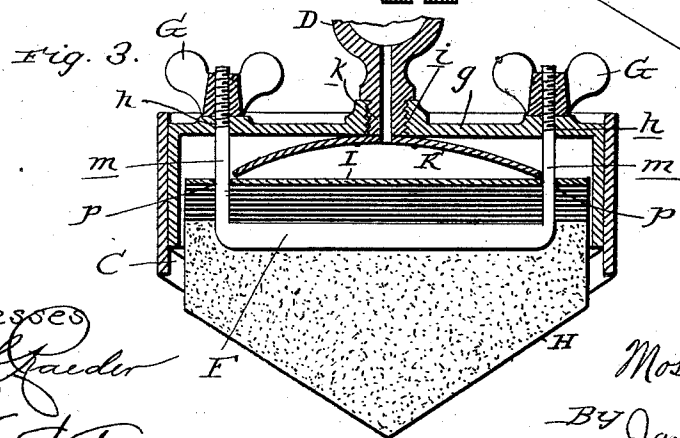
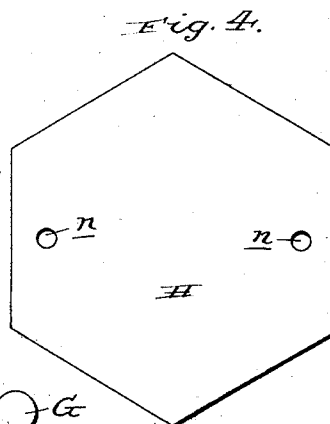
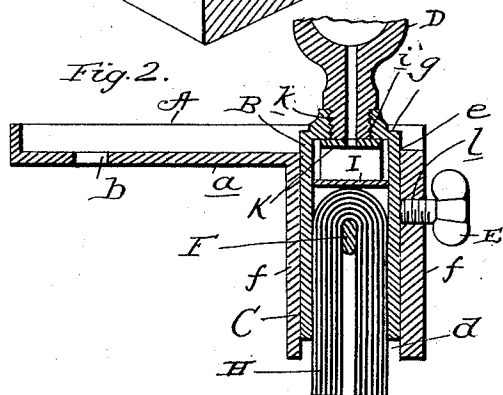
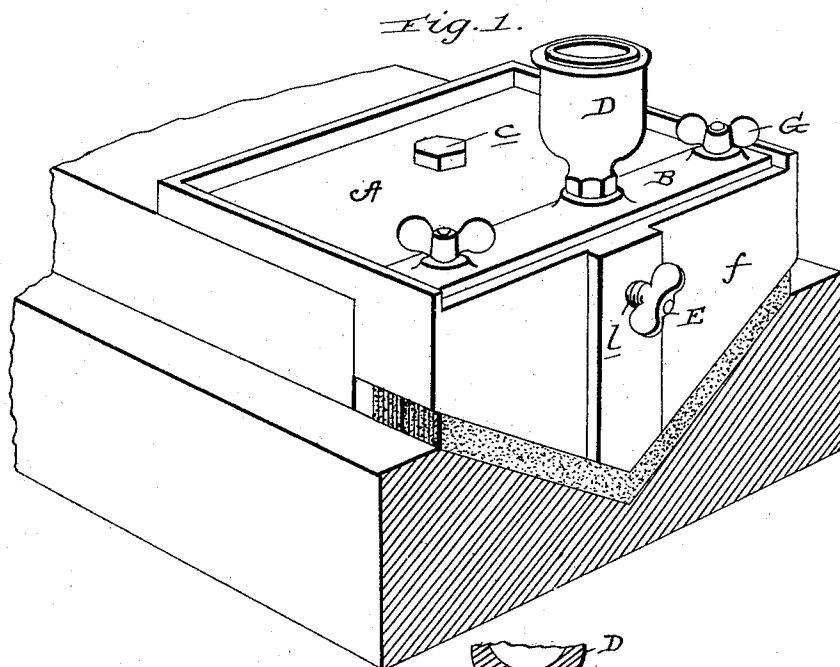


(No Model.)

M. BOOTH.
LUBRICATOR.

No. 509,864.

Patented Dec. 5, 1893.



Witnessed
Chas. Gaeder
Wm. S. Gordon

Inventor
Moses Booth.
By *James J. Sheehy*
Attorney

UNITED STATES PATENT OFFICE.

MOSES BOOTH, OF BLACKSTONE, MASSACHUSETTS.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 509,864, dated December 5, 1893.

Application filed July 13, 1893. Serial No. 480,403. (No model.)

To all whom it may concern:

Be it known that I, MOSES BOOTH, a citizen of the United States, residing at Blackstone, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Lubricators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in automatic lubricators for cross head slides of engines, and it has for its object to produce such a device of a substantial construction which will properly lubricate the bottom slide of an engine at each stroke of the piston, without the waste of oil or lubricant.

Other objects and advantages will appear from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of my improved device, illustrating the parts in an operative position, to lubricate the cross head slide. Fig. 2, is a vertical, longitudinal, central, sectional, view of the device showing the oil cup partly broken away. Fig. 3, is a sectional view taken in a plane at right angles to that of Fig. 2. Fig. 4, is a plan view of one of the oil pads.

