

(No Model.)

F. E. HARVEY.  
LUBRICATING AXLE CAP FOR VEHICLES.

No. 538,516.

Patented Apr. 30, 1895.

FIG. 1.

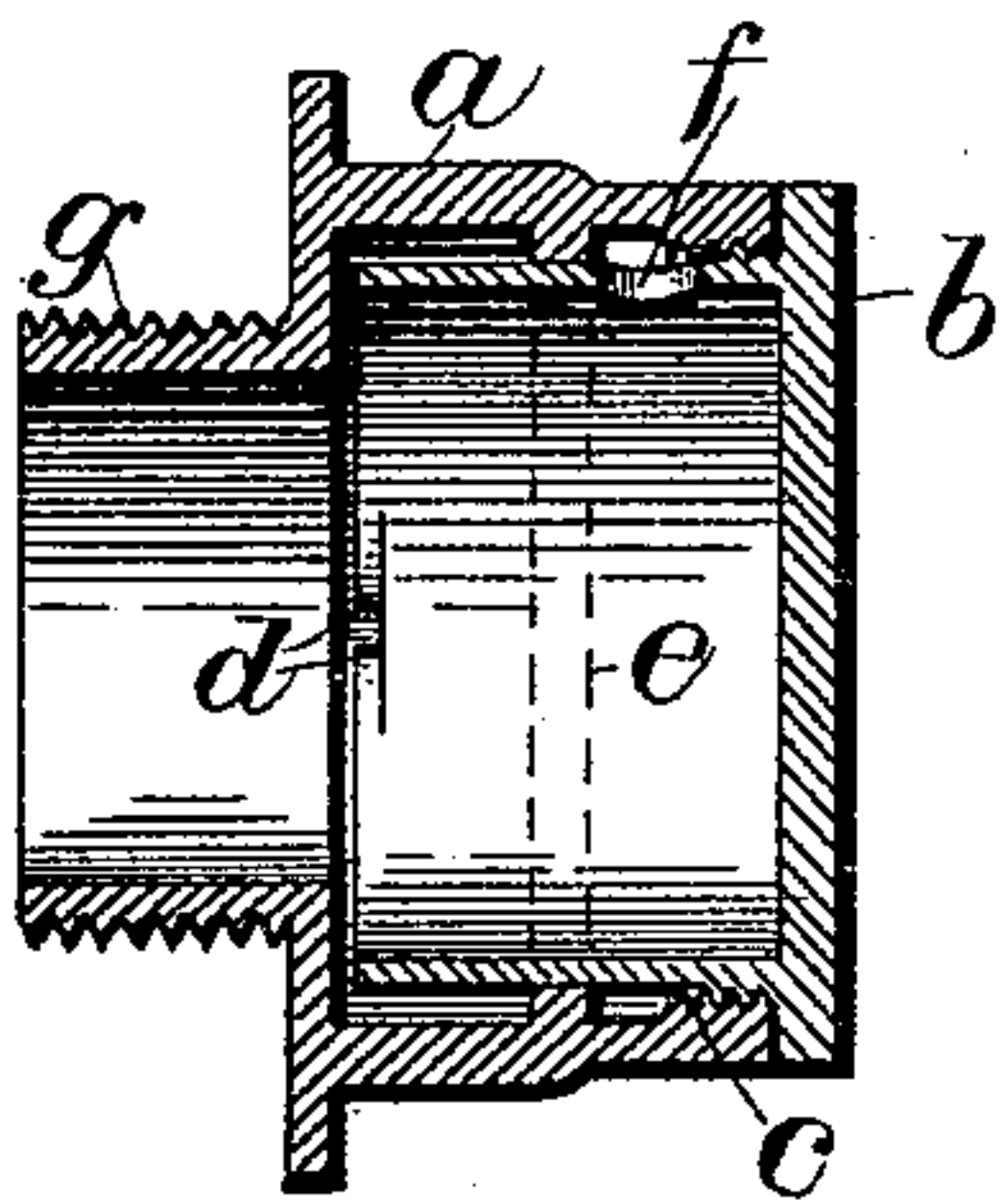


FIG. 2.

