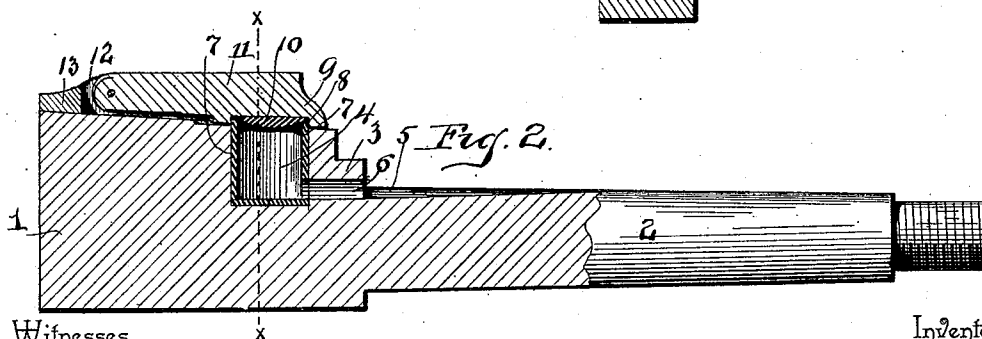
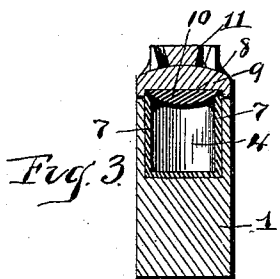
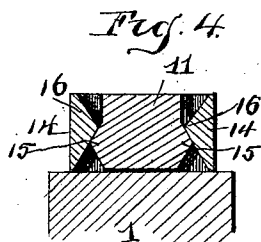
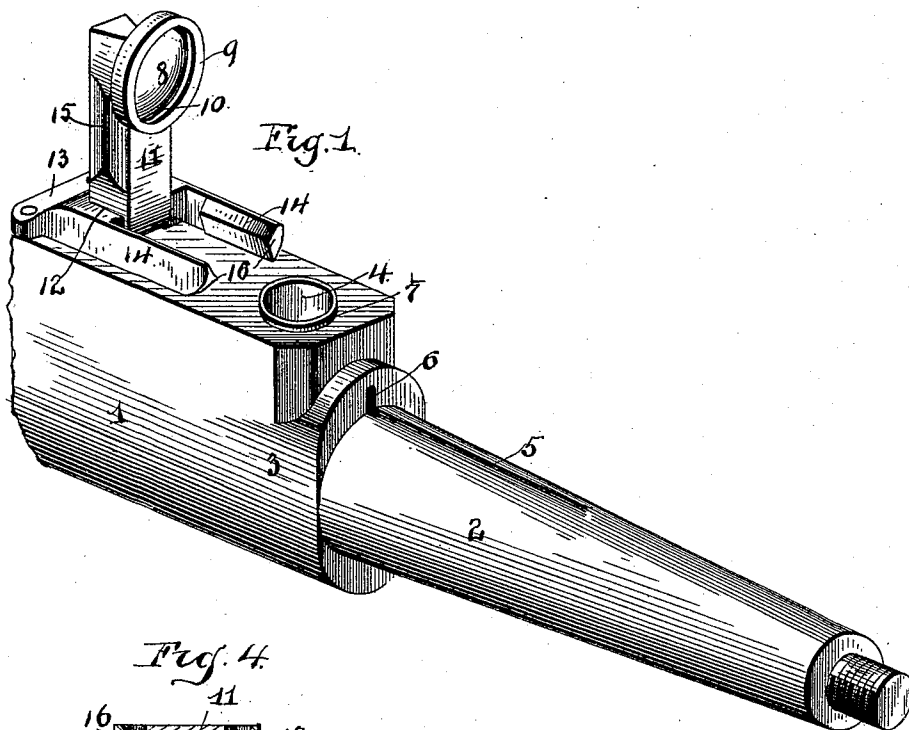


(No Model.)

T. H. FOX.
AXLE LUBRICATOR.

No. 470,998.

Patented Mar. 15, 1892.



Witnesses

S. G. Smith
H. F. Riley

Inventor

- T. H. Fox, -

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS HENRY FOX, OF ASHLAND, VIRGINIA.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 470,998, dated March 15, 1892.

Application filed September 16, 1891. Serial No. 405,891. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HENRY FOX, a citizen of the United States, residing at Ashland, in the county of Hanover and State of Virginia, have invented a new and useful Improvement in Axle-Lubricators, of which the following is a specification.

The invention relates to improvements in axle-lubricators.

The object of the present invention is to provide simple and inexpensive means for lubricating an axle, adapted to permit an axle to be greased without necessitating the removal of the wheel and capable of holding a quantity of a lubricant and of feeding the same to the axle when needed and of keeping the same free from dust and dirt.

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 a portion of an axle provided with a lubricator constructed in accordance with this invention, the cap being raised. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view on line $x x$ of Fig. 2. Fig. 4 is a detail sectional view.

Referring to the accompanying drawings, 1 designates an axle having a spindle 2 and provided at the inner end thereof with an enlargement 3, having an oil well or recess 4, which communicates with a groove 5 in the upper face of the spindle 2 by a bore 6. A lubricant is placed in the well or cavity 4 and is fed through the bore 6 to the groove 5, whence it is distributed over the surface of the spindle, and the well or cavity may be refilled from time to time without removing the wheel. The well or cavity is lined with rubber or similar material 7, and the lining projects slightly above the upper face of the enlargement and engages a circular recess 8 of a cap 9, which is also lined with rubber or similar material 10, and the cap fits closely over the well or cavity and prevents the entrance of dust and dirt and keeps the lubricant free from foreign matter. The cap 9 is constructed of metal and is preferably formed integral with a bar 11, which is pivoted in a bifurcation 12 of a clip 13 and is adapted to be swung up and down to open and close the well or cavity 4. The clip is constructed of

metal, preferably of steel, and is secured to the upper face of the enlargement and is provided at its sides with springs 14, which engage the bar when the cap is down on the well or cavity and hold the cap in place. The bar 11 is provided on opposite sides with oppositely-beveled lugs 15, which are triangular in section and are adapted to be engaged by beveled lugs 16, arranged on the inner faces of the springs at the free ends thereof, and being constructed similar to the lugs 15 and being triangular in cross-section. By this construction the lugs are adapted to readily engage each other and be withdrawn from such engagement and the bar 11 is securely held by the springs and the cap covers the well or cavity and excludes dirt and dust.

I do not wish to be limited to attaching the lubricator to the top side of the axle, as it is obvious that it will work equally as well if applied to any part of the axle.

What I claim is—

1. The combination, with an axle having an enlargement at the inner end of the spindle and provided with a well or cavity communicating with the spindle, of a clip secured to the enlargement and provided with a bifurcation, the bar 11, pivoted in the bifurcation and provided at its outer end with a cap arranged to cover the well or cavity and provided at opposite sides with beveled lugs triangular in cross-section, and the side springs formed integral with the clip and provided at their free ends with beveled lugs triangular in cross-section, adapted to engage the lugs of the bar, substantially as described.

2. The combination, with an axle provided with a well or cavity communicating with the spindle, of a clip secured to the axle, the bar 11, pivoted to the clip, provided at its outer end with a cap arranged to cover the well or cavity and provided at opposite sides with beveled lugs, and the side springs provided at their free ends with beveled lugs adapted to engage the lugs of the bar, substantially as described.

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

THOMAS HENRY FOX.

Witnesses:

ROBT. G. GEMMELL,
CHAS. W. LOREE.