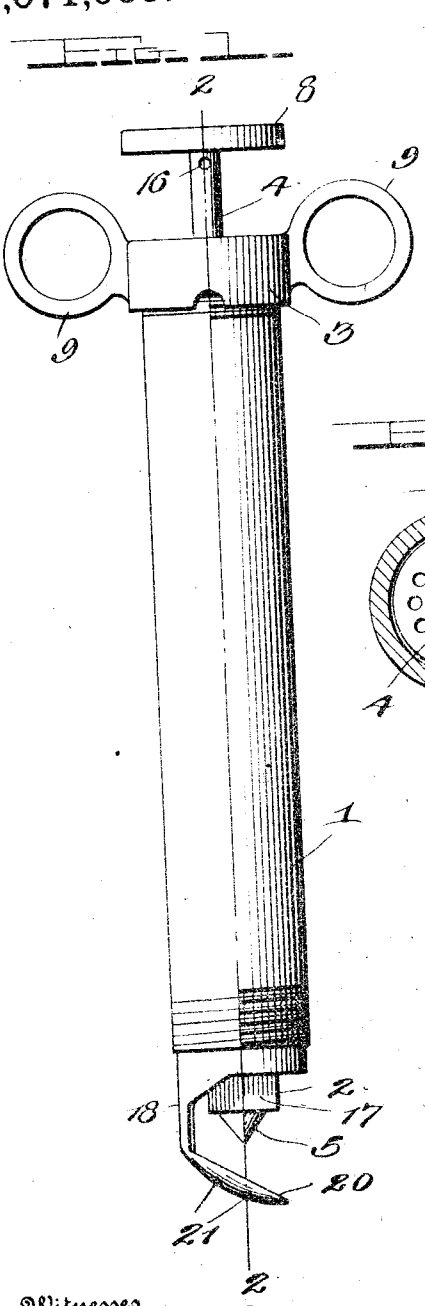
R. V. LEE.

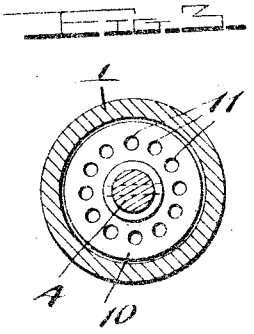
OIL GUN.

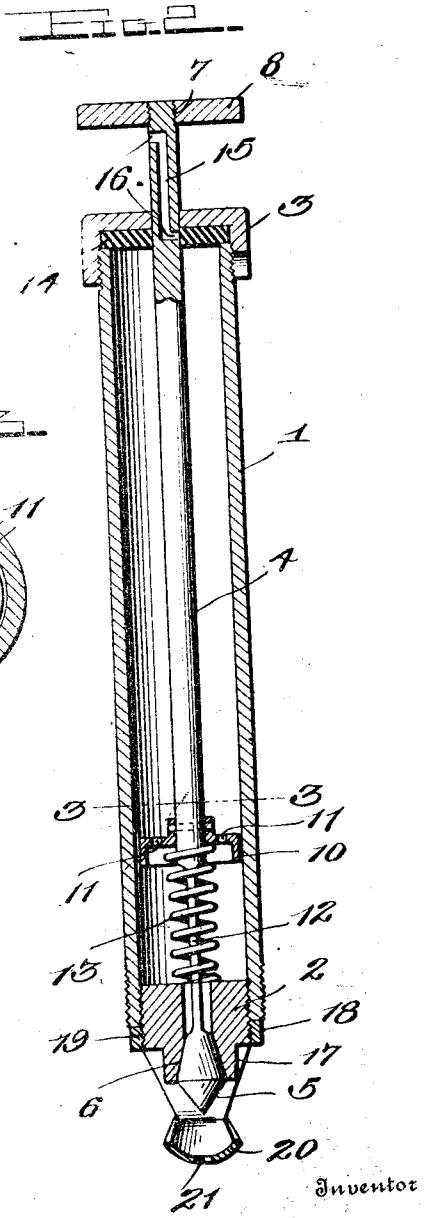
APPLICATION FILED OCT. 2, 1912.

1,071,063.

Patented Aug. 26, 1913.







Inventor

R. V. Lee,

Witnesses

Chas. L. Crieshaber.

A. J. Hind.

By Watson E. Coleman,

Attorney

UNITED STATES PATENT OFFICE.

RICHARD V. LEE, OF CALISTOGA, CALIFORNIA.

OIL-GUN.

1,071,063. Specification of Letters Patent. Patented Aug. 26, 1913.

Application filed October 2, 1912. Serial No. 723,615.

