I. L. REEVES.

GUN CLEANER AND PROTECTIVE DEVICE.

APPLICATION FILED JULY 12, 1912.

1,164,665.

Patented Dec. 21, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

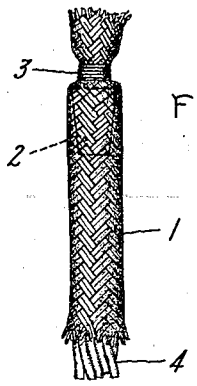


Fig. 2.

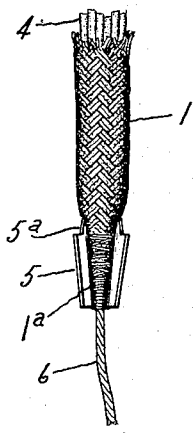
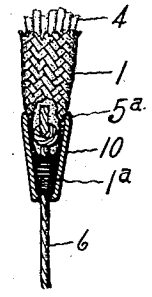


Fig. 3.



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2 SHEETS—SHEET 2.

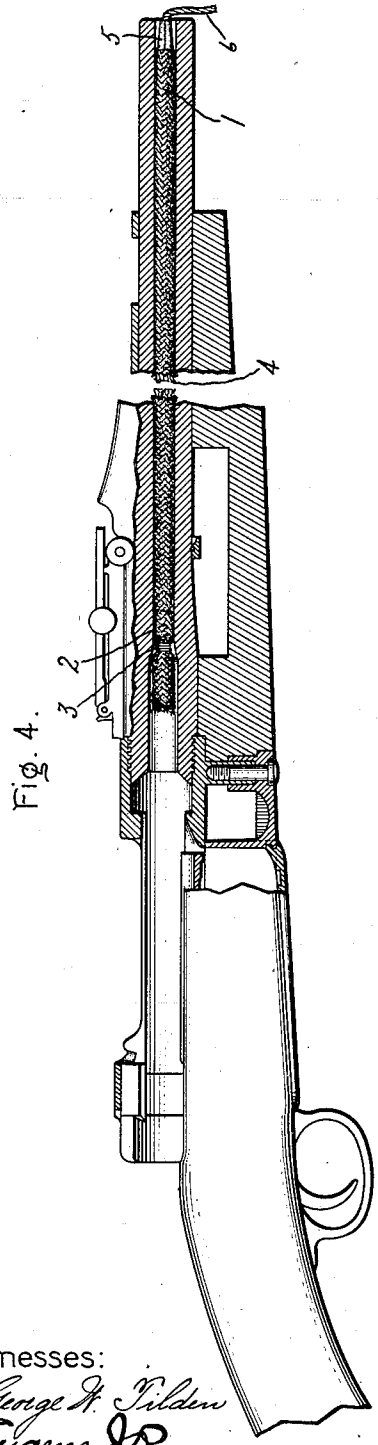


Fig. 4.

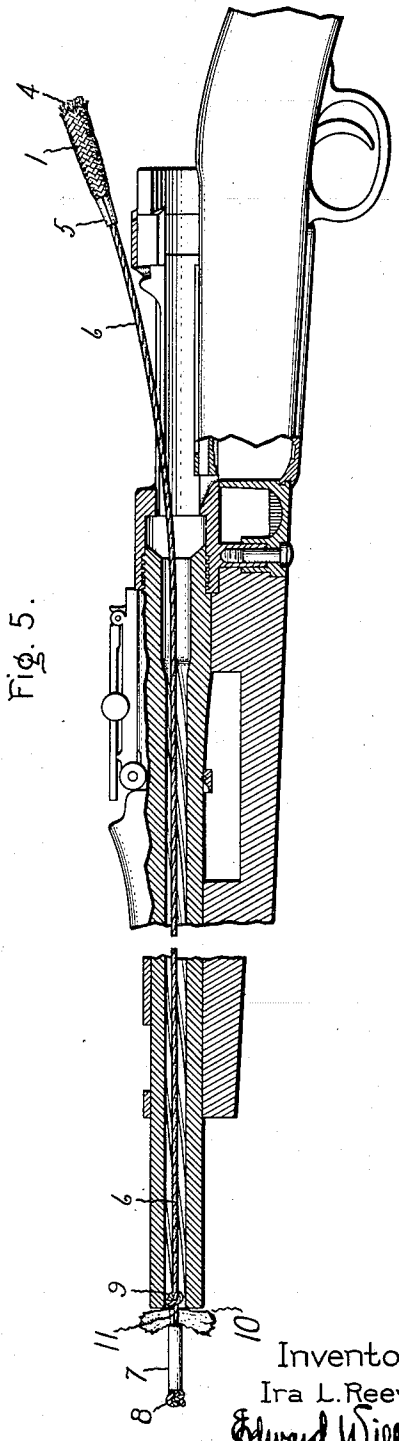


Fig. 5.

