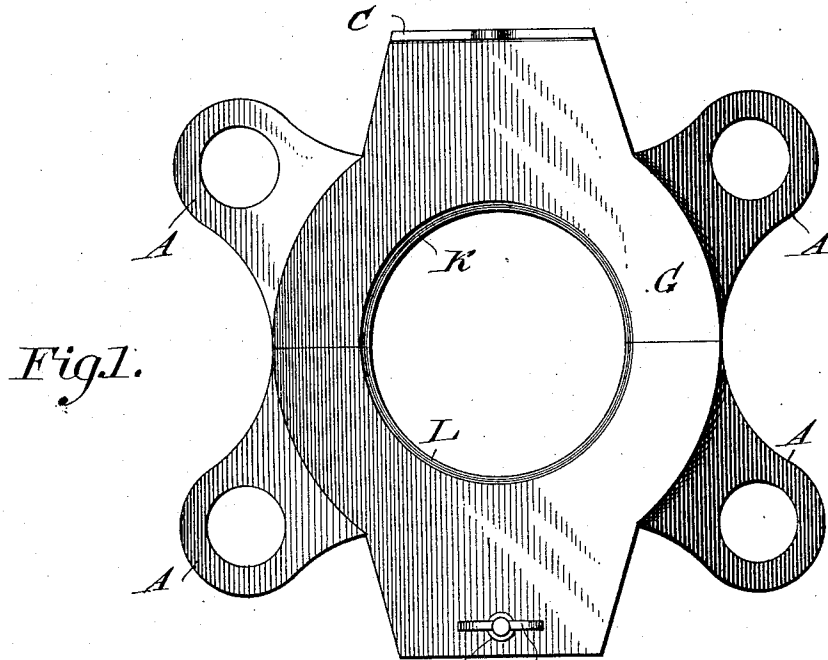
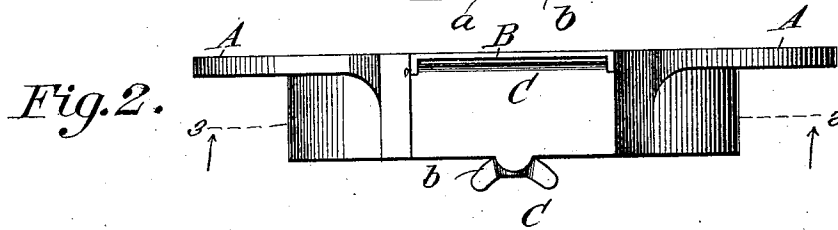
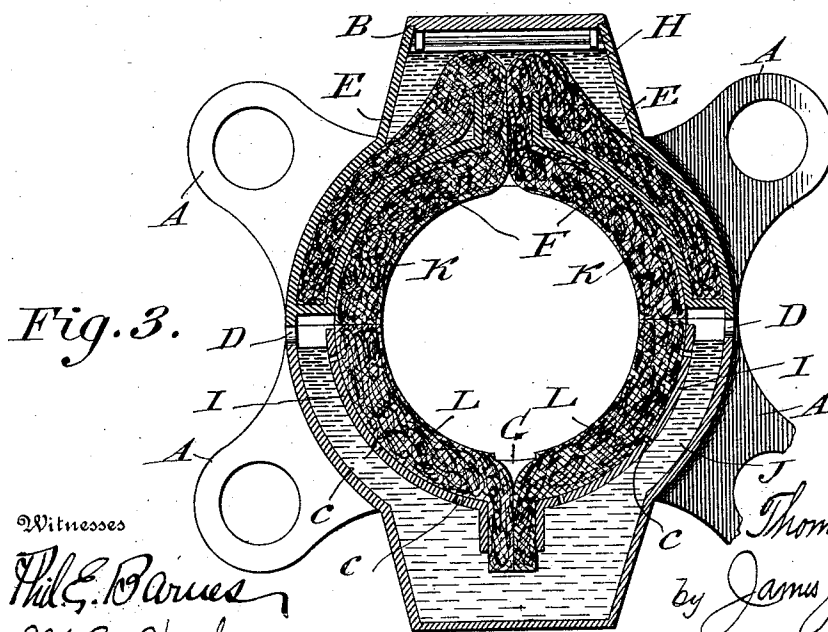


T. W. SMITH.
LUBRICATOR.

APPLICATION FILED JAN. 13, 1909.

Patented July 27, 1909.

929,039.



Witnesses

Phil E. Barnes
W. C. Dealy

Inventor

Thomas W. Smith.
by *James J. Shuch*
Attorney

UNITED STATES PATENT OFFICE.

THOMAS W. SMITH, OF SCRANTON, PENNSYLVANIA.

LUBRICATOR.

No. 929,039.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed January 13, 1909. Serial No. 472,087.

To all whom it may concern:

Be it known that I, THOMAS W. SMITH, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented new and useful Improvements in Lubricators, of which the following is a specification.