To all whom it may concern:

Be it known that I, RICHARD V. LEE, a citizen of the United States, residing at Calistoga, in the county of Napa and State of California, have invented certain new and useful Improvements in Oil-Guns, of which the following is a specification, reference being had to the accompanying drawings.

This invention which relates generally to oilers, has for its primary object to provide a simple and efficient construction which may be easily manipulated for squirting lubricant oil and relates more particularly to an improvement in oiling devices of this character in which a finger pressed plunger is provided that, when automatically moved in one direction, will open the valves and at the same time force the oil on to the distributer.

My invention comprehends improved construction and arrangement of cylinder contained pump device and certain combination of parts, all of which will be hereinafter described in detail and specifically pointed out in the appended claim, reference being had to the drawings, in which—

Figure 1 is a side elevation embodying my invention. Fig. 2 is a longitudinal section through the same, and Fig. 3 is a detail sectional view, taken on the line 3—3 of Fig. 2.

Reference now being had to the accompanying drawings in which like and corresponding parts are designated by like reference character throughout the several views, the numeral 1 indicates a cylinder or oil holding tube being internally threaded adjacent its lower extremity to which is detachably secured a plug 2. The opposite extremity of the cylinder 1 is exteriorly threaded upon which is adjustably secured a cap 3. The central portion of said cap and plug are provided with openings through which extends a plunger rod 4. The lower end of this plunger rod has formed integral therewith a conical valve 5 which is adapted to rest within a valve seat 6 formed adjacent the lower extremity of the plug 2, whereas the opposite extremity of this plunger rod is threaded, as at 7, to which is detachably secured a head 8. The cap 3 is provided with oppositely disposed rings 9 through which the fingers of the operator may extend when the thumb is pressing downwardly upon the head 8 for operating the plunger rod 4.

The plunger rod 4 has keyed thereto adjacent its lower extremity a plunger 10 which is cup-shaped and provided with a plurality of apertures 11. This plunger may be of metal, leather, or any other suitable material which is adapted to force the oil downwardly through the opening formed within the plug 2. The lower extremity of the plunger rod 4 is reduced, as at 12, so that when the same passes through the opening formed within the plug 2 it will provide ample room to permit the oil to discharge through the opening formed within the plug when the valve has been opened. A coil spring 13 is interposed between the plug 2 and the plunger 10 which will apparently hold the plunger in a raised position thereby keeping the valve 5 normally closed. A packing ring or gland 14 is interposed between the cap 3 and the upper end of the cylinder 1 to insure a tight connection therebetween to prevent the escape of any oil. The plunger 4 has formed adjacent its upper extremity a longitudinally extending opening 15 terminating at its extremity in right-angular passageways 16, one of which is adapted to open communication between the opening 15 and the interior of the cylinder 1, whereas the other passageway is in communication with the atmosphere, thereby providing an air vent which will convey air into the cylinder as the piston is forced downwardly, for a purpose which is obvious.

The lower extremity of the plug 2 is squared, as at 17, so that the plug may be easily and readily applied to or detached from the cylinder by means of a wrench or the like, and when this plug 2 is attached to the cylinder 1 several of the threads formed thereupon will project beyond the cylinder to permit a distributer 18 to be detachably connected thereto. This oil distributer 18 comprises a cylindrical portion which is internally threaded, as at 19, for engagement with the exposed threaded portion of the plug 2. A longitudinal extension is formed on the cylindrical portion and is provided with an angular spoon-shaped portion 20 having openings 21 through which the oil may discharge.

It will be noted that the lower end of the valve 5 tapers and thus directs the oil in-

wardly upon the central portion of the concavo-convex plate 20 and prevents loss or waste of the oil.

It is obvious from the foregoing that an oiler of this character may be used for oiling die stocks, pipe cutters, and the like, and the distributer will cause the oil to thoroughly lubricate all the parts of the device in which it is inserted.

It will be manifest from the foregoing that a device of this character will be inexpensive in the cost of manufacture, strong and efficient when in use, and the parts thereof may be readily assembled and installed, thereby rendering the same commercially desirable.

What I claim is:—

In an oil gun such as described, a cylinder body portion internally threaded at one end thereof, a plug having a valve seat formed therein threaded in the lower end of the cylinder, said plug being threaded and having its lower end disposed below the lower end of the cylinder, operating means within the cylinder and communicating with the plug, a ring threaded upon the plug and contacting with the adjacent end of the cylinder for locking the plug against movement, and a spreader formed upon said ring and being extended beneath the plug.

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

RICHARD V. LEE.

Witnesses:

C. W. CROUCH,

W. H. JOHNSTON.