement the nut 4 cannot become detached from the skein 2, as it will be held against end movement by reason of the head 9, formed upon the pin 8, coming in contact with the outer end of said nut; but when it is desired to remove the nut the parts designed to hold the nut in place can be easily removed, as it will be understood that by the swinging of the arm 12 and the angular frame 10 out of engagement with the head 6 the pin 8 can be withdrawn.

For the purpose of providing a means for easily moving the arm 12 and the angular frame 10 out of the way of the head 6 said parts are provided with the knobs 14 and 15.

In the drawings I have shown the bolt 5 placed in the center of the axle 1 and only extending partially through said axle; but the purpose of the present invention can be carried out without any particular reference to the exact arrangement of the bolt 5, as the only object is to provide a means for holding the head 6 in such a position that the pin 8 can be attached thereto.

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

The combination of a vehicle-axle having

mounted thereon a skein having a screw-  
threaded portion, a nut located upon the  
screw-threaded portion of the skein, a bolt  
provided with an apertured head said head  
5 located beyond the end of the axle and skein,  
an angular frame having pivotally attached  
thereto a head, said head provided with a pin  
adapted to engage the apertured head of the  
bolt, and an arm pivoted to the head of the  
10 pin and provided with an angled flange at its

free end, all arranged substantially as and  
for the purpose specified.

In testimony that I claim the above I have  
hereunto subscribed my name in the pres-  
ence of two witnesses.

CONRAD SCHAEFER.

Witnesses:

J. A. JEFFERS,

F. W. BOND.