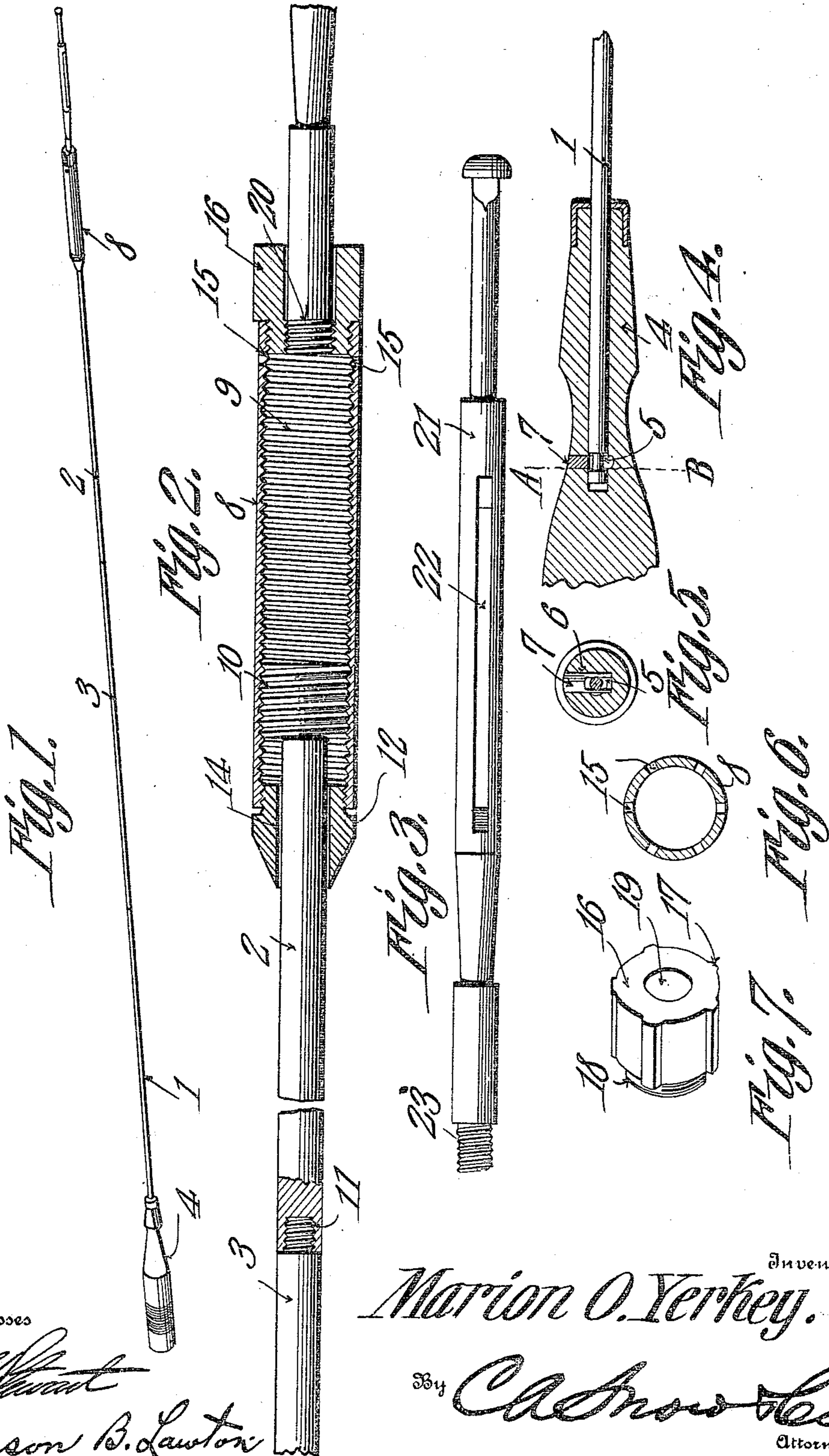


M. O. YERKEY.  
GUN CLEANER.

APPLICATION FILED FEB. 25, 1910.

959,680.

Patented May 31, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

MARION O. YERKEY, OF WESTON, WEST VIRGINIA.

GUN-CLEANER.

959,680.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed February 25, 1910. Serial No. 545,913.

*To all whom it may concern:*

Be it known that I, MARION O. YERKEY, a citizen of the United States, residing at Weston, in the county of Lewis and State of West Virginia, have invented a new and useful Gun-Cleaner, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form of a device of the class above specified which shall be inexpensive to manufacture, facile in operation and devoid of complicated parts; specifically, the provision of an oil cup adapted to be assembled with a cleaning rod for a gun, the said cup being arranged to engage the rifling of a firearm, the movement of the cup in the rifling producing a discharge of lubricant from the cup as it moves in the rifling; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts, hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the device, it being understood that within the scope of what hereinafter is thus claimed, divers changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows my invention in perspective; Fig. 2 is a vertical longitudinal section of the grease cup; Fig. 3 is a side elevation of one form of attrition member adapted to be assembled with the grease cup; Fig. 4 is a vertical longitudinal section of the handle, parts being broken away; Fig. 5 is a vertical transverse section on the line A—B of Fig. 4; Fig. 6 is a vertical transverse section of the oil cup, the cutting plane being passed through the ports in the oil cup; and Fig. 7 is a detail perspective of the plug which is mounted in one end of the oil cup.

