No. 750,425. PATENTED JAN. 26, 1904.

S. C. BAUGHN, Jr.

LOCK FOR SPINDLE NUTS.

APPLICATION FILED OCT. 14, 1903.

NO MODEL.

Fig. 6.

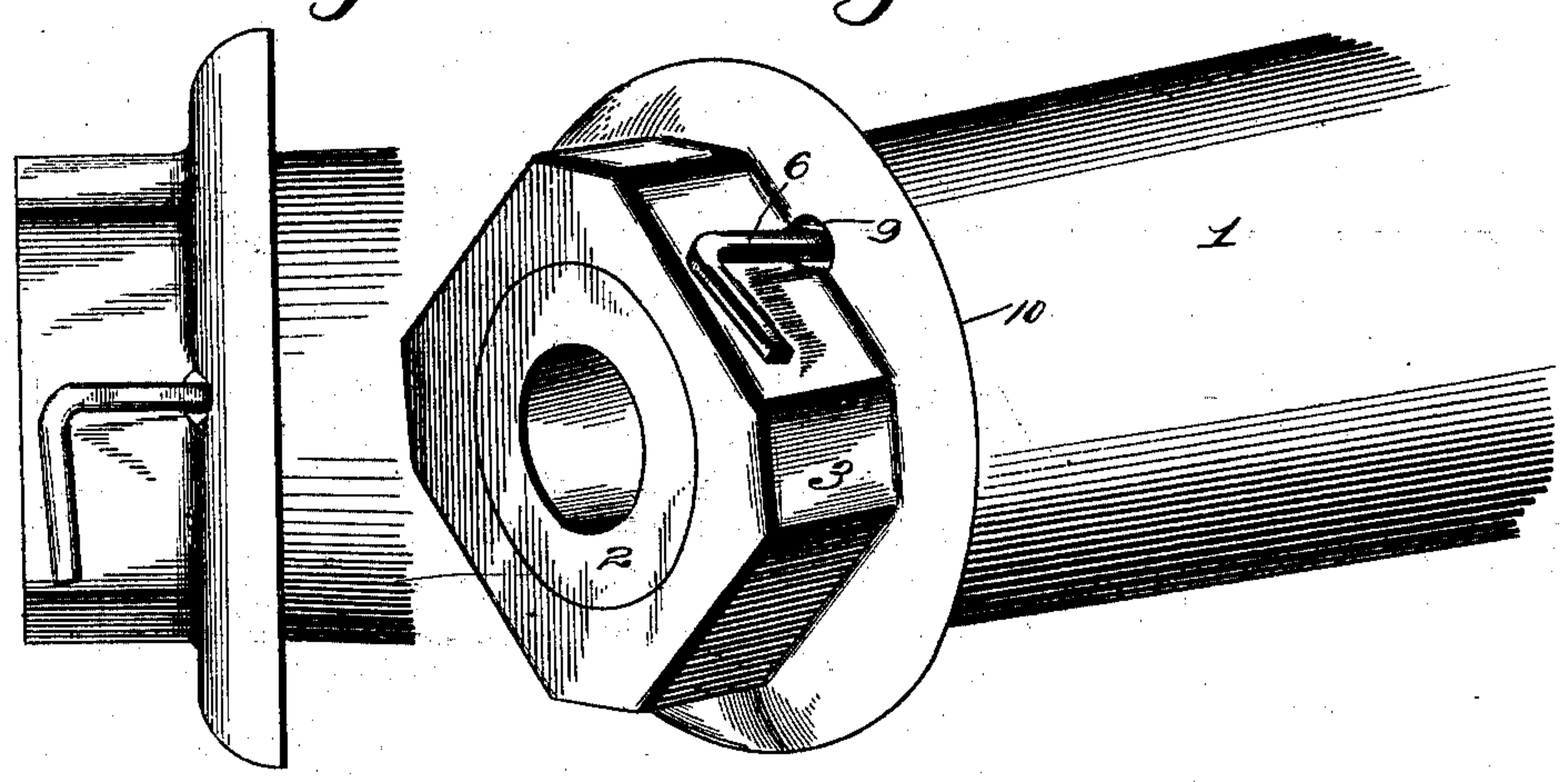


Fig. 1.

