

(No Model.)

R. FLEMING.
LUBRICATOR.

No. 355,155.

Patented Dec. 28, 1886.

Fig. 1.

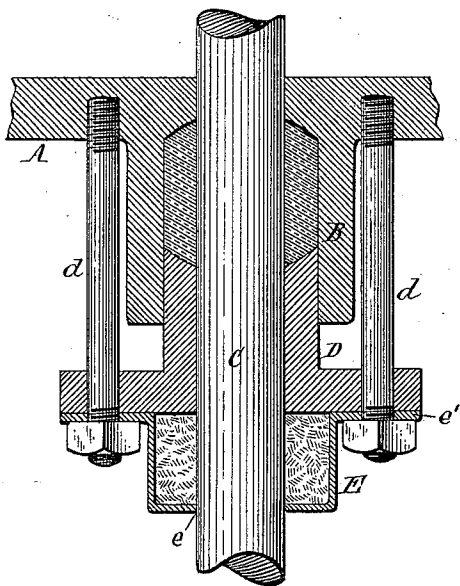


Fig. 3.

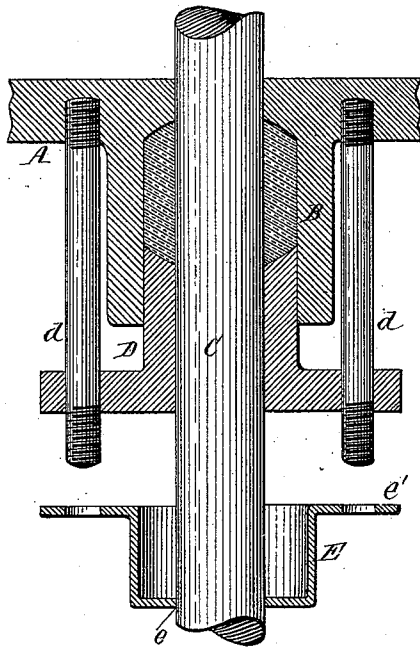


Fig. 2.

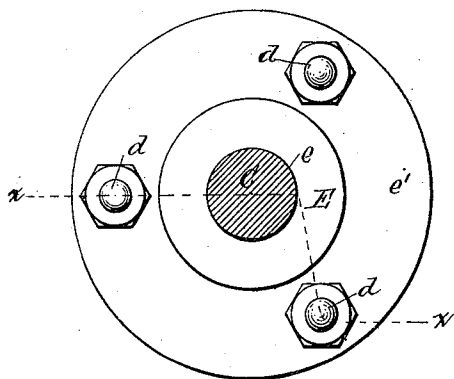


Fig. 5.

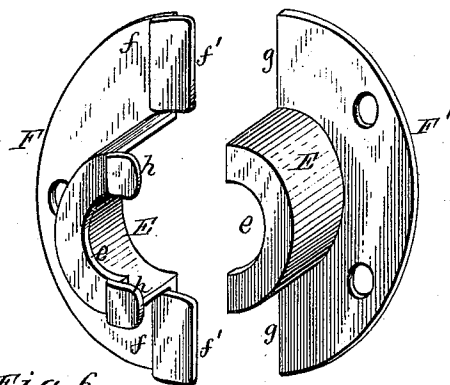
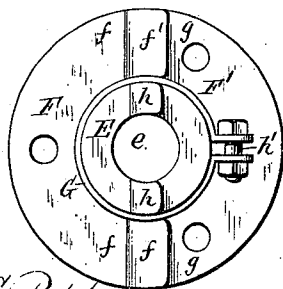
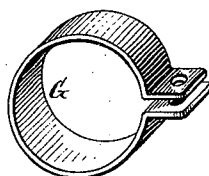


Fig. 4.

Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT FLEMING, OF BUFFALO, NEW YORK.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 355,155, dated December 28, 1886.

Application filed June 1, 1886. Serial No. 203,830. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FLEMING, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful
5 Improvements in Lubricators, of which the following is a specification.

This invention relates to a lubricator for reciprocating rods—such, for instance, as the piston and valve rods of steam and other engines, pumps, &c. These rods depend at present for their lubrication principally upon the lubricant which is introduced into the cylinder, and which is insufficient to properly lubricate the rods and unreliable in its action.

15 The object of my invention is to provide a simple and efficient device for lubricating these rods in a uniform and reliable manner; and my invention consists, to that end, of the improvements which will be hereinafter fully set forth, and pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a vertical section of a stuffing-box provided with my improved lubricating device in line $x x$, Fig. 2. Fig. 2 is a bottom plan view of the same. Fig. 3 is a vertical section showing the lubricator detached from the stuffing-box. Fig. 4 is a bottom plan view of my improved lubricator made in two parts to facilitate its application to the piston-rod. Fig. 5
30 is a perspective view of the two parts of the lubricator. Fig. 6 is a perspective view of the clasp whereby the two parts of the lubricator are secured.

35 Like letters of reference refer to like parts in the several figures.

A represents a portion of the cylinder-head of a steam or other engine or of a pump or similar machine.

40 B represents the stuffing-box, formed on the same in the usual manner, and C the piston-rod, which is guided in the stuffing-box.

D represents the gland, secured in place by bolts d in the usual manner.

45 E represents the receptacle for the lubricant, which is secured to the outer end of the gland preferably by the same bolts, d , which hold the gland in place. The receptacle E consists of a round box having in its bottom a central opening, e , through which the rod C passes

50 snugly, and provided with a marginal flange, e' , by which the receptacle is secured to the gland. The receptacle E is open at its upper side adjacent to the gland, so that when the receptacle is detached from the gland and lowered on the piston-rod, as represented in Fig. 55 3, the receptacle can be filled with a solid lubricating compound, which will lubricate the rod properly under the conditions of heat and motion under which the rod is operated. When the receptacle E is filled with the lubricant and secured to the gland, it lubricates 60 the rod uniformly and prevents overheating and undue wear of the parts, and thereby tends to maintain the stuffing-box in working order, which is liable to become injured when the 65 rod runs dry and becomes hot.

In the construction represented in Figs. 4, 5, and 6 the receptacle E is composed of two parts, F F', joined together diametrically, to enable the receptacle to be attached to the rod 70 without disconnecting the latter from the piston or cross-head. The part F is provided on the flange f with lips f' , which overlap the contiguous portions of the flange g of the part F'. The bottom of the box is also provided 75 on the part F with lips h , which overlap the contiguous portions of the bottom of the part F'. The two parts F F' are secured together by an elastic band or clasp, G, which embraces both parts of the box, and is tightened 80 on the same by a bolt, h' . The clasp G is sufficiently elastic to permit it to be slipped over the piston or other rod to which the lubricator is applied.

85 I am aware that the glands of stuffing-boxes have been provided with enlargements and depressions for the reception of oil, and this I do not claim.

I claim as my invention—

1. The combination, with a stuffing-box 90 gland, of a perforated open receptacle adapted to receive a solid lubricant and secured detachably to the outer side of the gland, substantially as set forth.

2. The combination, with a stuffing-box 95 gland, of an open receptacle for solid lubricants, detachably secured to the outer side of the gland and composed of two halves joined

together diametrically, substantially as set forth.

3. The combination, with a stuffing-box and a rod passing through the same, of a receptacle for a lubricant, composed of two parts, F
5 F', provided with lips secured to one part and overlapping the other part, and a clasp, G,

whereby the two parts are secured together, substantially as set forth.

Witness my hand this 26th day of May, 1886.

ROBERT FLEMING.

Witnesses:

OSCAR SCHAUB,
CARL F. GEYER.