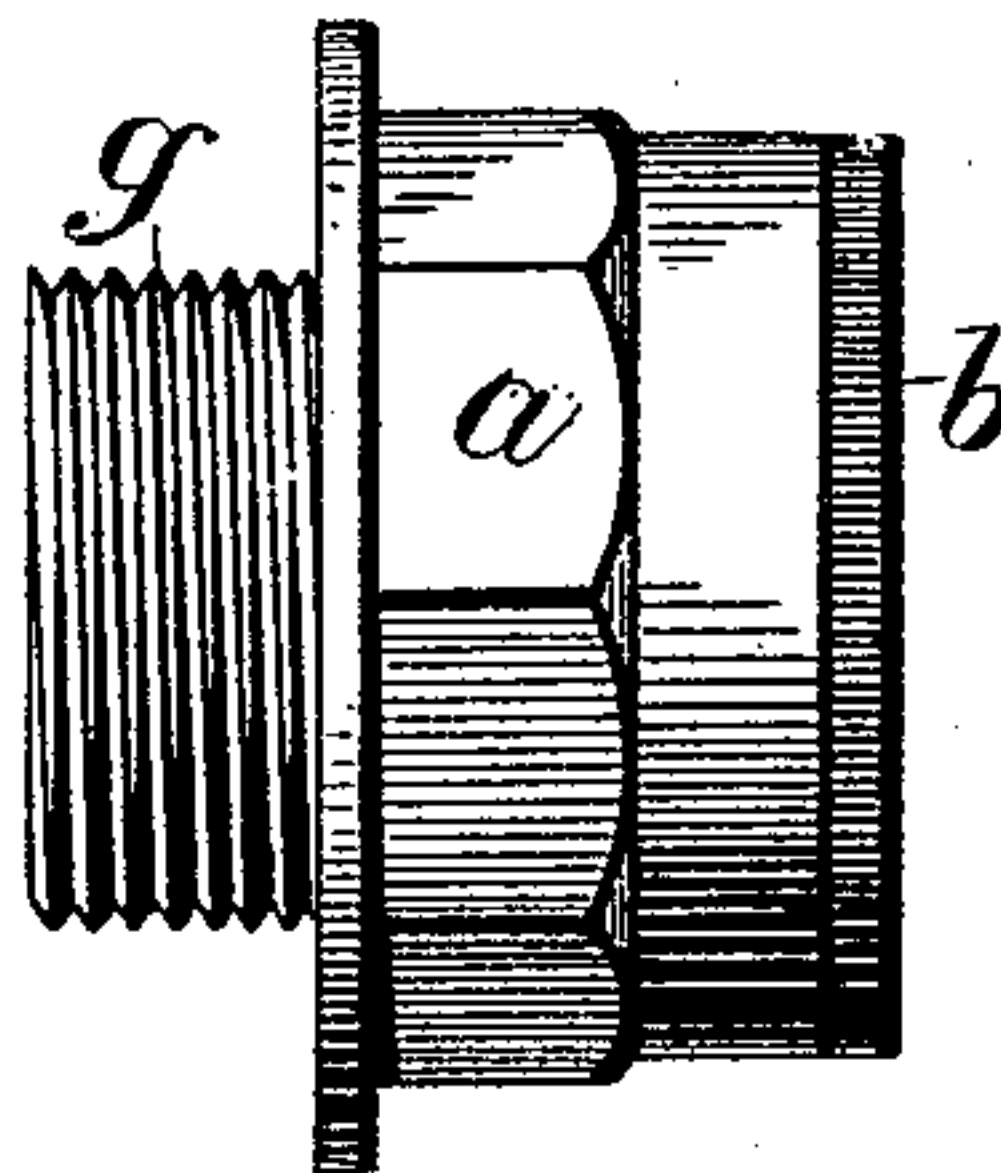


FIG. 3.

