

R. A. FESSENDEN.
MEANS FOR CLEANING GUNS.
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Fig. 3.

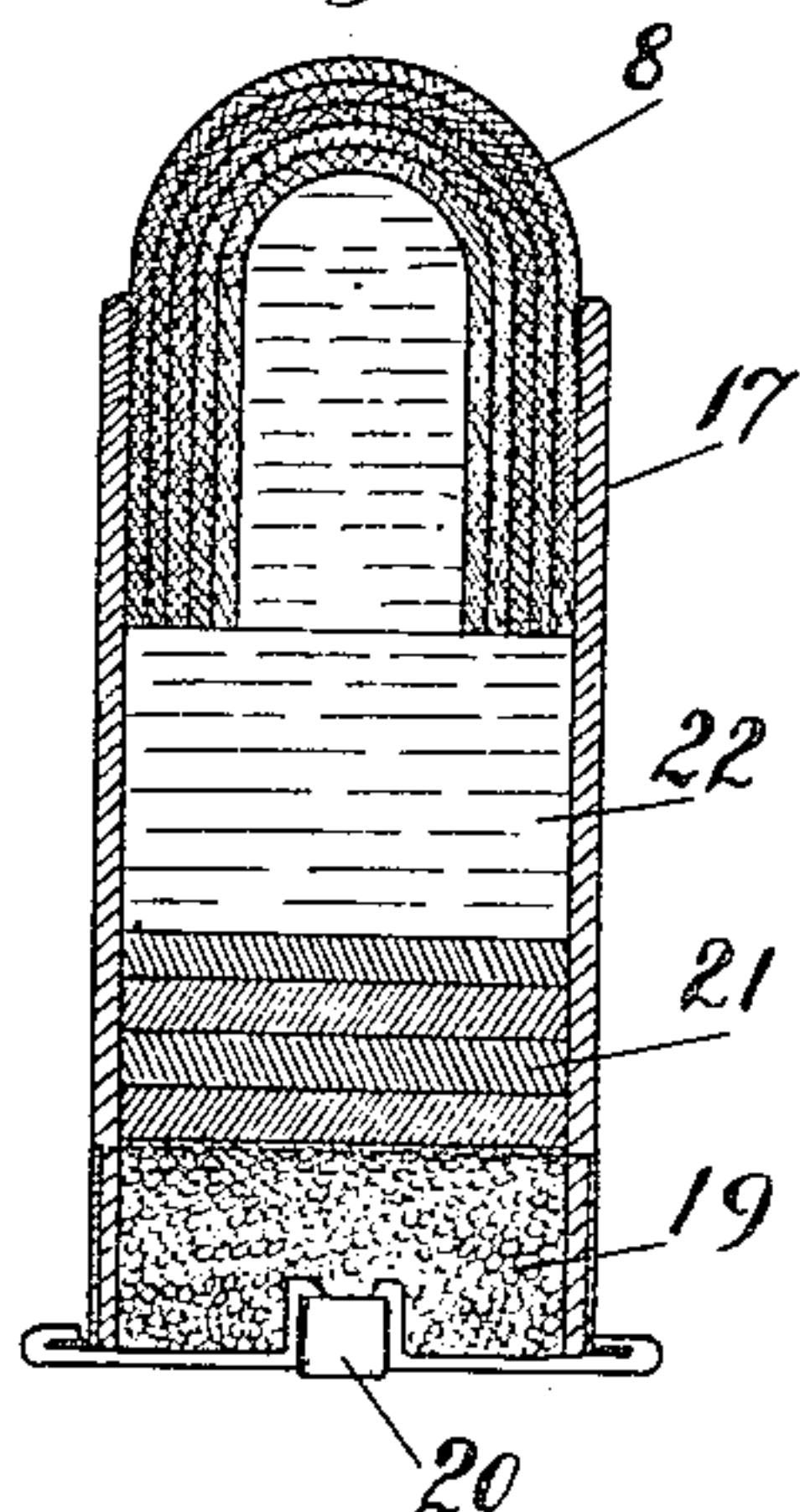


Fig. 4.

