

H. F. PHILLIPS.  
Carriage Axle-Lubricators.

No. 137,479.

Patented April 1, 1873.

Fig. 1.

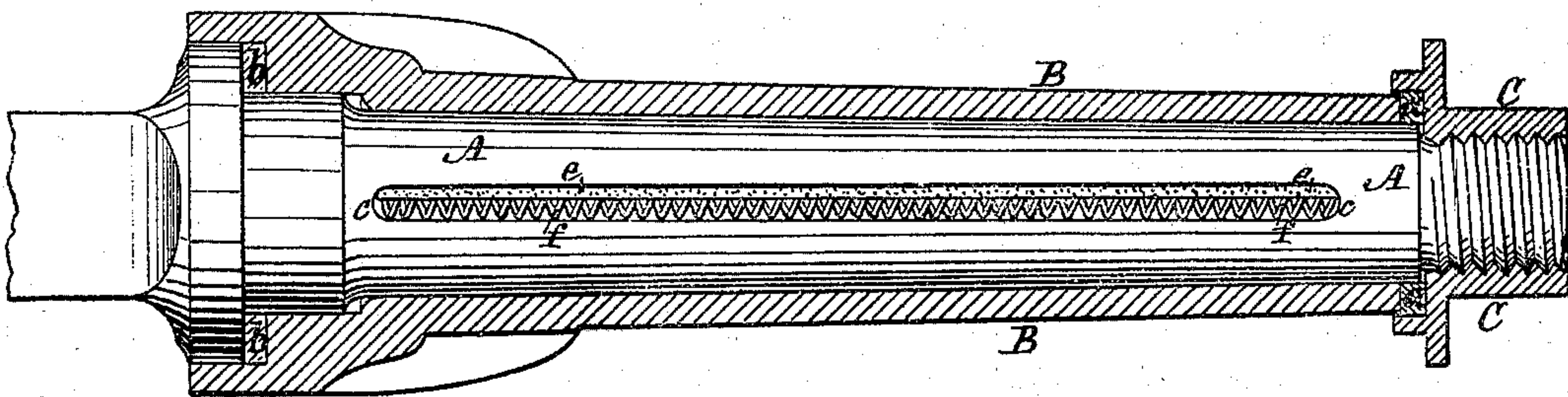


Fig. 2.

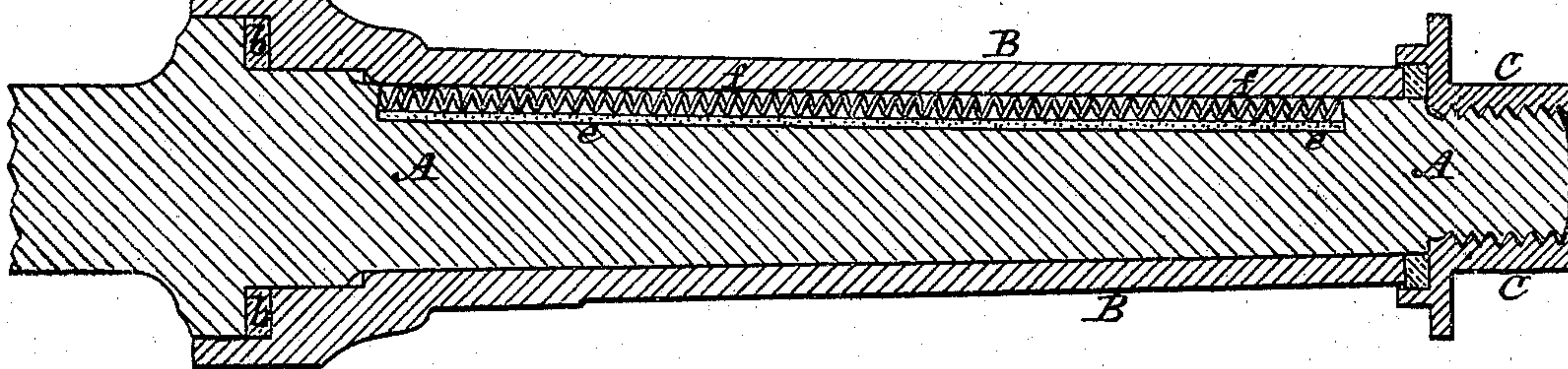


Fig. 3.