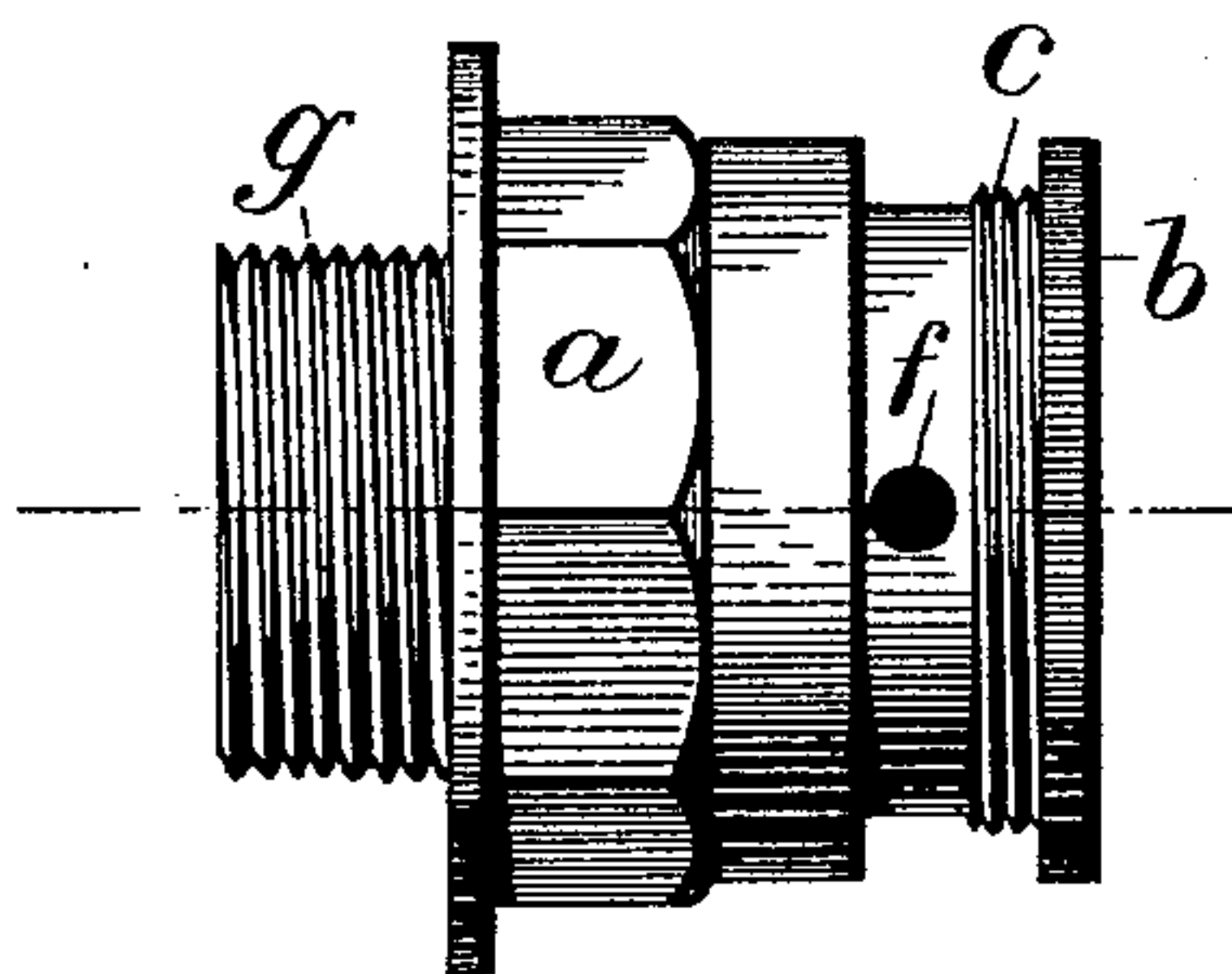


FIG. 4.