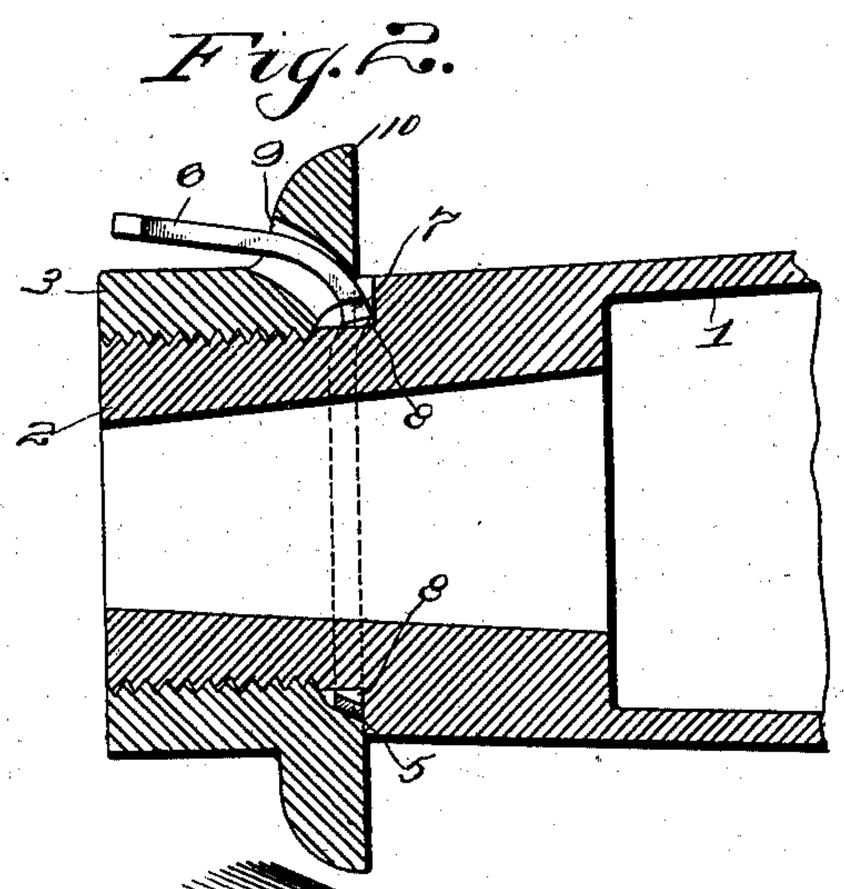


Fig. 2.