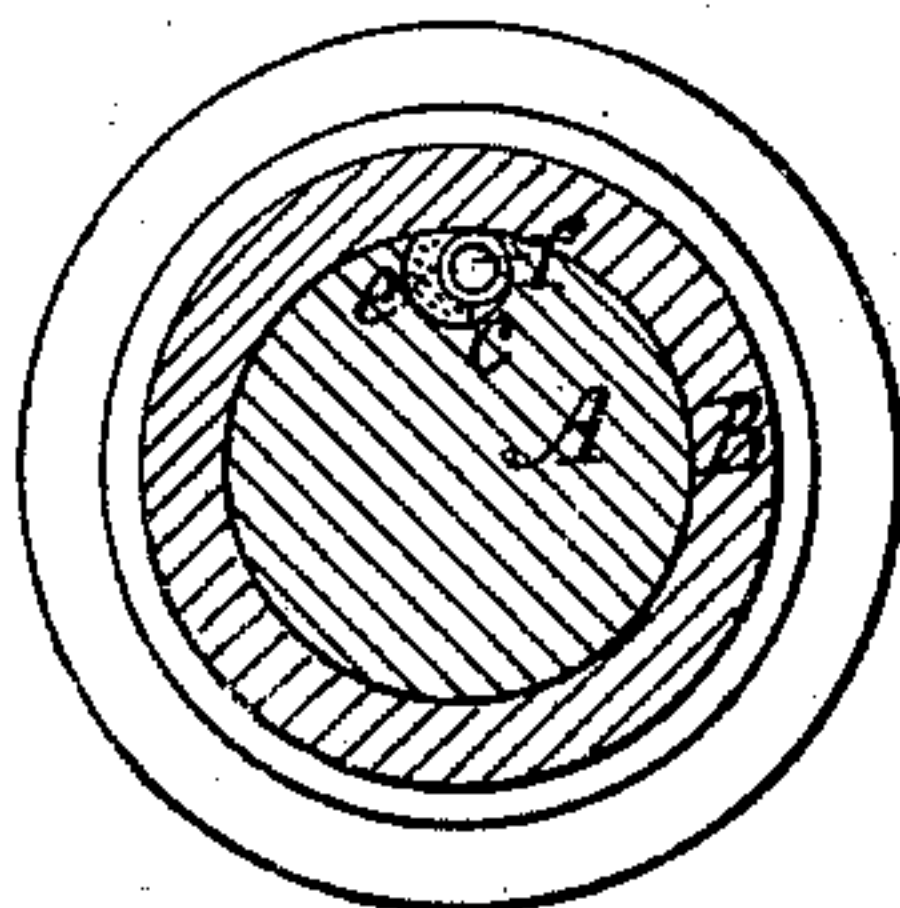


Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY F. PHILLIPS, OF AUBURN, NEW YORK, ASSIGNOR TO SHELDON  
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## IMPROVEMENT IN CARRIAGE-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. 137,479, dated April 1, 1873; application filed  
March 13, 1873.

*To all whom it may concern:*

Be it known that I, HENRY F. PHILLIPS, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Carriage-Axle Lubricators; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a top plan of an axle journal with the sleeve or box, nut, and packing between the journal and box in section. Fig. 2 represents a vertical longitudinal section through the journal, lubricator, and sleeve or journal-box. Fig. 3 represents a vertical transverse section through the same. Fig. 4 represents a modification of the lubricator packing.

My invention consists in a carriage-axle lubricator composed of a groove formed in the upper side of the axle journal, in which is placed a packing made of wire with some fibrous or flexible absorbing substance for retaining the lubricating compound or material, the object of the wire being to retain the packing in the groove.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing.

The axle journal is represented at A, and the hub, sleeve, or box at B. These two parts are held together by a cap-nut, C, and the joints are packed, as at *a b*, to prevent the lubricating material from leaking out or wasting. On the upper side of the journal there

is cut a groove, *c*, into which a packing, *e*, is placed, said packing being composed of wire and a suitable fibrous absorbing material so as to be held in said groove, and to retain therein the lubricating material.

In Figs. 1, 2, and 3 I have shown this packing as made of a piece of cloth on the exterior, with the wire *f* coiled in the form of a spring inside of the cloth. This answers a good purpose, as the wire is or may be contracted in diameter by coiling, and in this condition introduced into the groove, where it expands and so tightly holds the cloth or other fibrous material in place.

At Fig. 4 I have shown a modification of the cloth and wire packing. In this plan the cloth *e* is rolled up into a roll and the wire *f* is coiled or wound around it. In this condition the packing is inserted in the groove. The oil or other lubricator is then put into the groove, and the packing absorbs much of it, and gives it out to the journal as it is required. The groove *c* may be slightly under-cut so as to aid in holding in the packing.

What I claim as my invention is—

A carriage-axle lubricator made by forming a groove or chamber on the upper side of the axle journal, which is filled with a packing composed of a fibrous material and of wire, and with oil or other lubricator, substantially as and for the purpose described.

HENRY F. PHILLIPS.

Witnesses:

HORACE T. COOK,  
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