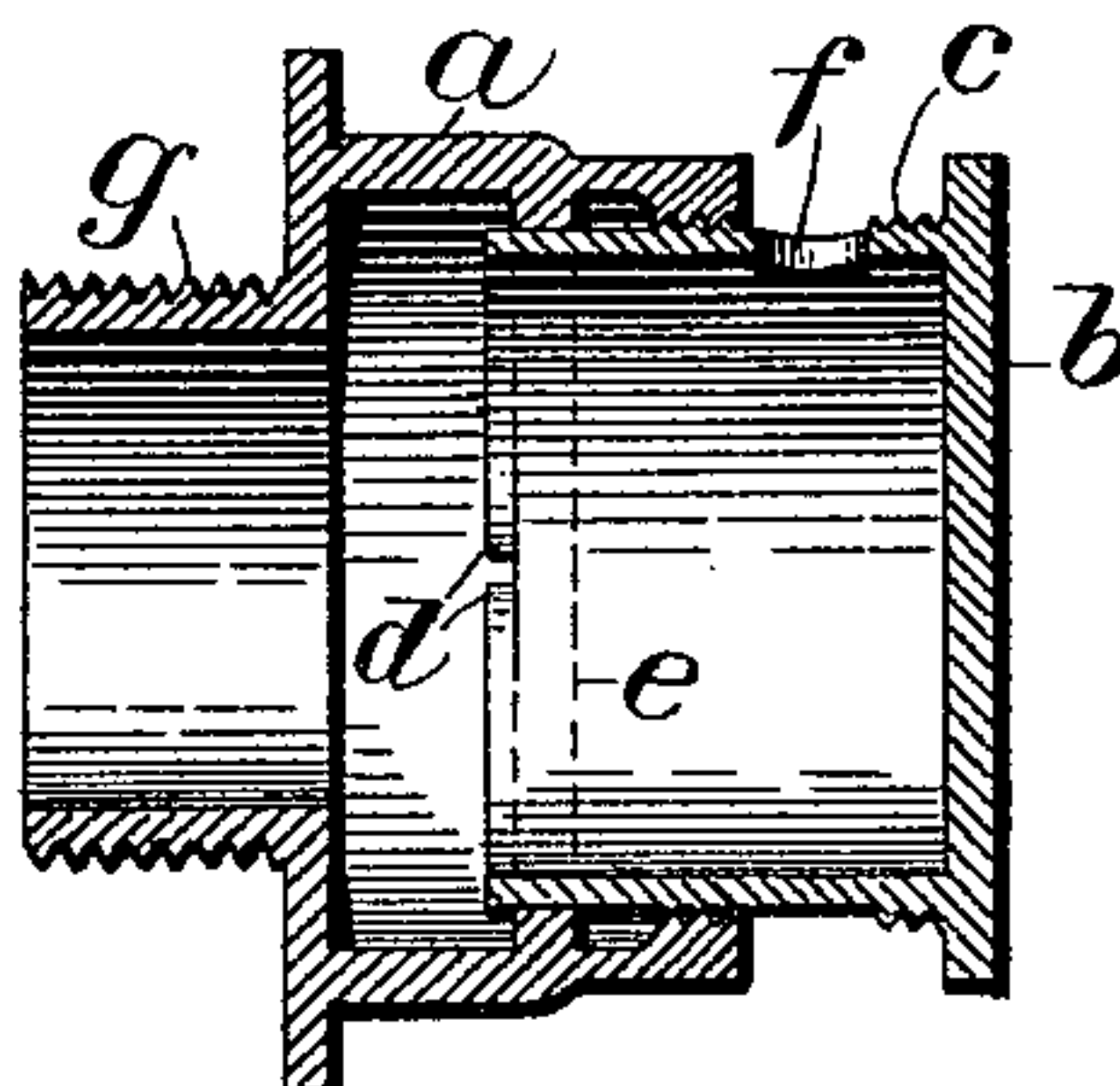