In carrying out my invention I provide, primarily, a plunger which, as shown in Fig. 1, comprises a section 1 which is assembled

with the handle, and a section 2 which is assembled with the grease cup. Between the sections 1 and 2 may be introduced any number of intermediate sections 3, so that the plunger may be lengthened or shortened to conform to the length of the barrel of the arm. These sections 1, 2 and 3 are threaded to engage each other, as denoted by the numeral 11 in Fig. 2, further description of so common an expedient being considered unnecessary.

I further provide a handle 4 having in one of its terminals an axial bore in which is journaled for rotation one terminal of the section 1. Near to the end of the rod which is mounted in the handle 4, the said rod is diminished in diameter, as denoted by the numeral 5, and the handle 4 is provided with a radial channel 6 crossing the opening in the handle in which the section 1 is journaled for rotation. A pin 7 is introduced into the channel 6 and this pin, as clearly shown in Figs. 4 and 5, is provided at its lower extremity with bifurcating arms which embrace the diminished portion 5 of the section 1, retaining the said section 1 against withdrawal from the handle 4, yet without interfering with its rotation in said handle.

I further provide a tube 8 which constitutes the grease cup of the device. This tube 8 is internally threaded from end to end, as denoted by the numeral 9. Rigidly assembled in any suitable manner with one end of the section 2 is a head 10 which is threaded to engage the threads 9 of the tube 8, the said head constituting a piston adapted to be advanced by rotation in the grease cup 8. The section 2 and the head 10 may be briefly denoted a supporting member for the grease cup 8. One end of the grease cup 8 carries a collar 12 which is threaded to engage the interior threads 9 of the grease cup. This collar 12 has an axial bore 14 in which is slidably mounted the section 2, the said collar serving to maintain the alinement of the section 2 with respect to the grease cup 8 and to prevent undue strains upon the head 10 caused by the lateral movement of the section 2. The grease cup 8 adjacent the end remote from the collar 12 is provided with a plurality of ports 15 in its wall, the same being shown in Fig. 2 and with more particularity in Fig. 6. The end of the grease cup adjacent to ports 15 carries a plug 16 having a screw neck 18 which is threaded to

engage the interior threads 9 of the grease cup, the screw 18 being of slightly less diameter than the body of the plug; so that a shoulder is formed adapted to engage the end of the grease cup when the plug 16 is screwed home, as shown in Fig. 2. The exterior of the plug 16 carries a plurality of ribs 17 which are adapted to register in the rifling of a firearm. It is to be understood that the number and shape of these ribs 17 and their positions upon the exterior of the plug will be determined by the character of the rifling of the firearm with which the device is to be used. This plug 16 should be fashioned from soft material so that it may travel the rifling of the arm without injuring the same. The plug 16 is provided with an axial bore 19 which throughout a portion of its length is threaded, as denoted by the numeral 20. In this axial bore 19 of the plug may be removably mounted any of the attrition elements which commonly form a part of a gun cleaning outfit. A rod 21, shown most clearly in Fig. 3, may constitute one of these attrition elements. The rod 21 is provided with a threaded shank 23 adapted to engage upon rotation the threads 20 of the bore of the plug, and the said rod may be provided with a longitudinally disposed slot 22 through which may be passed a rag, the ends of which may be permitted to extend rearward, covering the ribs 17 and the plug 16 and extending beyond the ports 15 in the grease cup. This application of a cleaning rag to a slotted rod is an expedient well known to hunters and dealers in firearms and it has not been considered necessary to show the rag applied to the device in the drawings.

Supposing the device to be assembled, as shown in Figs. 1 and 2, its operation is as follows: The space between the piston 10 and the plug 16 is filled with any approved lubricant, preferably a somewhat heavy grease. A cleaning rag is then inserted through the slot 22 in the member 1 and allowed to extend rearward covering, if desired, the ribs 17 of the plug and the ports 15 in the grease cup. The device is then introduced into the bore of a rifle, the ribs 17 engaging the rifling. By means of the plunger comprising the sections 1, 2 and 3 the oil cup may be forced to travel the bore of the arm, the ribs 17 following the rifling and causing the oil cup to rotate in the same manner as a projectile would rotate if following the rifling. This rotation of the grease cup causes the piston 10 to advance, gradually forcing the lubricant out of the ports 15 in the grease cup. It may be noted that the handle 4 is rotatably mounted upon the plunger, the function of this rotatable handle being explained hereinafter.