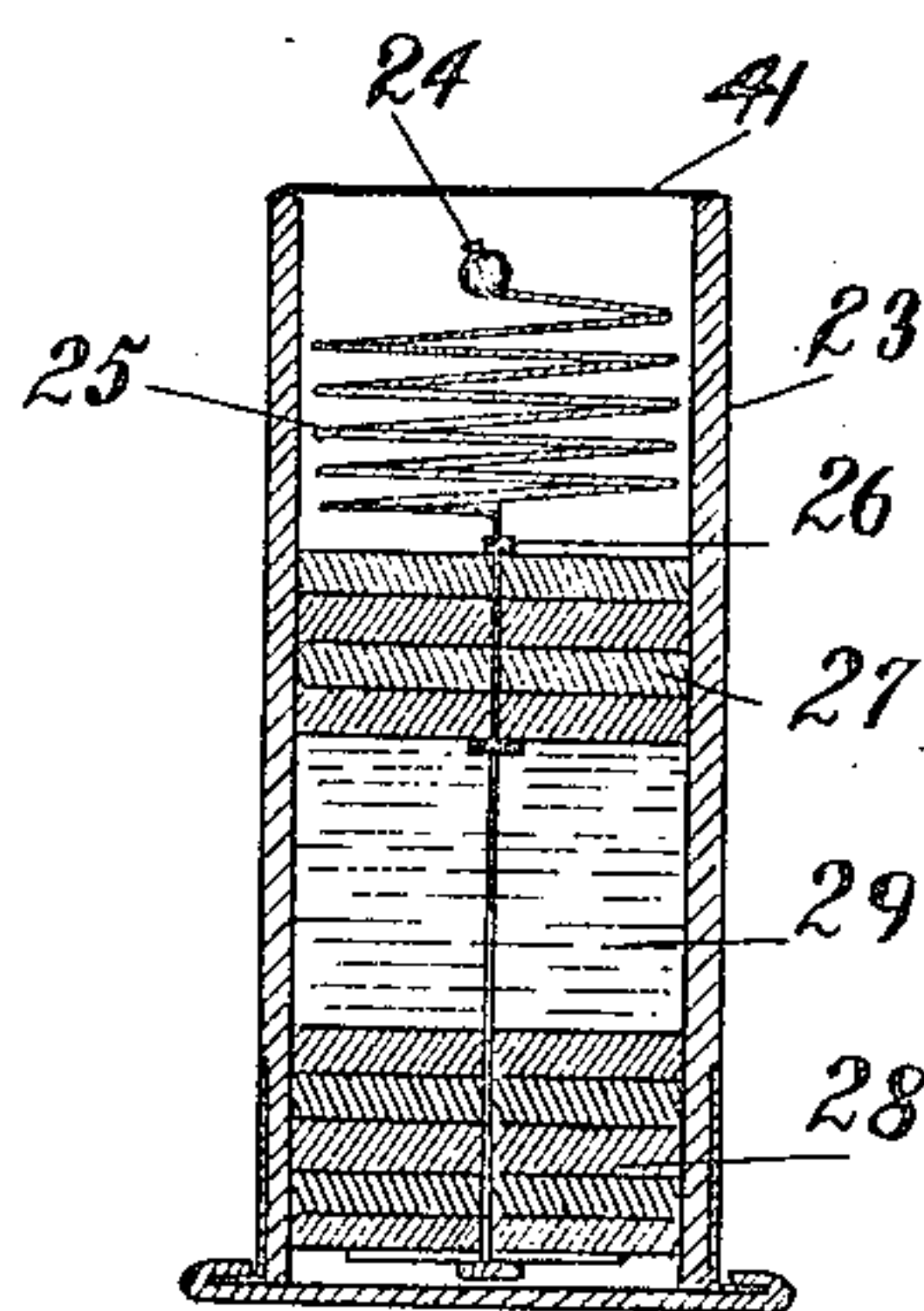


Fig. 5.

Fig. 1.