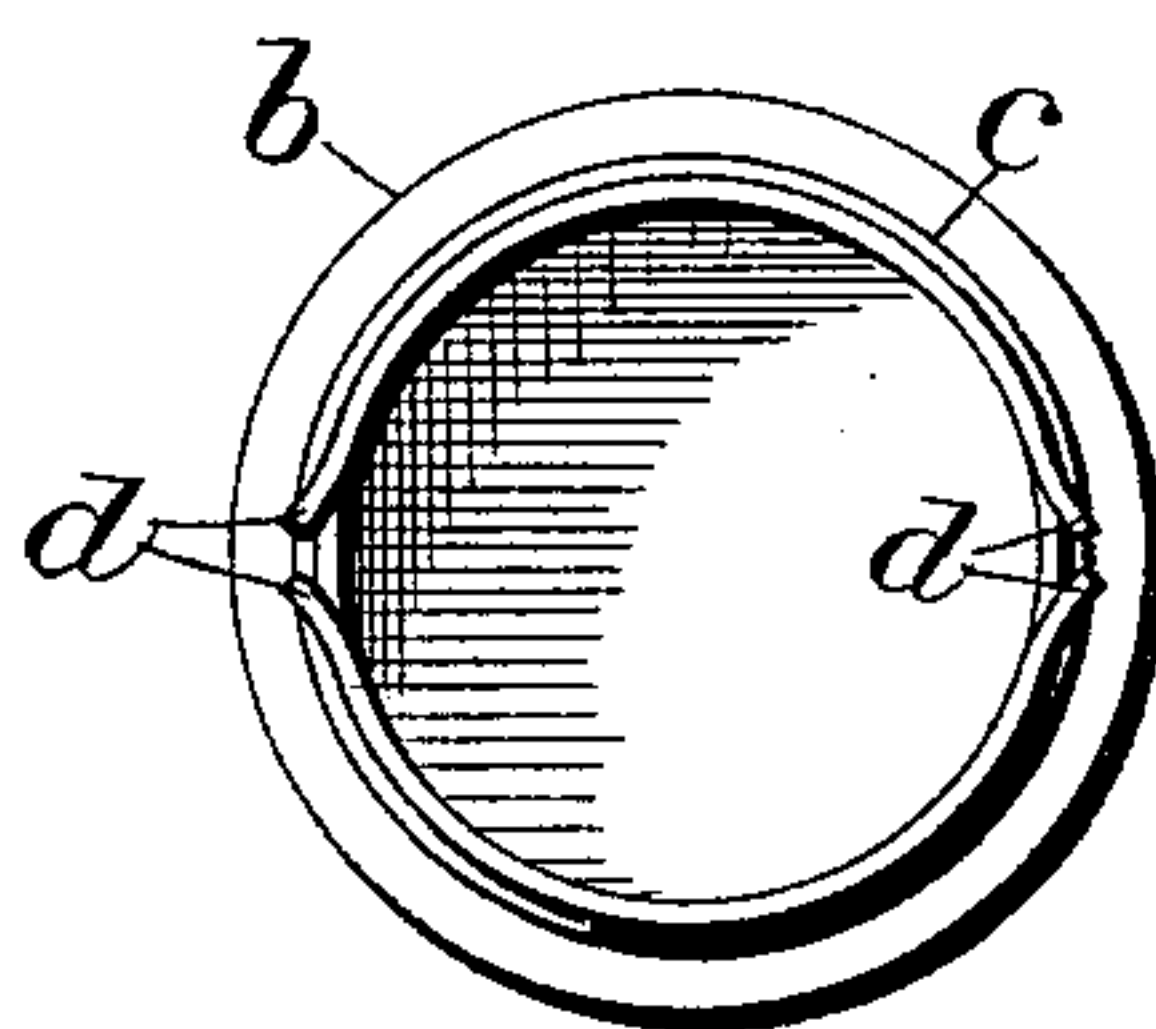


