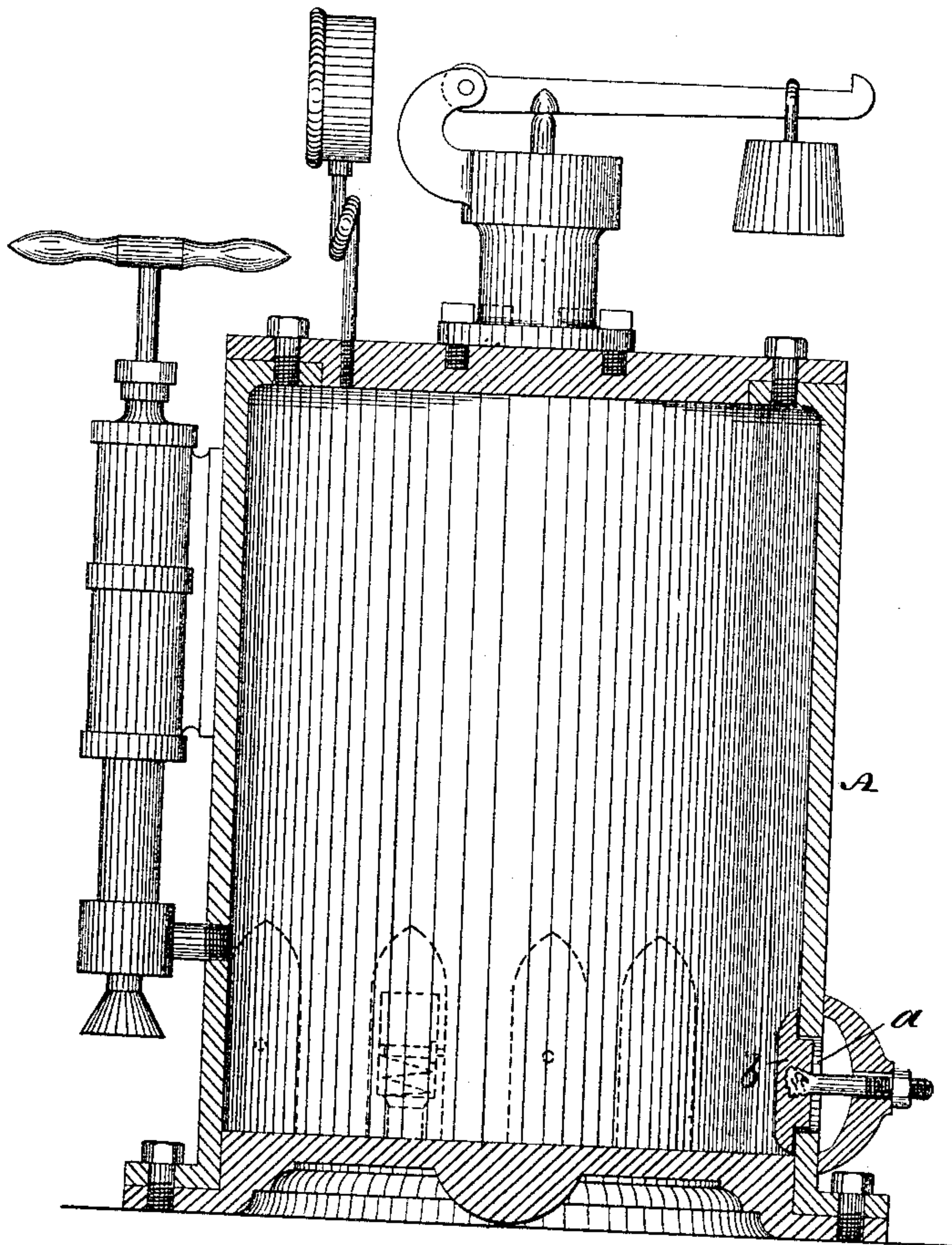


(No Model.)

W. T. CHAMBERLAIN.  
METHOD OF CHARGING AIR GUNS AND PROJECTILES.  
No. 279,540.  
Patented June 19, 1883.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM T. CHAMBERLAIN, OF NORWICH, CONNECTICUT, ASSIGNOR OF  
ONE-HALF TO BENJAMIN M. PRINCE, OF SAME PLACE.

## METHOD OF CHARGING AIR-GUNS AND PROJECTILES.

SPECIFICATION forming part of Letters Patent No. 279,540, dated June 19, 1883.

Application filed March 29, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. CHAMBERLAIN, a citizen of the United States, residing at Norwich, in the county of New London, State of Connecticut, have invented a new and useful Improvement in Charging Air-Operated Projectiles and Guns or Similar Weapons, which improvement is fully set forth in the following specification and accompanying drawing, in which the figure is a vertical section of apparatus for charging air-operated guns and projectiles embodying my invention.

The object of my invention is to dispense with gunpowder or other explosive for discharging or impelling a projectile. For this purpose I provide projectiles, fire-arms, guns, or other weapons with chambers to receive compressed air, and employ a receiver in which said projectiles or weapons are placed, and force into the same the compressed air which fills the chambers, thus charging the projectiles or weapons.

Referring to the drawings, A represents an air-tight receiver for compressed air, the same having a suitable air forcing or pumping apparatus, pressure-gage, &c. In the side of the receiver is a man-hole, *a*, having a suitable cover, *b*, for the introduction of projectiles, fire-arms, or weapons, both of the latter being provided with chambers, air-inlets, valves for closing said inlets, and means for liberating the compressed air, and forming the subject-matter of separate applications for Letters Patent. The cover *b* is removed and the projectiles or arms, or both, inserted into the receiver through the man-hole, after which the cover is reapplied and secured. Air is then forced into the receiver, and as the valves of the projectiles or arms are automatically opened by the pressure of the air in the receiver the compressed air fills the chambers of the projectiles or arms. The pressure of

air within the receiver is then reduced by discharge of air from the receiver through one of its pipes or by opening the man-hole, whereby the valves of the projectiles or arms close, after which the projectiles or arms are removed. A projectile is now fitted within a gun or other fire-arm having means for liberating the compressed air from the chamber at the rear of the projectile, whereby the projectile is forcibly discharged, it being noticed that the same is accomplished without the employment of gunpowder or other explosives. An air-charged arm is loaded with a proper ball, shot, or other missile, and then discharged by liberating the compressed air from the chamber of the arm, the action of said air being exerted on the missile so as to impel the same forcibly from the weapon, this also being accomplished without gunpowder or other explosives, thus avoiding the smell, smoke, heat, and fouling tendency thereof.

If desired, a separate receiver may be employed for charging each projectile or arm, in which case such receiver will be in communication with the receiver A.

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

The method of charging a projectile or weapon, consisting in placing such projectile or weapon having an air-chamber and a valve into an air-tight receiver, then forcing air into said receiver, the valve opening and permitting air to enter the aforesaid chamber, and finally removing the projectile or weapon air-filled, the valve being closed, all substantially as described.

WM. T. CHAMBERLAIN.

Witnesses:

JOHN A. WIEDERSHEIM,  
A. P. GRANT.