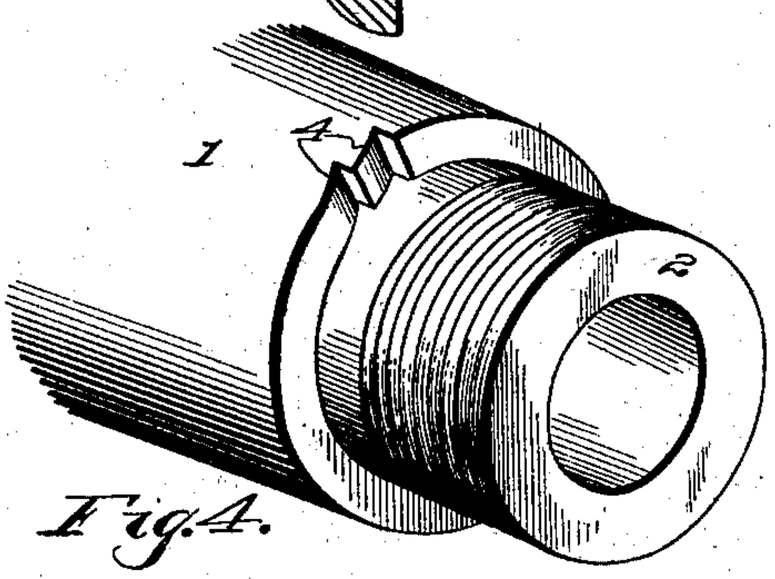
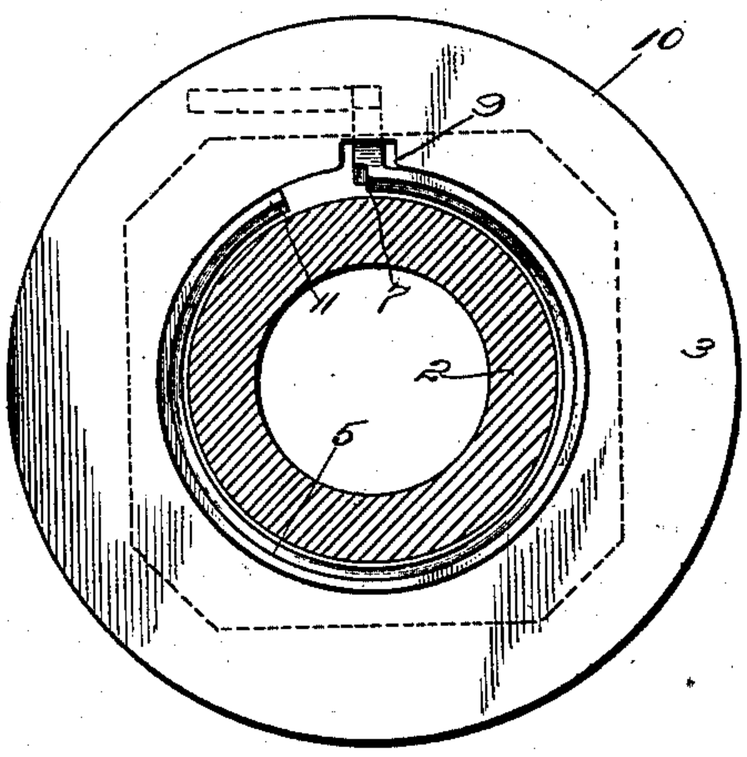


Fig. 4.

Fig. 3.



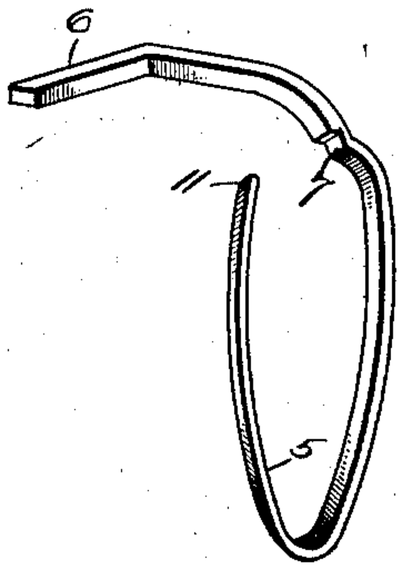


Fig. 5.

Witnesses
Fred. C. Maynard.
H. J. Riley

S. C. Baughn, Jr. Inventor.
By C. A. Snow & Co.
Attorneys

No. 750,425. Patented January 26, 1904.

UNITED STATES PATENT OFFICE.

SAMUEL C. BAUGHN, JR., OF BERTRAND, MISSOURI, ASSIGNOR OF ONE-HALF TO HENRY L. FINLEY, OF BERTRAND, MISSOURI.

LOCK FOR SPINDLE-NUTS.

SPECIFICATION forming part of Letters Patent No. 750,425, dated January 26, 1904.

