

No. 682,060.

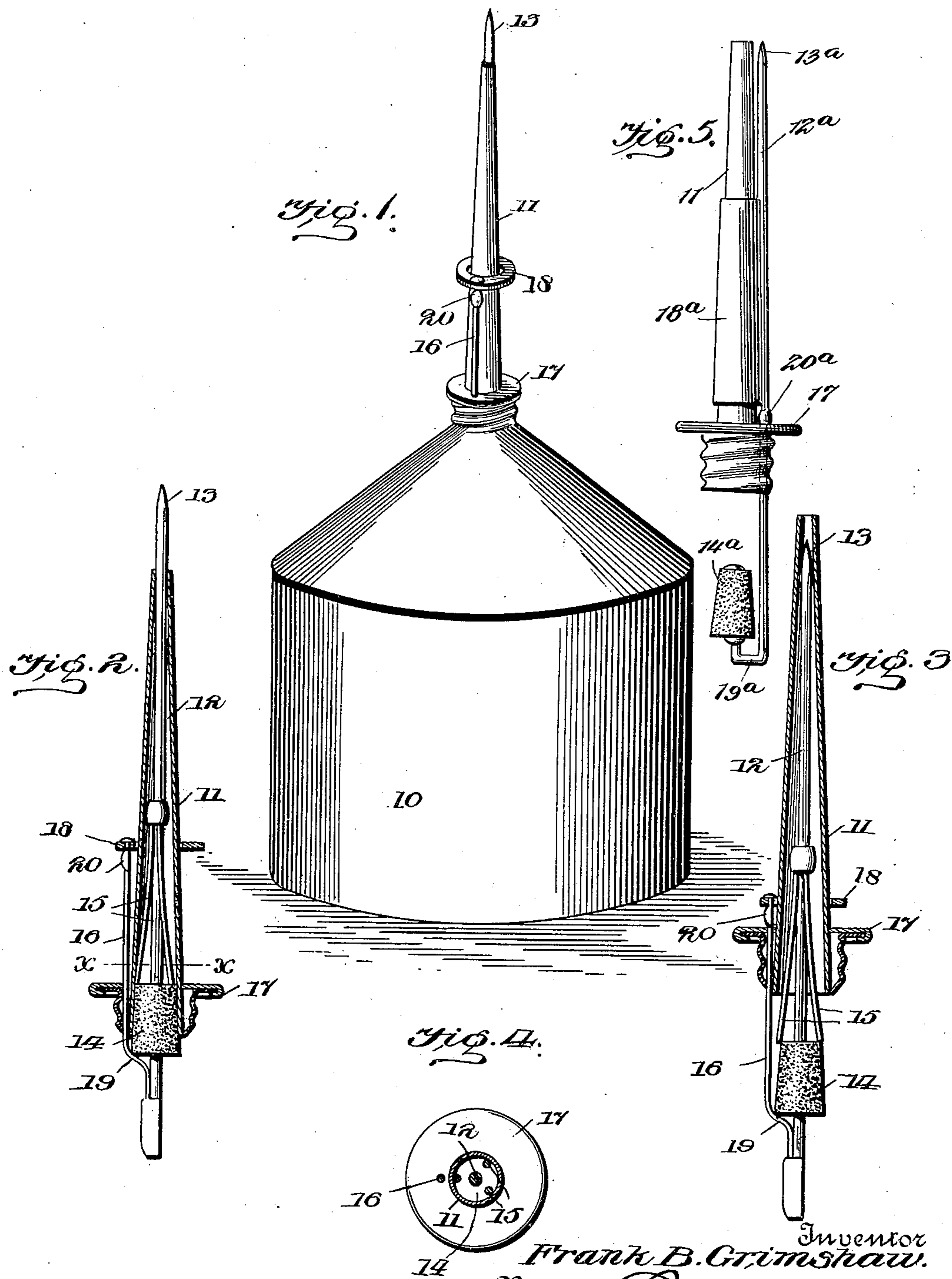
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F. B. GRIMSHAW.

OIL CAN.

(Application filed Feb. 14, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 682,060, dated September 3, 1901.

Application filed February 14, 1901. Serial No. 47,297. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK B. GRIMSHAW, a citizen of the United States, residing at Clark, in the county of Clark and State of South Dakota, have invented a new and useful Oil-Can, of which the following is a specification.

In lubricating journals of machinery it is usually necessary to first clean the oil-hole of the dust and dirt which has accumulated and incorporated with the oil into a hardened mass that fills said hole and prevents the ingress of the lubricant to the bearing. Unless the workman has some instrument with him or there is some article conveniently at hand time is lost in looking for a device that is suitable for removing this obstruction. The present invention aims to overcome this difficulty by providing upon the oil-can a novel device which may be used for this purpose, and thus provide an article which is always at hand and is not liable to be lost or misplaced.

More particularly the object of the invention is to provide an instrument of this character which is attached to the can and can be moved to an operative or an inoperative position. When in the former position, it is held rigidly in place and at the same time cuts off the flow of the lubricant from the can, and thus prevents waste and dripping. When in its inoperative position, it is completely out of the way of the operator and permits the ready passage of the lubricant through the spout.

To the accomplishment of these and other objects the construction set forth in the following specification and shown in the accompanying drawings is preferred; but it will be understood that this invention is open to change and modification within the scope of the claims.