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UNITED STATES PATENT OFFICE.

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GUN CLEANER AND PROTECTIVE DEVICE.

1,164,665. Specification of Letters Patent. Patented Dec. 21, 1915.

Application filed July 12, 1912. Serial No. 709,068.

To all whom it may concern:

Be it known that I, IRA L. REEVES, a citizen of the United States, residing at South Natick, county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Gun Cleaner and Protective Devices, of which the following is a specification.

My invention relates to devices for protecting the barrel bore of small arms and the like when the latter are not in use from the deleterious effects of the atmosphere and the products of combustion of powder, and to devices which are also adapted to clean the barrel bore of such arms.

The object of my invention is generally to provide a device that is adapted to be readily inserted in the barrels of such arms and which may be conveniently contained in such barrels at all times when the fire arms are not in use.

Again the object of my invention is further to provide a device which is adapted to retain a rust preventing substance, such as oil, in immediate contact with every part of the bore of the barrel, including the rifling, when the fire arm is not in use, and which is also adapted to prevent the leakage of such preventing substance.

Another object of my invention is to provide this device with a convenient ready means for cleaning the bore of the barrel.

In carrying out my invention I provide a wick-like unitary structure of circular cross-section, such cross-section being somewhat greater than the cross-section of the bore of the gun barrel. This wick-like structure is about the same length as the gun barrel and is provided at one end with a ferrule to which is attached a manipulating cord. The plug and ferrule ends of the wick are treated with any substance impervious to oil, as for example paraffin wax, which prevents the creeping of the oil, with which the main portion of the wick itself is saturated. The free end of the cord is provided with a loop and a cooperating sleeve for securing a cleaning rag. This sleeve also serves as a weight and guide in introducing the cord and wick into the barrel of the fire-arm.

The novel features that I believe to be characteristic of my invention will be definitely indicated in the claims appended hereto; the features of construction and mode of operation will be understood by reference to the following description taken in connection with accompanying drawings which show the preferred embodiments of my invention and in which—

Figure 1 is a side elevation of the device in its preferred form partly broken away to show the soft core; Fig. 2 is a similar view of the cord end showing the ferrule before it is compressed upon the end of the device; Fig. 3 is a partial section showing the method of securing the cord to the device; Fig. 4 is a partial horizontal section of a small arm with the device within the barrel, and Fig. 5 is a similar view showing the device removed and the cleaning rag about to be drawn through the barrel bore to remove any excess of the cleaning agent or products of combustion of powder.

The long sheath or braided cover 1 is of textile material woven or braided about a soft textile core 4 of cotton strands or similar material, at one end of which is placed a cork 2 within the sheath whose end has been impregnated with wax or some other material that is not soluble in oil. The cork being an expansive or resilient medium accommodates itself to the shape of the interior of the article to which it is applied, and is prevented from being separated from the sheath by the twine 3 that is tied or otherwise fastened to the end thereof. This cork and the material of the sheath immediately surrounding it being also treated with a material such as wax prevents the leakage of oil or other fluid past the end thereof when the device is in place in the bore of a gun, as shown in Fig. 4. This device when in the bore of a gun barrel permits a film of the lubricant or cleaning fluid to come in contact with the interior of the barrel as the body of the device contains a lubricant before being inserted in the barrel of the gun, thus preventing the collection of moisture therein. The split or otherwise constructed ferrule 5 is shown in its open condition in Fig. 2, and in its closed or compressed condition in Fig. 1. It is applied to the end of the device to which the cord 6 is attached after this end of the device has been drawn down to a taper by the winding of the twine 1^a, as clearly shown in Fig. 2. In addition to this means of holding the cord and the body in good working relation, prongs 5^a are bent into the

sheath and core. This ferrule is of a pliant material, such as brass, and may be easily removed for the replacement of a new string if desired. The ferrule end of the article and part of the pull cord is treated with wax or similar material that is not soluble in oil.