Application filed October 14, 1903. Serial No. 177,068. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL C. BAUGHN, JR., a citizen of the United States, residing at Bertrand, in the county of Mississippi and State of Missouri, have invented a new and useful Lock for Spindle-Nuts, of which the following is a specification.

The invention relates to improvements in locking devices for axle-nuts.

The object of the present invention is to improve the construction of locking devices for preventing axle-nuts from accidentally unscrewing and to provide a simple, inexpensive, and efficient one capable of securely holding an axle-nut on an axle and adapted to permit the same to be readily removed when desired.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of an axle-skein and an axle-nut provided with a locking device constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the outer end of the axle-skein. Fig. 5 is a detail view of the locking-spring. Fig. 6 is a plan view illustrating the construction of the approximately L-shaped arm and showing the arrangement of the outer portion thereof with relation to the outer face of the nut.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an axle-skein, provided at its outer end at the shoulder 2, formed by reducing and threading it for the reception of an axle-nut 3, with notches 4, adapted to be engaged by a locking-spring 5 for preventing the nut from accidentally unscrewing. The locking-spring 5, which is circular, is constructed of steel or other suitable material, and its ends are separated, as clearly illustrated in Fig. 5 of the accompanying drawings. One end of the spring is clamped between the axle-nut and the shoulder 2 of the axle-skein, and its other end is provided with an L-shaped arm 6, and it has a tooth or engaging portion 7 at the angle formed by the arm and the body portion of the spring for engaging one of the notches of the shoulder 2 of the axle-skein. The circular body portion of the spring is received within an annular groove 8 of the nut, and the L-shaped arm 6 extends outward through an opening 9 adjacent to the flange 10 of the nut. The annular groove 8, which is arranged at the inner end of the threaded portion of the nut, is flared, and the circular body portion of the spring is flared or set at an angle to conform to the configuration of the nut and the adjacent portion of the axle-skein. The locking device is applicable to carriages and vehicles other than heavy wagons employing axle-skeins, and when it is used on such lighter vehicles the body portion of the springs will be made square in cross-section to conform to the configuration of the groove of the axle-nut and the pivot of the spindle.

When the spring is not applied to the axle, its end 11 is laterally offset from the tooth or engaging portion 7, so that the latter will be forced into engagement with the axle when the body portion of the spring is placed under tension by screwing the axle-nut on the axle-skein. When the nut is screwed on the axle, the spring automatically engages one of the notches of the shoulder 2 and prevents the nut from accidentally unscrewing. Should it be desired to remove the nut, the L-shaped arm is drawn outward to hold the spring out of engagement with the notches until it has passed the same by the rotation of the nut, which may be engaged by any ordinary wrench. The L-shaped arm is adapted to be forced outward by the wrench in applying the latter to the nut, and the outer portion of the L-shaped arm is arranged near the outer face of the nut in convenient position to enable it to be operated by a wrench to obviate the necessity of disengaging the spring by hand.

It will be seen that the device is exceedingly simple and inexpensive in construction,

that it is applicable to wagons, carriages, and analogous vehicles, and that it is capable of securely holding a nut and of permitting the same to be readily removed when desired.

What I claim is—

1. In a device of the class described, the combination of an axle provided at its outer portion with a notch, an axle-nut having an opening, a circular spring arranged at the inner end of the axle-nut and encircling the axle, and provided with an engaging portion arranged to interlock with the said notch, said spring being provided with an arm extending through the said opening, substantially as described.

2. In a device of the class described, the combination of an axle provided at its outer end, adjacent to its threaded portion, with a shoulder and having a notch therein, an axle-nut having a groove and provided with an opening communicating therewith, and a circular spring arranged in the groove of the nut and provided with an arm extending outward from one end of the spring through the said opening and arranged on the exterior of the nut in position to be engaged by a wrench, said spring being provided at the inner end of the arm with an engaging portion to interlock with the said notch, substantially as described.

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

SAMUEL C. BAUGHN, JR.

Witnesses:

L. C. GATY,

G. R. WALLACE.