

No. 744,335.

PATENTED NOV. 17, 1903.

F. J. GRANT.
AXLE NUT LOCK.

APPLICATION FILED JAN. 5, 1903.

NO MODEL.

Fig. 1.

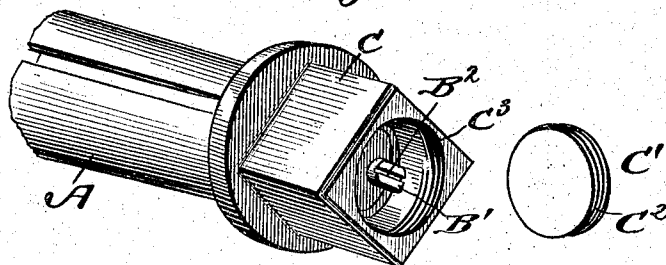


Fig. 2.

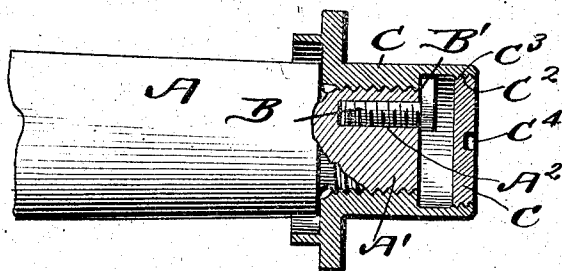


Fig. 3.

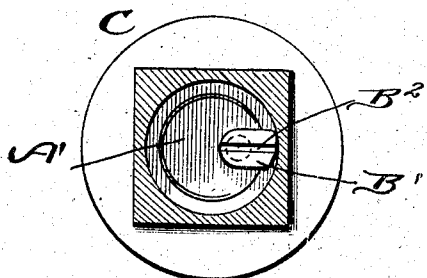


Fig. 4.

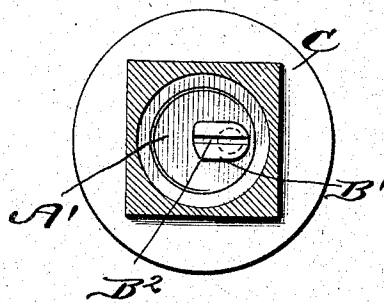


Fig. 5.

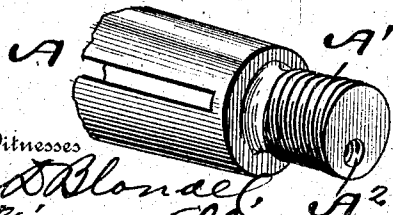
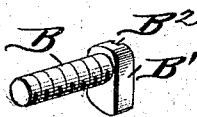


Fig. 6.



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UNITED STATES PATENT OFFICE.

FRANCIS JONES GRANT, OF CHICAGO, ILLINOIS.

AXLE-NUT LOCK.

SPECIFICATION forming part of Letters Patent No. 744,335, dated November 17, 1903.

Application filed January 5, 1903. Serial No. 137,903. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS JONES GRANT, a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Axle-Nut Lock, of which the following is a specification.

This invention relates generally to nut-locks, and more particularly to a nut-lock adapted to be applied to the end of a vehicle-axle for the purpose of locking the axle-nut thereon, it being a common occurrence at the present time for axle-nuts to work loose from the end of an axle; and the object of my invention therefore is to provide a simple and efficient device which can be applied to any and all axles and nuts now in use and by means of which the nut can be effectively locked upon the axle.

Another object is to provide a locking device which can be quickly and easily released whenever it is desired to remove the nut from the axle.

With these objects in view the invention consists of the novel features of construction, combination, and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view showing the practical application of my invention, the cap of the axle-nut being removed from the nut in order to more clearly disclose the lock arranged therein. Fig. 2 is a sectional view showing the end of the axle and a nut applied thereto, the locking device being shown in elevation. Fig. 3 is a sectional view showing a relative position of the parts when the nut is locked, and Fig. 4 is a similar view showing the relative position of the parts when the nut is unlocked. Fig. 5 is a detail perspective view showing the end of the axle, and Fig. 6 is a detail perspective view of the locking device.

A indicates an ordinary vehicle-axle having a threaded end A', said threaded end having a threaded aperture A² bored therein, said threaded aperture being arranged adjacent to one edge or off from the center of the end of the axle. Fitting in said threaded

aperture A² is a threaded pin B, having an eccentric head B', the outer face of said head being grooved or slotted longitudinally, as shown at B², for the purpose of receiving the end of the screw-driver or bit for the purpose of turning the head into a locked or unlocked position.

C indicates the ordinary axle-nut, and C' the cap which is inserted in the outer end thereof, said cap being threaded externally, as shown at C², and adapted to screw into the threaded portion C³, the cap being constructed with a groove or slot C⁴, extending across the outer face of the same for the purpose of receiving the end of the screw-driver or bit for the purpose of screwing or unscrewing the said cap.

As before stated, the end of the axle has a threaded bore, in which is inserted the threaded pin B, and when the axle-nut is applied to the end of the axle the eccentric head B' of the pin is turned inwardly toward the center of the axle, so that the nut can be freely turned without contacting with the said head. After the nut has been turned up the desired distance the eccentric head is turned around, so that one end is brought into engagement with the interior surface of the nut, and any reverse movement of the said nut will forcibly bind the nut and head together, thereby securely locking the nut upon the end of the axle. After the nut has been locked the cap-piece is inserted therein for the purpose of protecting the locking device. Whenever it is desired to remove the nut it is only necessary to remove the cap-piece, turn the locking-head back to the position shown in Fig. 4, and the nut can then be removed.

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

1. The combination with an axle having a threaded aperture formed eccentrically in its end, of a threaded pin having an eccentric head, said pin fitting in the aperture, and a nut fitting over the end of the axle and having an interior shoulder engaged by the head of the pin when said head is turned in one direction.

2. The combination with an axle having a

reduced threaded end and a threaded aperture
eccentrically located in said end, of a threaded
pin fitting said aperture, an elongated head
eccentrically arranged on the pin, a threaded
5 nut fitting on the end of the axle, said nut
having an interior, annular shoulder, the
head of the pin engaging the shoulder when

turned in one direction and disengaging the
shoulder when turned in the opposite direc-
tion.

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