

No. 845,589.

PATENTED FEB. 26, 1907.

C. D. SMITH.  
NUT LOCK.

APPLICATION FILED MAY 12, 1906.

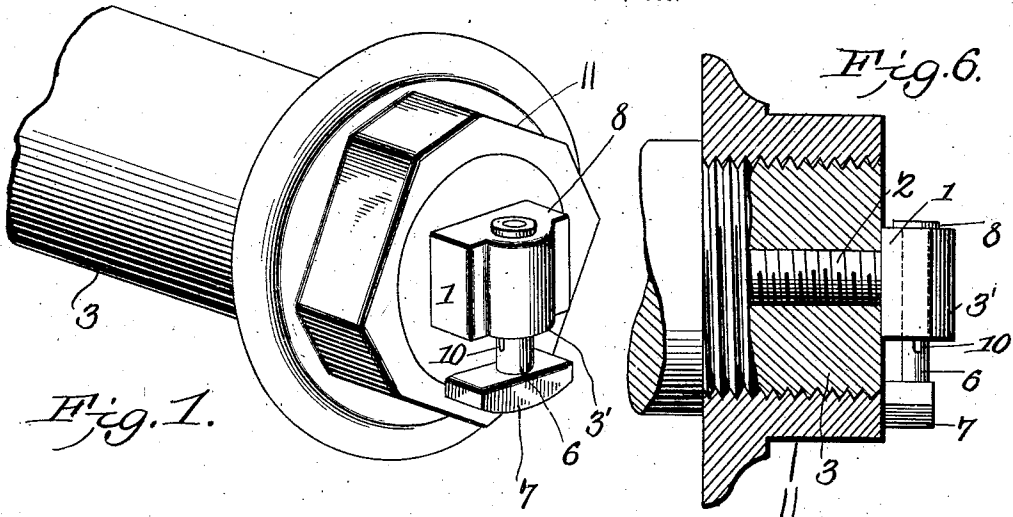


Fig. 1.

Fig. 6.

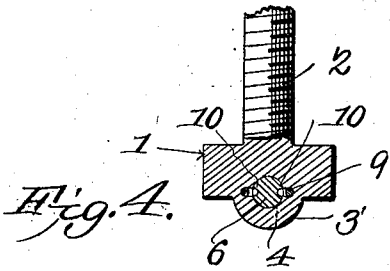


Fig. 4.

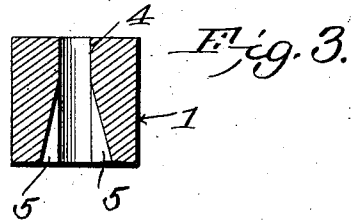


Fig. 3.

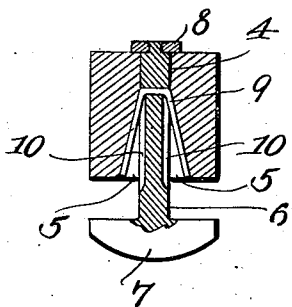


Fig. 2.

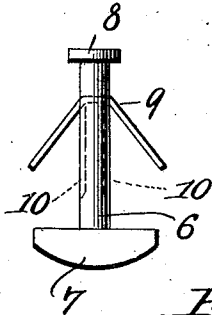


Fig. 5.

WITNESSES:

*E. J. Stewart*  
*W. H. ...*

*Charles D. Smith,*  
INVENTOR.

By *Cashmore*  
 ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLES D. SMITH, OF PARIS, ILLINOIS.

## NUT-LOCK.

No. 845,589.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed May 12, 1906. Serial No. 316,570.

*To all whom it may concern:*

Be it known that I, CHARLES D. SMITH, a citizen of the United States, residing at Paris, in the county of Edgar and State of Illinois, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates to nut-locks; and it consists in the novel construction and arrangement of its parts, as hereinafter described.

The object of the invention is to provide a nut-lock especially adapted to be used at the ends of axle-spindles for the purpose of retaining the axle-nuts thereon, although it may be used to advantage when applied to other devices.

It consists primarily of a block adapted to be attached to the end of the spindle, said block having extending vertically there-through a perforation with oppositely-grooved sides. A pin having at its lower end an enlarged head passes through the perforation of said block, said pin being provided with a spring the end of which are adapted to enter the grooves in the perforation of said block. A cap is secured to the end of said pin on the opposite side of the block from the said head.

In the accompanying drawings, Figure 1 is a perspective view of a spindle, showing the nut-lock applied thereto. Fig. 2 is a vertical sectional view of the block, showing the pin located therein. Fig. 3 is a vertical sectional view of the block with the pin removed. Fig. 4 is a horizontal sectional view of the block. Fig. 5 is a side elevation of the pin disconnected from the block. Fig. 6 is a side elevation with parts in section of the end of the axle, showing the nut-lock applied thereto.

The block 1 is provided on its rear face with the threaded lug 2, which is adapted to enter a threaded perforation in the end of the spindle 3. The outer face of said block 1 is provided with the integral vertical extending strengthening-web 3'. The perforation 4 extends vertically through said block, said perforation being provided at its lower end and on opposite sides with the vertical grooves 5 5. The pin 6 is adapted to slide within the perforation 4. Said pin is provided at its lower end with the enlarged head 7 and at its upper end with the cap 8. The spring 9 passes through the said pin, and the ends of said spring are inclined down toward the head 7. The sides of the pin 6 are provided with

the grooves 10 10, which are adapted to receive the ends of the spring 9. The pin 6 is longer than the dimension of the block 1, as shown in Fig. 2, and the said pin is adapted to slide within the perforation 4 of the said block. The block 1 is so positioned upon the end of the spindle 3 that when the pin 6 is slid up in the said block the axle-nut 11 may pass over the said pin and engage the spindle-threads and when the said nut passes beyond the said pin the same is slid down, which carries the enlarged head 7 below the edge of the nut-perforation, and thus the said nut is held in position against rotation.

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

1. In combination with a spindle and a nut, a block adapted to be applied to the spindle end, said block having a perforation, a pin slidably mounted in said perforation and having at one end an enlarged head and at its other end a cap, said pin having greater axial dimension than the block, said pin carrying a spring adapted to engage the block-perforation.

2. In combination with a spindle and a nut, a nut-lock consisting of a block adapted to be applied to a spindle and having a perforation provided at one end with oppositely-located grooves, a pin adapted to slide in said perforation and having at one end an enlarged head and at its other end a cap, a spring attached to said pin and having ends adapted to enter the grooves of said block-perforation.

3. In combination with a spindle a nut-lock comprising a perforated block adapted to be attached to the spindle, said block having located in opposite sides of its perforation and at the lower end thereof grooves, a pin adapted to slide within said block-perforation, said pin having at one end an enlarged head and at the other end a cap, a spring passing through said pin and having depending ends, said pin having grooves located under said spring ends and adapted to receive said spring ends.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES D. SMITH.

Witnesses:

GEO. W. MYERS,  
M. B. DALY.