FIG. 5.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FREDERICK EDMOND HARVEY, OF LONDON, ENGLAND.

## LUBRICATING AXLE-CAP FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 538,516, dated April 30, 1895.

Application filed August 17, 1894. Serial No. 520,634. (No model.) Patented in England March 13, 1893, No. 5,383, and in France August 28, 1893, No. 232,462.

*To all whom it may concern:*

Be it known that I, FREDERICK EDMOND HARVEY, a subject of the Queen of Great Britain, residing at 7 Douglas Terrace, Surbiton Hill, London, in the county of Surrey, England, have invented an improved lubricating axle-cap for vans, carts, cabs, carriages, and other vehicles to facilitate the lubricating or oiling of the axle and other parts or bearings, (for which I have obtained a patent in Great Britain, dated March 13, 1893, No. 5,383, and in France, No. 232,462, dated August 28, 1893,) of which the following is a specification.

This invention relates to an improved lubricating axle-cap for vans, carts, cabs, carriages and other vehicles to facilitate the oiling or lubricating of the axle and other parts or bearings and has for its object to effect such oiling or lubrication without removing the cap as is necessary with axle-caps made as at present by the use of which latter a considerable amount of lubricating material is wasted. By the use of axle-caps made according to this invention moreover, experienced hands are unnecessary, and the stripping of the threads, occasioned by the frequent removal of the axle-caps as at present constructed, is avoided.

In order that my said invention may be fully understood I will now proceed to describe the same with reference to the accompanying sheet of drawings, in which—

Figure 1 is a vertical section of axle-cap complete closed; Fig. 2, a plan of cap closed in position; Fig. 3, a plan of cap open, with hole for oiling exposed; Fig. 4, a vertical section of cap open, and Fig. 5 a detail hereinafter referred to.

The same letters denote the same parts in all the views.

*a* shows body of cap; *b*, cover of same, provided with screw thread *c*, and having parts *d d* of its inner edge cut and turned outward, thus forming stops. The cover *b* with stops *d d* is shown detached in full plan at Fig. 5. *e* shows internal flange; *f*, hole for oiling and *g* screw-flange.

The cap is screwed into the box of the wheel by the screw flange *g* the cover *b* being closed as shown in plan at Fig. 2.

When it is required to lubricate the axle it is simply necessary to unscrew the cover *b*, (the edge of which being milled as shown at Figs. 2 and 3 allows of this being effected without the aid of any tool,) then pull out the said cover until the stops *d* come into contact with the internal flange *e* when the hole *f* will be exposed, and the axle-cap is in the position shown in plan Fig. 3 and in section at Fig. 4. The oil or other lubricant can then be poured into or passed through the hole *f*; and the cover *b* pushed back and screwed into its place. By this operation there will be no loss of lubricating material, as the hole *f* is kept uppermost until the thread *c* reaches the cap *a* and the cover *b* being guided there is no fear of stripping the thread *c*.

It will be seen that the inner portion of the cover *b* forms a cylinder by which the lubricating material is held during charging.

This improved lubricating cap may be applied to existing caps by cutting off the face of said caps, fastening in the internal flange *e* and having a female thread for the thread *c* of cover *b* to screw into.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a lubricating axle-cap, the combination with the cylindrical body *a* internally screw threaded to engage the cap *b*, and screw threaded at *g* to engage the box of the wheel, and provided with the internal flange *e*; of the cap *b* concentric with said cylindrical body and provided with screw threads *c*, and having the perforation *f* to admit the lubricating material into the said cap; stops *d* on said cap, and the milled head or flange by means of which the said cap is screwed up and unscrewed, substantially as and for the purposes described.

FREDERICK EDMOND HARVEY.

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