

(No Model.)

J. W. JOHNS.

CANISTER SHOT.

No. 341,245.

Patented May 4, 1886.

Fig. 1.

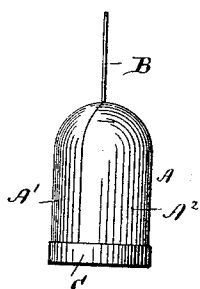


Fig. 2.

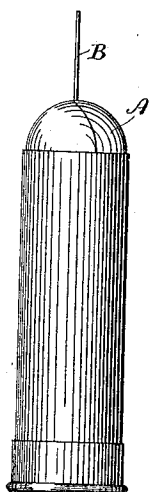


Fig. 4.

Fig. 3.

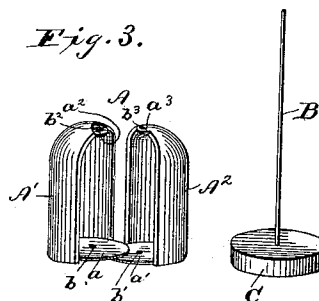


Fig. 5.

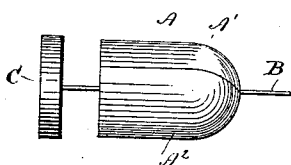
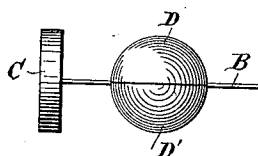


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES WATSON JOHNS, OF WHITE HOUSE, CRAMOND BRIDGE, NEAR EDINBURGH, SCOTLAND.

CANISTER-SHOT.

SPECIFICATION forming part of Letters Patent No. 341,245, dated May 4, 1886.

Application filed August 1, 1885. Serial No. 173,388. (No model.) Patented in England March 19, 1884, No. 5,101.

To all whom it may concern:

Be it known that I, JAMES WATSON JOHNS, a subject of the Queen of Great Britain, residing at White House, Cramond Bridge, near Edinburgh, Scotland, have invented certain new and useful Improvements in Canister-Shot for Use with Small-Arms, (for which Letters Patent of Great Britain have been granted to me, No. 5,101, bearing date the 19th day of March, 1884;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a new and improved device or combination of parts for confining and retaining a charge of shot in a compact body after it leaves the muzzle of the gun and during a portion of its flight, and automatically effecting the liberation of the charge during its flight at an approximately predetermined point of range, this result being effected or produced by the action of the atmosphere or gravity, or both combined, upon the device or devices employed for maintaining the charge in a compact body; and to this end my said invention, which I regard as generic in nature, consists in the combination, with a segmental, sectional, or separable canister or inclosing-shell for the reception of the charge of shot and a suitable retainer or locking device for preventing the escape of the shot, said parts constituting the canister or shell proper, of a device borne by the canister or shell and connected with or acting upon the retainer or locking device in such manner as to permit the canister or shell to open and liberate the charge of shot during the flight of the projectile, said last-named device being actuated to effect this result by the resistance of the atmosphere or the action of gravity, or both combined.

My invention also consists in the herein-after-described improved form and construction of the canister or inclosing-shell, exhibiting the preferred embodiment of my before-mentioned generic invention, whereby the results described may be secured, with the additional advantage that the canister can be employed as an automatic discharging-shell or converted into a non-discharging shell having all the desirable qualities of solid shot. This

preferred form and construction of my invention I show in the accompanying drawings, in which—

Figure 1 is an elevation of a cylindrical canister embodying my said invention. Fig. 2 is an elevation of the same placed in a cartridge, and ready for firing; Fig. 3, a perspective of the segments forming the canister. Fig. 4 is a perspective of the spindle and wad; Fig. 5, an elevation of the canister, showing the spindle partly withdrawn; and Fig. 6 is an elevation of a spherical canister embodying my invention.