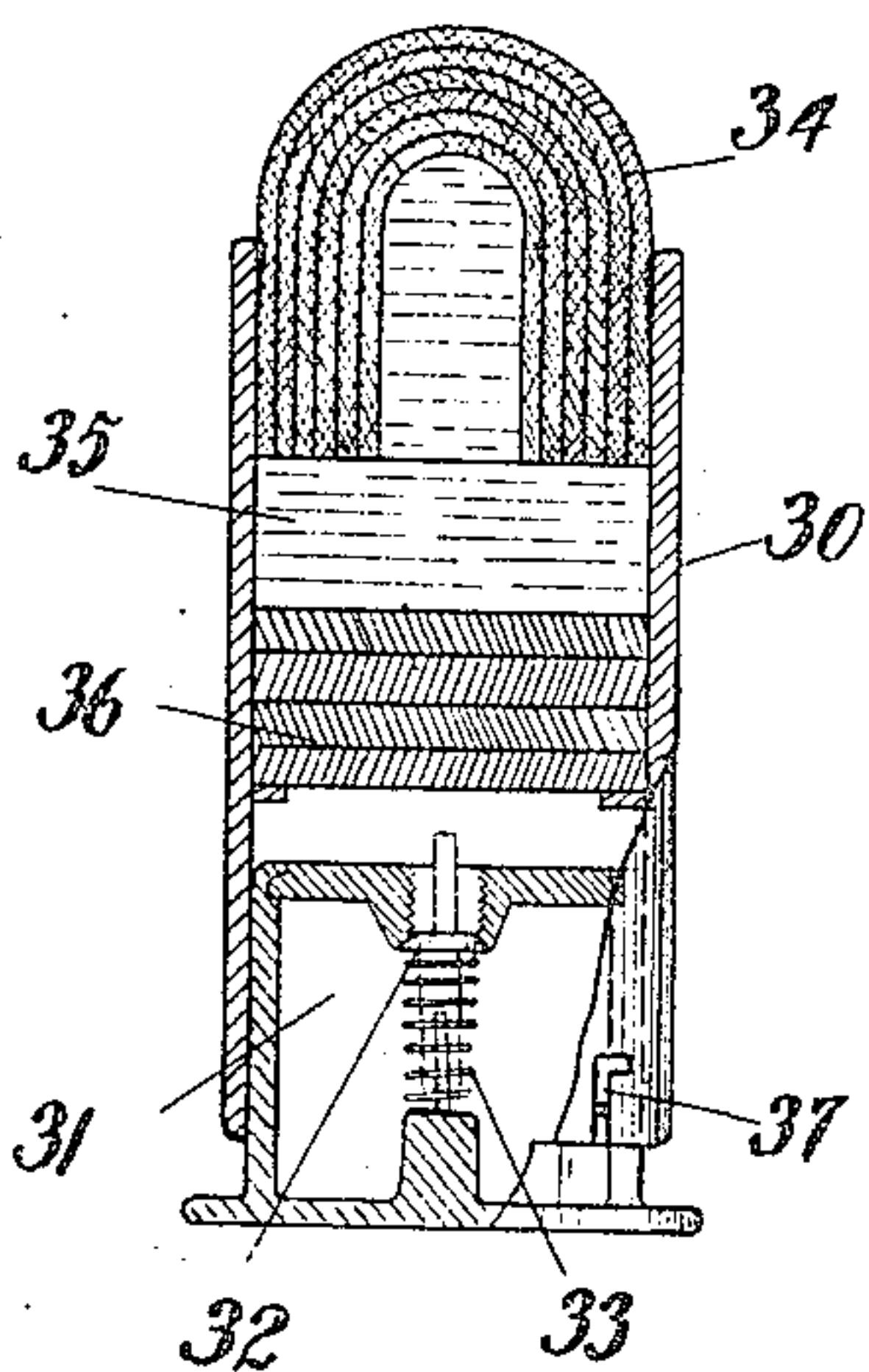
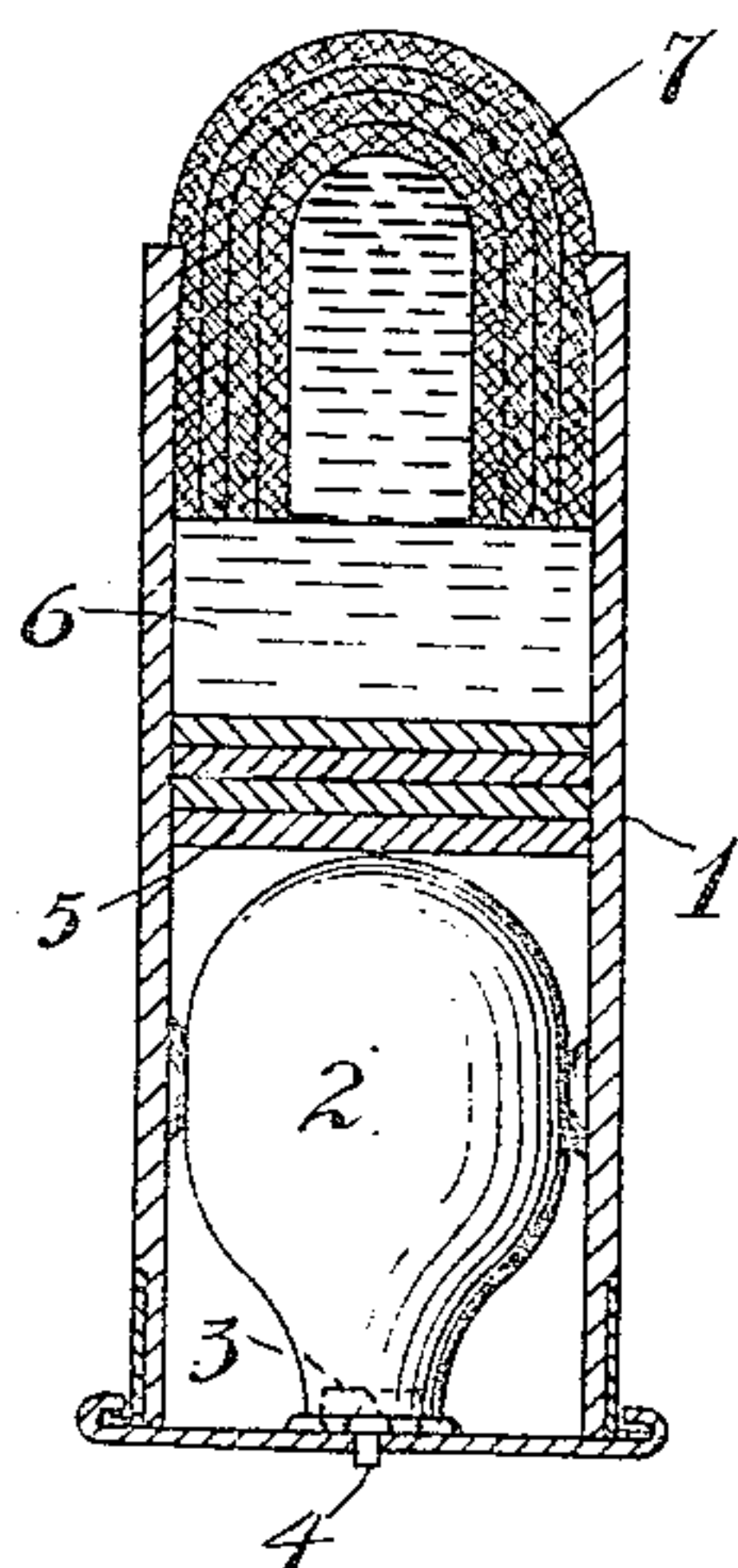