Mounted upon the cord is a weight 7 to assist in entering the device and its coöperating parts within the gun barrel bore to be protected. The knots 8 and 9 acting as stops prevent the weight 7 from becoming detached from the device. Furthermore the weight 7 is mounted loosely upon the looped end of the cord between the knots 8 and 9, and of such dimension as to allow for the insertion of a piece of cloth at 11 within the upper end of the loop to remove any excess of cleaning or anti-rust fluid from within the barrel bore should it be desirable. This is accomplished by passing the weight 7 into the breech of the gun, and allowing it to fall through the bore and out of the muzzle as shown in Fig. 5 where it is received by the operator who will then slide the weight away from the knot 9 of the looped end, and then separate the loop at 11 to insert the cloth 10. After the cloth is in the proper position it can be pulled through the barrel to remove the excess of lubricant or other foreign accumulations that are to be removed.

In accordance with the provisions of the patent statutes, I have described the principle of operation of my invention, together with the article which I now consider to represent the best embodiment thereof; but I desire to have it understood that the article shown is merely illustrative, and that the invention can be carried out by other equivalent means.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A gun cleaning and protecting device comprising an elastic and compressible body portion that fills the bore of the gun to prevent the admission of a deleterious agent thereto and provided with a fibrous surface to hold a cleaning or lubricating agent, and an end portion formed and treated to prevent the leakage of the agent from said bore.

2. A gun cleaning and protecting device comprising in a unitary structure a fibrous flexible body portion that fills the bore of the gun to prevent the admission of a deleterious agent thereto, a cleaning or lubricating agent carried by the body, and an end portion treated to prevent the leakage of the agent from said bore.

3. A gun cleaning and protecting device comprising a fibrous flexible body portion that fills the bore of the gun to prevent the admission of a deleterious agent thereto, a cleaning or lubricating agent carried by the body, and an elastic compressible member mounted in the end portion of the flexible body to prevent the leakage of the agent from said bore.

4. A gun cleaning and protecting device comprising in a unitary structure a fibrous flexible body portion that fills the bore of the gun to prevent the admission of a deleterious agent thereto and to hold a cleaning or lubricating agent, a treated end portion formed to prevent the leakage of the agent from said bore, a cord secured to the body, and a weight slidably mounted on the cord.

5. In a small arms barrel bore protecting means, a flexible body that prevents the admission of a deleterious agent thereto, an elastic compressible member mounted within one end of said body, a cord one end of which is secured within the body and the other end formed into a loop to receive a cleaning cloth, and a weight mounted upon the loop.

6. In a small arms barrel bore protecting and cleaning device, a woven or braided sheath, a soft core within the sheath, a resilient body secured within the sheath at one end, a cord secured to the device, a conical ferrule, and a weight secured to said cord.

7. In a small arms barrel bore protecting and cleaning device consisting of a woven or braided sheath, a soft core therefor, a resilient body secured within the sheath, a cord secured to the device, a conical ferrule for holding the cord and sheath in place, a loop at the opposite end thereof provided with stops, and a weight slidably mounted upon said loop and between the stops.

8. In a small arms barrel bore protecting and cleaning device, a woven or braided sheath, a soft core within the sheath, a cleaning agent carried by said device, a resilient body secured within the sheath, means for preventing leakage beyond the end thereof, cord secured to the device, and a weight secured to the cord.

9. A gun cleaning and protective device comprising a fibrous body portion which retains a cleaning or lubricating agent and an end portion treated with a material insoluble in said agent.

10. In a protective device for the bore of a gun, a fibrous body portion to hold a protective agent and an elastic compressible end portion treated with a material insoluble in the protective agent.

11. In a gun cleaning and protective device, a woven or braided sheath, a compressible core within the sheath, a cleaning or protective agent carried by said device, an end portion impregnated in a material insoluble in the cleaning or lubricating agent, a resilient body secured within the end portion, a cord, retaining means for securing the cord to the sheath, and a weight secured to the cord.

12. A gun cleaning and protective device

comprising in a unitary structure, a fibrous flexible body portion having a fibrous sheath which retains a cleaning or lubricating agent and having end portions treated with a material insoluble in said agent to retain the agent in the body portion.

13. A gun cleaning and protective device comprising a fibrous flexible body portion for retaining a cleaning or lubricating agent and having ends treated with a material insoluble in the cleaning or lubricating agent to prevent the leakage of the agent from the body portion.

In witness whereof I have hereunto set my hand this 27th day of June, 1912.

IRA L. REEVES.

Witnesses:
FORREST N. ADAMS,
L. I. SMITH.