Referring to said drawings, A is a cylindrical canister or inclosing-shell, made of light metal or other suitable material, and composed of two or more segments, $A^1 A^2$. Said segments have lapping parts, $a^1 a'$ and $a^2 a'$, which parts are provided with eyes or holes $b^1 b'$ and $b^2 b'$. When the segments are put together, the eye b^1 will register with the eye b' and the eye b^2 with the eye b' , and said eyes will be in the line of the axis of the canister.

B is a light spindle or rod, which passes freely through the eyes or holes in the segments, and serves as a locking or retaining device, holding said segments together. At one end the spindle is secured to the center of a wad or disk, C, made of some suitable material. Said wad or disk is slightly larger in diameter than the diameter of the canister. When the segments are locked together by the spindle, the wad or disk rests against the base of the canister and projects around the same. The canister is charged with shot and the segments locked together by passing the spindle through the eyes or holes. Said canister is then placed in any ordinary cartridge-shell, as shown in Fig. 2, and is ready for firing. During the flight of the projectile the resistance of the atmosphere or gravity, or both combined, acting on the wad or disk, withdraws the spindle from the canister, allowing the segments to fall apart and liberate the shot. The spindle can be made of different lengths, projecting more or less beyond the crown of the canister. The point at which the shot will be liberated being approximately determined by the length of said spindle, the greater the length the greater the range attained. By confining the shot when dis-

charged and during the greater portion of its flight, said shot is prevented from trailing. When liberated, it is in a highly-concentrated form, and each pellet will strike with equal velocity. The range is also increased, as the shot, being confined during the greater portion of its flight, will retain its velocity much longer than when permitted to separate immediately upon discharge. When desired, the charge can be converted into solid shot by simply bending or hooking the forward end of the spindle over the crown of the canister, which will prevent said spindle from being withdrawn.

In Fig. 6 I show a spherical canister composed of two segments, D D'. If desired, a conical canister may be used.

It is obvious that various changes can be made in the construction and arrangement of the several parts of my said invention without departing from the principle of the same, and I do not wish to be understood as limiting myself to the specific construction herein shown and described.

What I claim as new, and desire to secure by Letters Patent, is—

1. A separable canister or shot-inclosing shell, in combination with a removable locking spindle or rod passing through the separable parts of the canister or shell and holding the same closed to retain the shot, and a retarding device connected with the locking spindle or rod to actuate the same and effect the liberation of the shot during the flight of the projectile, all arranged and operating substantially as shown and described.

2. A separable canister or shot-inclosing shell made in segments, in combination with a removable locking spindle or rod passing through the segments and holding the canister or shell closed to retain the shot, and a wad or disk or equivalent means connected with the locking spindle or rod, and adapted to automatically effect the withdrawal of said locking spindle or rod during the flight of the projectile and permit the canister or shell to separate and liberate the shot, substantially as shown and described.

3. A separable canister or shot-inclosing shell made in segments, having lapping parts provided with eyes adapted to register with each other, in combination with a removable locking spindle or rod passing through the eyes in the segments and holding the canister or shell closed to retain the shot, and a wad or disk connected with the locking spindle or rod, and adapted to automatically effect the withdrawal of said locking spindle or rod during the flight of the projectile and permit the canister or shell to separate and liberate the shot, all arranged and operating substantially as shown and described.

4. A separable canister or shot-inclosing shell made in segments, in combination with a removable locking spindle or rod passing through the segments and holding said canister or shell closed to retain the shot, and a wad or disk of larger diameter than the diameter of the canister, connected with the locking spindle or rod, and adapted to automatically effect the withdrawal of said locking spindle or rod during the flight of the projectile and permit the canister or shell to separate and liberate the shot, substantially as shown and described.

5. A separable canister or shot-inclosing shell made in segments, in combination with a removable flexible locking spindle or rod passing through the segments and holding the canister or shell closed to retain the shot, and a retarding wad or disk connected with the locking-spindle to actuate the same, whereby the projectile may be used as an automatic discharging-shell or may be converted into a non-discharging shell by bending the forward end of the spindle or rod, substantially as shown and described.

Dated this 24th June, 1885.

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