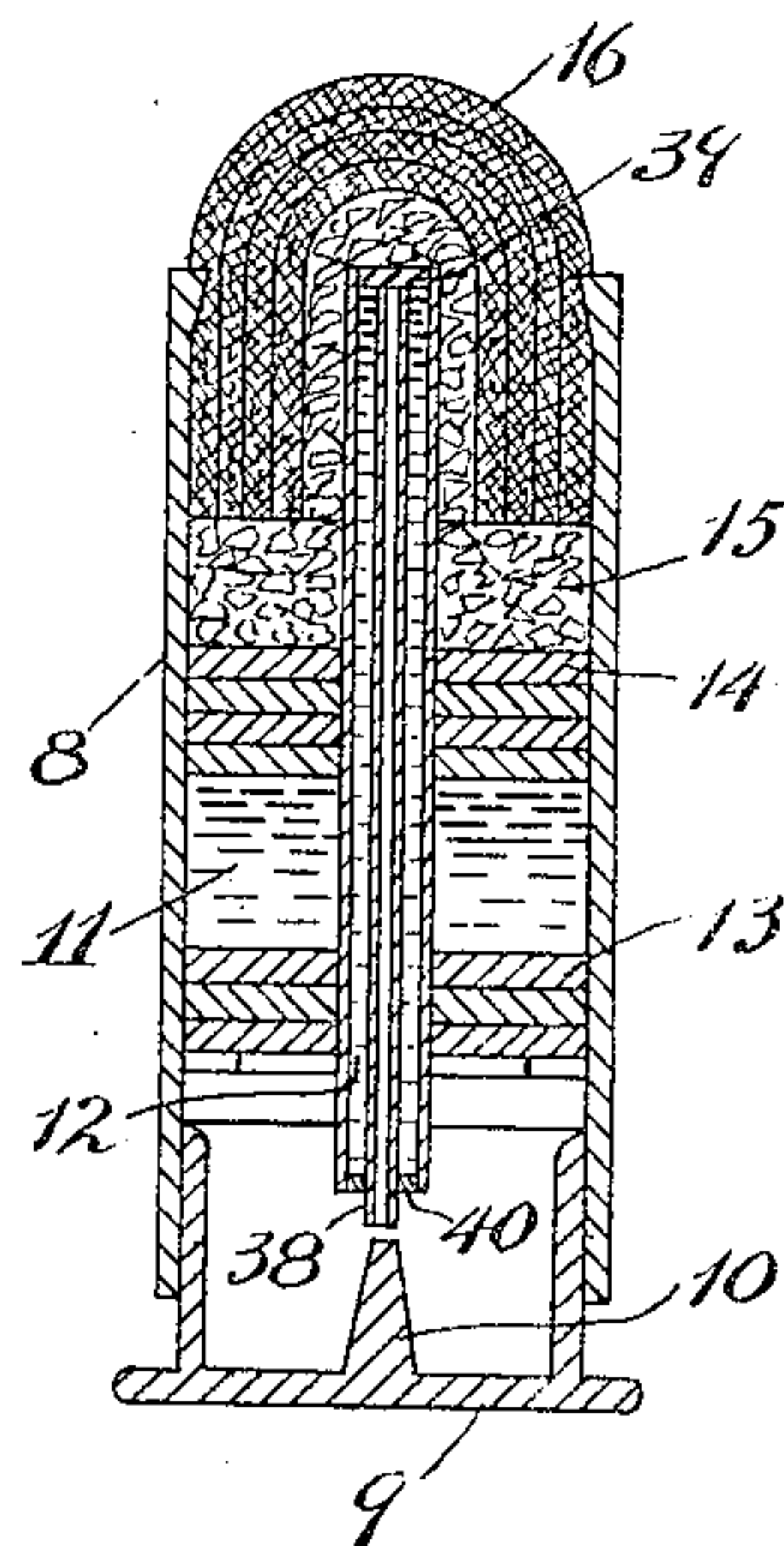