Referring by letter to said drawings: A, indicates the holder, which is adapted to be secured to the forward end of a cross head slide. This holder has a horizontal flange *a*, provided with an aperture *b*, for the reception of a bolt *c*, for fastening the whole to the cross head slide, although it is obvious that any suitable means might be employed for effecting the proper attachment. This holder is provided at its outer end with a vertically disposed chamber *d*, which is open at its top as shown at *e*, to receive the pad holder and connecting parts, as will be presently described. The lower edges of the side walls *f*, taper from their centers in opposite directions as shown so as to conform to the shape of the pads and the groove in the slide bed as shown.

B, indicates the pad holder. This holder is of a general rectangular shape in outline, and is designed to fit snugly in the chamber

C, and has its top *g*, provided near opposite ends with a vertical aperture *h*, and is furthermore provided at its center with a screw-tapped aperture *i*, which latter is designed to receive the lower, external, screw-threaded end *k*, of the oil cup or lubricant holder D. The outer, vertical wall *j*, of the holder A, is provided with a screw-tapped aperture *l*, designed to receive a set-screw E, for the purpose of adjustably fixing the pad holder B, within the main holder A, as shown.

F, indicates a yoke. This yoke is provided at opposite ends with vertical branches *m*, which pass out through the holes or apertures *h*, and are externally threaded to receive thumb screws or nuts G.

H, indicates the pads, which are formed of felt or other suitable material, and are preferably of a hexagon shape as shown in Fig. 4, of the drawings, having holes *n*, near opposite edges in the longitudinal center to receive the branches *m*, of the yoke.

I, indicates a pressure plate. This plate is arranged within the pad holder and is provided near opposite ends with holes *p*, designed to register with the holes in the pads and also receive the threaded branches of the yoke.

K, indicates a pressure or tension spring. This spring is interposed within the pad holder between the pressure plate and the top wall of said holder, so that the pressure exerted thereby will be imparted from the plate to the pads upon the yoke.

In operation, after the main holder has been secured to the cross head slide, or before said holder has been attached thereto, the pads are strung upon the branches of the yoke, and folded upon each other at their longitudinal centers, after which the pressure plate is placed over the branches of the yoke and upon the pads. The spring is then placed above the plate and the whole introduced into the pad holder B, until the threaded branches of the yoke, extend through the holes *h*, in the top wall, after which the set screws are then turned so as to adjustably secure the yoke therein. The pad holder is then placed in the chamber C, of the holder A, and the set screw E, turned so as to adjustably secure the same in position. The oil or lubricant from the cup passing down

through the channel in the bottom of the cup, will be fed gradually upon the plate I, which serves the function of a distributor, when such oil or lubricant will be discharged upon the pads and from there conveyed to the slides.

By this construction it will be seen that the slide is wiped during each stroke of the piston so that there is no waste of oil and the slides are kept properly lubricated.

The pads here shown are of a hexagon shape in outline and the pad holder is beveled on its under side in opposite directions from a central point, so as to conform to the shape of the groove or way in the slide-bed, and it is obvious that the shape of these parts can be changed to suit or correspond with the character of slide bed employed without departing from the spirit of my invention.

Having described my invention, what I claim is—

1. In a lubricator for engine slides, the combination with the main holder, having the chamber at its outer end, the pad holder slidable in said chamber, a set screw for adjustably securing said holder therein, a yoke adjustably secured in the holder, to sustain oil or lubricating pads, and suitable means for adjusting the yoke, substantially as specified.

2. In a lubricator for engine slides, the combination with the main holder, having the chamber at its outer end, the slidable pad holder arranged in said chamber, a set screw for securing said holder therein, a yoke arranged in the holder to sustain oil pads, a pressure and distributing plate arranged upon the yoke above the pad, a spring for ex-

erting pressure upon the plate, and an oil cup adapted to feed upon the plate and over the pads, substantially as specified.

3. In a lubricator for engine slides, the oil pad holder having the holes in its top near opposite ends, in combination with an oil cup arranged on the top to discharge into the holder, the yoke having its branches threaded and passing through holes in the top of the holder, set screws for adjustably sustaining the yoke within the holder, a pressure and distributing plate arranged upon the yoke and a spring interposed between the plate and the top of the holder, the whole receiving oil pads and attached to the cross head slide of an engine, substantially as specified.

4. In a lubricator for engine slides, the main holder A, having the vertical chamber C, and one wall of said chamber provided with a screw-tapped aperture *l*, the pad holder B, arranged in said chamber, and having the holes in its top near opposite ends, the oil cup arranged on the top to feed into the holder, the yoke having its ends threaded and passing through the holes in the holder, the hexagon shaped oil pads strung upon the yoke and folded upon each other, the pressure and distributing plate also arranged upon the yoke and above the pads, and the spring interposed between the plate and the top wall of the holder, substantially as specified.

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

MOSES BOOTH.

Witnesses:

CAROLINE R. MASON,
GEO. W. SPAULDING.