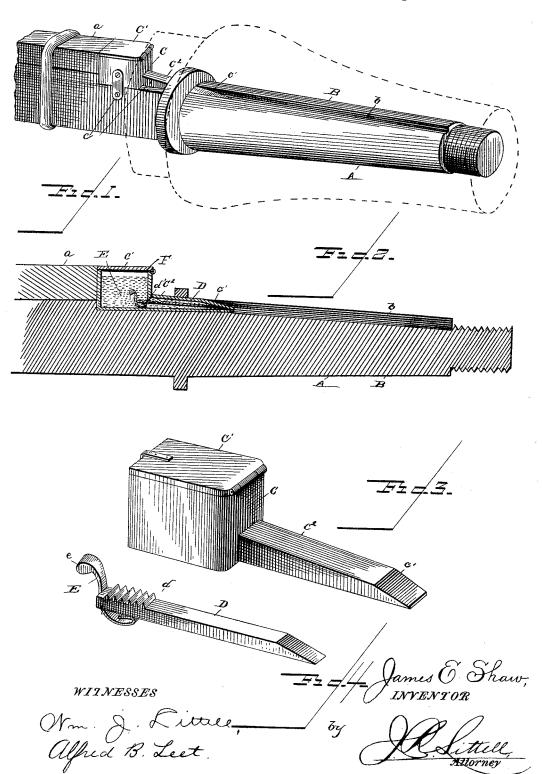
(No Model.)

## J. E. SHAW. AXLE LUBRICATOR.

No. 410,719.

Patented Sept. 10, 1889.



## UNITED STATES PATENT OFFICE.

JAMES EDWARD SHAW, OF BISHOPVILLE, SOUTH CAROLINA, ASSIGNOR OF ONE-HALF TO ROBERT W. SPANN, OF SAME PLACE.

## AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 410,719, dated September 10, 1889.

Application filed June 11, 1889. Serial No. 313,880. (No model.)

To all whom it may concern:

Be it known that I, James Edward Shaw, a citizen of the United States, residing at Bishopville, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Axle-Lubricators, of which the following is a specification.

This invention relates to lubricators; and it 10 has for its object to provide a device of this character embodying in connection therewith an adjustable feed-regulating device.

A further object of the invention is to provide, in combination with a lubricator of this character, simple and improved means for forcing oil or grease through its outlet.

A further object of the invention is to provide a device of this class possessing advantages in point of simplicity, durability, and 20 general efficiency.

In the drawings, Figure 1 is a perspective view of the end of an axle illustrating the lubricator applied thereto, the hub being shown in dotted lines. Fig. 2 is a vertical longitudinal sectional view of Fig. 1. Fig. 3 is a detail perspective view of the lubricator. Fig. 4 is a similar view of the adjustable pin.

Corresponding parts in the figures are de-30 noted by the same letters of reference.

Referring to the drawings, A designates the axle, preferably provided with the wood top section a, secured thereto by clips in the usual manner. The axle-spindle B is 35 provided in its top with a longitudinal groove b. Upon the axle, at the end of the section a, is mounted the lubricator C, preferably corresponding in size and shape to the latter. The lubricator is retained in position by a 10 plate c upon each side thereof and projecting over the axle and secured thereto by screws. The lubricator comprises the receptacle or body portion having a hinged cover C', and from the bottom of this re-45 ceptacle projects a feed-tube C2, designed to be disposed within the groove of the axlespindle, and is provided with a contracted or conical-shaped feed-opening c'. Within the feed-tube is disposed an adjustable pin as set forth.

D, designed to regulate the flow of oil or 50 grease. This pin has a pointed end corresponding to the feed-opening, and is provided upon its upper face near its rear end with a series of notches d, adapted to be engaged by a lug d', projecting downwardly at 55 the rear end of the feed-tube. To retain the pin in adjusted position, there is provided a spring E, secured to the end thereof and curved under the same, whereby an upward pressure is exerted upon the pin. The free 60 end of the spring is continued upwardly above the pin and forms a knob e for adjusting the latter.

F designates a plate, preferably constructed of rubber and fitting snugly within the re- 65 ceptacle and attached to the under side of the cover, said plate forming an air-tight joint when the cover is closed.

The operation and advantages of my invention will be readily understood by those 70 skilled in the art to which it appertains. The pin in the feed-tube is adjusted to the desired position and the receptacle filled with lubricating material, when the cover is

A lubricator constructed as above described occupies but little space, does not in any way interfere with the wheels of the vehicle, and by its use thorough lubrication is secured.

I claim as my invention-

closed.

1. In an axle-lubricator, the combination, with the receptacle and a feed-tube projecting therefrom and provided with a lug at its inner end, of an adjustable feed-regulating 85 pin disposed in said tube and provided with a series of notches adapted to receive said lug, and a spring for retaining said pin in adjusted position, substantially as set forth.

2. In an axle-lubricator, the combination, 90 with a receptacle provided with an air-tight cover and with a feed-tube having a lug projecting from its inner end, of an adjustable feed-regulating pin disposed in said tube and provided with a series of notches adapted 95 to receive said lug, and a spring for retaining the pin in adjusted position, substantially

3. In an axle-lubricator, the combination, with the receptacle and a feed-tube projecting therefrom and provided with a contracted feed-opening at its outer end and with an interior lug at its opposite end, of an adjustable pin having a pointed end corresponding to the feed-opening and provided near its other end with a series of notches adapted to engage the lugs, and a spring for holding

the pin in adjusted position, substantially as to and for the purpose set forth.

In testimony whereof I affix my signature in

In testimony whereof I affix my signature in presence of two witnesses.

JAMES EDWARD SHAW.

Witnesses:

ALTAMON R. MOSES, ROBT. O. PURDY.