Fig. 2.



Witnesses

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MEANS FOR CLEANING GUNS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, REGINALD A. FESSENDEN, a citizen of the United States, residing at 1737 Riggs Place, Washington, in the District of Columbia, have invented or discovered certain new and useful Improvements in Means for Cleaning Guns, of which improvements the following is a specification.

The invention herein described relates to means for cleaning fire arms after they have been fouled by discharge.

Heretofore, it has been usual after firing guns to clean them by means of a rod carrying on its end cleaning implements. The cleaning implements have been more or less bulky and tedious and annoying to use and consequently guns are frequently left uncleaned until the inside of the gun becomes rusted and corroded.

The object of my invention is to secure an easier and simpler means of cleaning fire arms.

In the accompanying drawings forming a part of this specification Figure 1 is a cross sectional view showing a form of apparatus in which a compressed gas is used. Fig. 2 shows a cross sectional view of an apparatus in which the gas is generated at the time of use. Fig. 3 shows a cross sectional view in which an explosive compound is used. Fig. 4 shows a cross sectional view in which the device is manually operated. Fig. 5 shows a cross sectional view in which I show a second form of device using a compressed gas.

In the practice of the invention the cleaning implement is made in the form of a cartridge which is carried by the sportsman or soldier in the same manner as an ordinary cartridge and is inserted in the fire arm when it is desired to clean the same.

In Fig. 1, 1 is the shell containing a cylinder of compressed gas 2 sealed by the seal 3, said seal being adapted to be punched by a forward motion of the pin 4.

5 is one or more wads, 6 is a compound of any suitable form of lubricant and anti-corrosive grease, preferably a mixture of oleate of calcium and graphite. Oleate of calcium which is preferably made by shaking up slaked lime and water with sperm oil I have found to be a very admirable non-corrosive lubricant.

7 is a cleaning wad made in the shape of a bullet and preferably consisting of a cloth

impregnated with rouge or sand or similar detergent.

To use this form of cleaning cartridge the cartridge is inserted in the gun and the trigger pulled, thereby puncturing the seal 3 and causing the gas to escape and expand and drive out the cleaning bullet 7, the lubricant 6 and cleaning wad 5. Any suitable gas may be used, for example compressed nitrogen.