In the drawings which form a part of this specification, Figure 1 is a perspective view of an oil-can embodying the present invention. Fig. 2 is a longitudinal sectional view of the spout thereof and showing the cleaning device in operative position. Fig. 3 is a view similar to Fig. 2, but illustrating the position of the cleaning device when moved to an inoperative position. Fig. 4 is a cross-section on the line X X of Fig. 2. Fig. 5 is a side elevation of a slightly-modified form of construction.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

For the purpose of illustrating the application and operation of the improvement a well-known form of oil-can is shown, comprising a body 10 and a removable tapering spout 11, having a screw-threaded connection with the body. It will be understood that this construction may be varied as desired. To the spout 11 is secured the cleaning device. In the construction shown this device is constructed substantially as follows: A cleaner-rod 12 is mounted longitudinally within the tapering spout 11 and is adapted to be moved so that its outer end, which is preferably pointed, as at 13, will be projected from the end of said spout. This rod is preferably of the same diameter as the bore of the spout at its upper edge, so that when it is projected it will close the opening and will also be rigidly held against independent lateral movement within the spout. A plug-valve 14 is secured to the inner end of the cleaner-rod and is adapted to close the inner end of the spout when the rod is moved to its outer position. In order to prevent the end of said valve from engaging the inner end edge of the spout, a plurality of guide-arms 15 are secured to the cleaner-rod and are arranged in divergent relation, with their outer ends disposed contiguous to the edge of the plug. This construction insures the proper insertion of the plug into the spout.

To provide for the manipulation of the cleaner-rod 12, an operating-rod 16 is secured to the lower end thereof and passes through an opening in the usual stop-flange 17 of the spout. The outer end of this operating-rod is fastened to an adjusting-collar 18, that surrounds and is slidable upon the spout. The inner portion of the operating-rod is offset, as at 19, and forms a bearing against which the plug 14 rests, whereby said plug is held against longitudinal movement upon the cleaner-rod. A small plug 20 is also secured to the outer portion of the operating-rod and is arranged to close the opening in the stop-flange to prevent the escape of the oil there-through and also to form a stop to space the adjusting-collar from the stop-flange, so that it may be easily grasped.

The operation of the device will be obvious.

When the can is not in use, the cleaner-rod is arranged in its projected position. The spout will therefore be entirely closed and all dust and dirt excluded from its interior and from the interior of the body. When it is desired to lubricate a journal, the oil-hole must first be cleaned. This can be easily accomplished by means of the projecting end of the cleaner-rod, which can be held in its exposed position by grasping the adjusting-collar 18. It is furthermore held against lateral movement because of its snug fit in the upper end of the spout and by the plug in the lower end. Furthermore, no oil can pass through the spout while the rod is projecting therefrom. After the oil-hole has been thoroughly cleaned the adjusting-collar is moved down the spout, consequently moving the cleaning-rod inwardly until its outer end is housed within the spout. A free passage-way will thus be opened through the spout, through which the lubricant may freely pass.

In Fig. 5 is illustrated a slightly different form of construction. In this modification the cleaner-rod 12<sup>a</sup> is slidably mounted on the exterior face of the spout 11 and passing through the rim 17 is provided at its inner end with an offset portion 19<sup>a</sup>, which carries the plug 14<sup>a</sup>. An operating-sleeve 18<sup>a</sup> surrounds the spout 11 and is secured to the cleaner-rod 12<sup>a</sup>, said rod being provided with the sharpened end 13<sup>a</sup> and the spacing-plug 20<sup>a</sup>, as in the above-described construction. There are certain important advantages for this construction. In the first place a device is provided by means of which the oil-hole can be readily cleaned and when in operative position the flow of lubricant is cut off. Furthermore, the operator can positively hold the device in operative position and prevent its being forced inward and permitting the escape of the oil. It will also be observed that the cleaner-rod will keep the passage-way through the spout open and prevent the oil gumming and clogging therein.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an oil-can, the combination with a spout having a stop-flange, of a cleaner-rod located longitudinally of the spout and arranged to have its outer end projected beyond the end of the same, a plug-valve arranged to close the passage-way at the inner end of the spout when the rod is in projected position, an operating-rod passing through

the flange of the spout and connected to the plug, said rod being provided with an operating-handle, and a plug-valve located upon the exterior portion of the operating-rod between the handle and the flange of the spout, the said valve being arranged to close the opening through which the operating-rod passes and also forming a stop to space the operating-handle from the flange.

2. In an oil-can, the combination with a spout having a stop-flange, of a cleaner-rod slidably mounted longitudinally within the spout and arranged to have its outer end projected beyond the end of the same, a plug-valve arranged to close the passage-way at the inner end of the spout when the rod is in projected position, an operating-handle located on the exterior of the spout, an operating-rod connected to the handle and passing through the stop-flange of the spout, said rod being connected to the plug-valve, and a stop secured to the exterior of the operating-rod to limit the inward movement of the same and space the operating-handle from the stop-flange.

3. In an oil-can, the combination with a spout having a stop-flange, of a cleaner-rod slidably mounted within the spout and arranged to have its outer end projected from the same, an operating-rod connected to the inner end of the cleaner-rod and passing through the stop-flange of the spout, said operating-rod being provided at its outer end with an adjusting-collar that surrounds and is slidable upon the spout, a plug arranged upon the outer portion of the operating-rod and arranged to close the opening in the stop-flange of the spout through which the operating-rod passes, said plug also forming a stop to space the adjusting-collar from the stop-flange.

4. In an oil-can, the combination with a tapering spout having a stop-flange, of a cleaner-rod slidably mounted within the spout and arranged to have its outer end projected from or housed within the same, said rod when in its projected position closing the outer end of the spout, a plug secured to the inner portion of the rod and arranged to close the inner end of the passage-way through the spout when the rod is in its projected position, guide-arms secured at one end of the rod and having their opposite ends arranged contiguous to the end edge of the plug, an operating-rod secured to the inner end of the cleaner-rod and passing through the stop-flange of the spout, and an adjusting-collar secured to the outer end of the operating-rod and surrounding the spout.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK B. GRIMSHAW.

Witnesses:

S. N. BROWN,  
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