When the device is used as hereinbefore described, the piston 10 should advance in

the grease cup 8 and in order that the handle sections 1, 2 and 3 may not rotate in the handle 4, thereby permitting the handle sections and the grease cup from rotating as an entity without advancing the piston, the fore finger may be extended beyond the handle 4 upon the section 1 to prevent the rotation of the several handle sections with the grease cup should the friction between the piston 10 and the grease cup 8 be sufficient to overcome the friction between the handle 4 and the section 1.

The foregoing is but one of the many applications to which my invention may be put. For example, the piston 10 may be rotated into abutment with the collar 12, binding the grease cup 8 against independent movement. In such case a common wire scratch brush may replace the element 22 and the device be used as a common rigid cleaning rod. If desired, the element 21 may be removed and a rag placed over the ribs 17. In such case, the piston 10 being free to move in the grease cup 8, one of the several handle sections may be grasped and the device introduced into the rifling of a gun and reciprocated therein, the grease cup being filled with a lubricant or not, as may be desired. Likewise, the piston 10 may be rotated into binding relation with the collar 12, so that the grease cup may have no independent movement, the device being introduced into the bore of a gun and reciprocated therein, the pivotal connection between the handle section 1 and the handle 4 permitting the ribs 17 to traverse the rifling. When assembled in this manner it will be seen that the grease cup, whether provided with the attrition member or not, will traverse the rifling without discharging any of the lubricant.

The device may readily be separated into its component parts and housed in small compass in the pocket of the operator.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:—

1. A device of the class described comprising a cup; and a member connected with the cup for moving the cup along the bore of a fire arm, the said member being movable within the contour of the cup to displace the contents thereof.

2. A device of the class described comprising a supporting member; a cup rotatably mounted upon the supporting member; the cup having an element to engage the rifling of a fire arm; and the supporting member and the cup having interengaging elements to advance the supporting member within the cup upon a rotation of the cup.

3. A device of the class described comprising an internally threaded cup; a supporting member threaded to engage the cup and movable within the cup; and means

upon the cup to engage the rifling of a fire arm.

4. A device of the class described comprising an internally threaded grease cup provided with a port; a plug removably mounted in the end of the grease cup and rigidly assembled therewith, the said plug having ribs to engage the rifling of a firearm; a piston threaded to engage the interior of the cup and to travel therein; and a plunger rigidly assembled with the piston.

5. A device of the class described comprising a grease cup provided with a port; a plug removably mounted in the end of the cup and rigidly assembled therewith, the said plug being provided with ribs to engage the rifling of a firearm, and with an axial bore; attrition means removably mounted in the bore of the plug; and a plunger for advancing the plug in the rifling, the plunger being rotatably mounted in the cup and being movable to force a lubricant through the port upon the movement of the plug in the rifling.

6. A device of the class described comprising an internally threaded grease cup provided with a port; a plug removably mounted in the end of the cup and rigidly assembled therewith, the said plug being provided with ribs to engage the rifling of a firearm, and with an axial bore; attrition means removably mounted in the bore of the plug; a piston threaded to engage the interior of the cup and to travel therein; and a plunger rigidly assembled with the piston.

7. A device of the class described comprising a grease cup having an element to follow the rifling of a firearm; a plunger for advancing the cup in the rifling, the plunger being rotatably mounted in the cup and being movable to force a lubricant from the cup upon the movement of the cup in the rifling; and means for locking the plunger against rotation in the cup.

8. A device of the class described comprising an internally threaded grease cup provided with a port and arranged to follow the rifling of a firearm; a piston threaded to engage the interior of the cup and to travel therein, the piston being arranged to engage the end of the cup against rotation; and a plunger rigidly assembled with the piston.

9. A device of the class described comprising an internally threaded tube arranged to follow the rifling of a firearm; a collar mounted in the end of the tube; a head threaded to engage the interior of the tube and rotatably mounted therein, the head being arranged to engage the collar against rotation; and a plunger slidably mounted in the collar and rigidly assembled with the head.

10. A device of the class described comprising an internally threaded tube arranged to follow the rifling of a firearm; a collar mounted in the end of the tube; a head threaded to engage the interior of the tube and rotatably mounted therein, the said head being arranged to engage the collar against rotation; a plunger slidably mounted in the collar and rigidly assembled with the head; and a handle rotatably mounted upon the plunger.

11. A device of the class described comprising an internally threaded tube; a plug mounted in one end of the tube and rigidly assembled therewith, the plug being provided with ribs to follow the rifling of a firearm; a collar mounted in the end of the tube; a head threaded to engage the interior of the tube and rotatably mounted therein, the head being arranged to engage the collar against rotation; and a plunger slidably mounted in the collar and rigidly assembled with the head.

12. A device of the class described comprising an internally threaded tube; a plug mounted in one end of the tube and rigidly assembled therewith, the plug being provided with ribs to follow the rifling of a firearm; a collar mounted in the end of the tube; a head threaded to engage the interior of the tube and rotatably mounted therein, the head being arranged to engage the collar against rotation; a plunger slidably mounted in the collar and rigidly assembled with the head; and a handle rotatably mounted upon the plunger.

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

MARION O. YERKEY.

Witnesses:

E. E. WHITE,  
ALBERT BUNNER.