Another form in which a gas is used as the motive power is shown in Fig. 5. Here the gas is contained in a chamber 31, being pumped therein by an ordinary bicycle pump, which may be wound with copper wire to enable it to give pressures up to 150 pounds per square inch. 32 is a valve, 33 is a spring for holding the valve closed, 37 a locking pin and slot, 30 a tube forming a part of the shell but movable with reference to the chamber 31, 36 the cleaning wad, 35 the lubricant, 34 the cleaning bullet. In the operation of this device the cartridge is placed in the barrel of the gun. The barrel is then closed and in doing this the cleaning wad 36 is pressed against the valve pin 32, allowing the compressed gas to escape and propel the cleaning wad out of the barrel. The tube 30 cannot escape as it is held by the shoulder in the gun.

Fig. 2 shows a device in which the propelling power is generated by the action of a tube full of water 12 on a body of quick lime 15 or calcium carbide or hydrolith. 8 is a movable tube, 9 is the base of the shell, 10 is a pin fixed to the base of the shell, 12 a tube full of water, 38 a concentric tube, 39 and 40 are seals for sealing the tube 12, 13 and 14 are wads, 11 is the lubricant, 16 is the cleaning bullet. On placing this cartridge in the gun and closing the breech mechanism the pin 10 forces the small tube 38 forward, rupturing the seals 39 and 40 and the water comes into contact with the quick lime 15 and is turned into steam the steam furnishing the propulsive force, or hydrogen of the hydrolith.

In Fig. 3, 17 is the shell, 21 the cleaning wad, 22 is the lubricant, 8 the cleaning bullet, 19 a powder preferably containing a large proportion of an alkalin salt so that the products of its combustion will be alkaline rather than acid and 20 is a detonator. In this case the propulsive effect is furnished by the explosion of the powder 19.

In Fig. 4 the shell 23 contains the cleaning wads 28, the lubricant 29 and the scouring wads 27, the cord 25 and the small weight 24. The cleaning wads and scouring wads 5 are connected together by the rod 26 to which the cord 25 is fastened. In practice 41 is a paper cap formed of thin paper pasted over the end of the cleaning cartridge. In operation the paper cap 41 is 10 broken off and the cartridge is slipped into the gun. The gun is then inverted so that the small weight falls through it and the cord is then seized and the scouring wads, lubricant and cleaning wads are pulled 15 through the barrel.

By the use of this invention the matter of cleaning guns is very much simplified and the annoyance consequent thereto is done away with. All that it is necessary for the 20 sportsman or soldier to do is to take two or three cleaning cartridges, which can be loaded up at leisure or purchased ready loaded and when the time comes for cleaning the gun insert a cleaning cartridge.

25 What I claim is:

1. Means for cleaning gun-barrels, comprising a cartridge having a projectile or cleaning plug formed by a cleaning wad impregnated with a detergent, and a body 30 of non-corrosive lubricant behind said wad, the cartridge also containing means for forcing the projectile through a gun barrel; substantially as described.

2. Means for cleaning gun barrels, comprising a cartridge having a cleaning plug 35 or projectile formed by a bullet-shaped wad

of fibrous material carrying a detergent, and a body of non-corrosive lubricant behind the said wad, and means also contained within the cartridge for forcing it through a gun 40 barrel, substantially as described.

3. Means for cleaning gun barrels, comprising a cartridge having a cleaning plug or projectile formed by a bullet-shaped wad 45 of fibrous material carrying a detergent, a body of non-corrosive lubricant behind the said wad, a second wad behind said body of lubricant, and means also contained within the cartridge for forcing it through a gun barrel, substantially as described. 50

4. Means for cleaning guns, comprising a cartridge containing a cleaning plug, having an alkaline substance and a rust preventive substance, and means also contained within the cartridge for forcing it 55 through a gun barrel, such means being of a non-corrosive character, substantially as described.

5. Means for cleaning gun barrels comprising a cartridge containing a cleaning 60 plug, expansive means for forcing the plug through the barrel, and devices automatically operated by the closing of the gun breech for freeing the plug-forcing means.

Signed at Brant Rock in the county of 65 Plymouth and State of Mass. this 4th day of Oct. A. D. 1906.

REGINALD A. FESSENDEN.

Witnesses:

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