My invention pertains to piston-rod lubricators; and it contemplates the provision of a simple, inexpensive and compact lubricator, of the kind stated, constructed with a view of advantageously applying lubricant to a piston-rod so as to prevent frictional wear thereof and at the same time avoiding waste of lubricant.

The invention will be fully understood from the following description and claim, when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a front elevation of the lubricator constituting the best practical embodiment of my invention of which I am cognizant. Fig. 2 is a plan view of the lubricator. Fig. 3 is a vertical section taken in the plane indicated by the line 3—3 of Fig. 2.

Similar letters of reference designate corresponding parts in all of the views of the drawings.

The body of my novel lubricator is preferably made of suitable metal in a shape to surround the piston-rod of an engine, and is preferably, though not necessarily, formed in two sections, as shown, and is provided with apertured ears A for the passage of screws or bolts through the medium of which the lubricator is to be connected with the usual gland at one end of a piston cylinder in the ordinary well known manner. The said body is provided at its upper end with an opening B, normally closed by a hinged door C, and in its front wall and near its lower end the body has a small opening *a* which is normally occupied by a thumb-screw *b* and is designed for the drainage of any water that may find its way into the body. It will also be observed by reference to Fig. 3 that the body is provided in its opposite edges with apertures D, and when the body is formed in two sections, as shown, the said apertures D are in the form of notches in the upper end of the lower section.

The inner side of the lubricator body—*i. e.*, the side designed to be opposed to the side of a piston-rod, is open, and interiorly

the body is provided with two packing-pockets E the inner walls F of which are arranged about the proportional distance illustrated from the inner edges of the side walls G of the body—*i. e.*, the edges opposed to the side of the piston-rod for a purpose presently set forth. It will be seen by reference to Fig. 3 that the said packing-pockets E are open to the chamber H formed in the upper portion of the body, and that the lower, closed ends of the pockets are disposed slightly above the horizontal median line of the body. Thus when the body is formed in two sections, the pockets E will be comprised in the upper section. It will also be seen by reference to Fig. 3 that the body is interiorly provided with bridge walls I which are preferably foraminous, as indicated at *c*, and are arranged in the lower portion of the body so as to be comprised in the lower section thereof, and are located about the distance illustrated from the inner edges of the side walls G of the body—*i. e.*, the edges opposed to the side of the piston-rod. The office of the said bridge walls I is to support the packing in the lubricator and thereby prevent such packing from occupying the chamber J which is designed to contain lubricant.

In the practical use of the lubricator, packing, indicated by K, is arranged in the packing-pockets E and at the inner sides of the inner walls F of said pockets, and packing, indicated by L, is arranged at the inner sides of the bridge walls I, and so as to depend into the lubricant chamber J, and when the body of the lubricator is made in two sections as shown, I prefer that the packing L be separate from the packing K, as also shown. I also prefer that the inner portions of the packing K and L be so arranged as to bear against the side of a piston-rod extending through the central opening of the body, and that the packing be of felt or analogous material, this latter in order to lessen the liability of fraying attended by the objectionable carriage of packing fibers or portions into the piston cylinder to which the lubricator is applied.

When the lubricator is put into use and at requisite intervals of time, it is supplied with suitable lubricant; the supply to the chamber H being effected through the opening B, and the supply to the chamber J being effected through one or both of the apertures D.

It will be gathered from the foregoing that my improvements constitute an efficient piston-rod lubricator, and one that embodies no delicate parts such as are liable to get
5 out of order after a short period of use; also, that when necessity demands the used-up packing in the body of the lubricator may be expeditiously and easily removed and as readily replaced by new packing. It
10 will also be gathered that during the use of the lubricator, the oil is fed from the pockets E through the packing opposed to the piston-rod by a siphon action, and from the chamber I to the packing through the open-
15 ings c and also after the manner of feeding a wick; and further, that excess oil from the packing is received in the chamber J with the result that the lubricator is maintained in a neat and clean state.

20 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

A lubricator comprising a hollow body having a transverse central opening, for the
25 passage of a device to be lubricated, and also having an opening in its top, pockets in its upper portion, at opposite sides of said central opening and separated from each other by an opening in communication with

the said top opening, the inner walls of 30 which pockets are arranged at a distance from the central opening to form a space at opposite sides of and above the central opening, a lubricant chamber arranged in the lower portion of the body and extending be- 35 low and at opposite sides of the central opening, the inner walls of which chamber are arranged at a distance from the central opening, to form a space at opposite sides of and below the central opening, and are 40 separated by an opening in communication with the lower portion of the chamber, and packing occupying the pockets, the opening between the upper ends of the pockets, the spaces at the inner sides of the inner walls 45 of the pockets, and the spaces at the inner sides of the inner walls of the lubricant chamber portions and depending through the opening between said walls into the lubricant chamber. 50

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS W. SMITH.

Witnesses:

JAMES A. SAVILLE,
J. J. WYMB.