

No. 618,901.

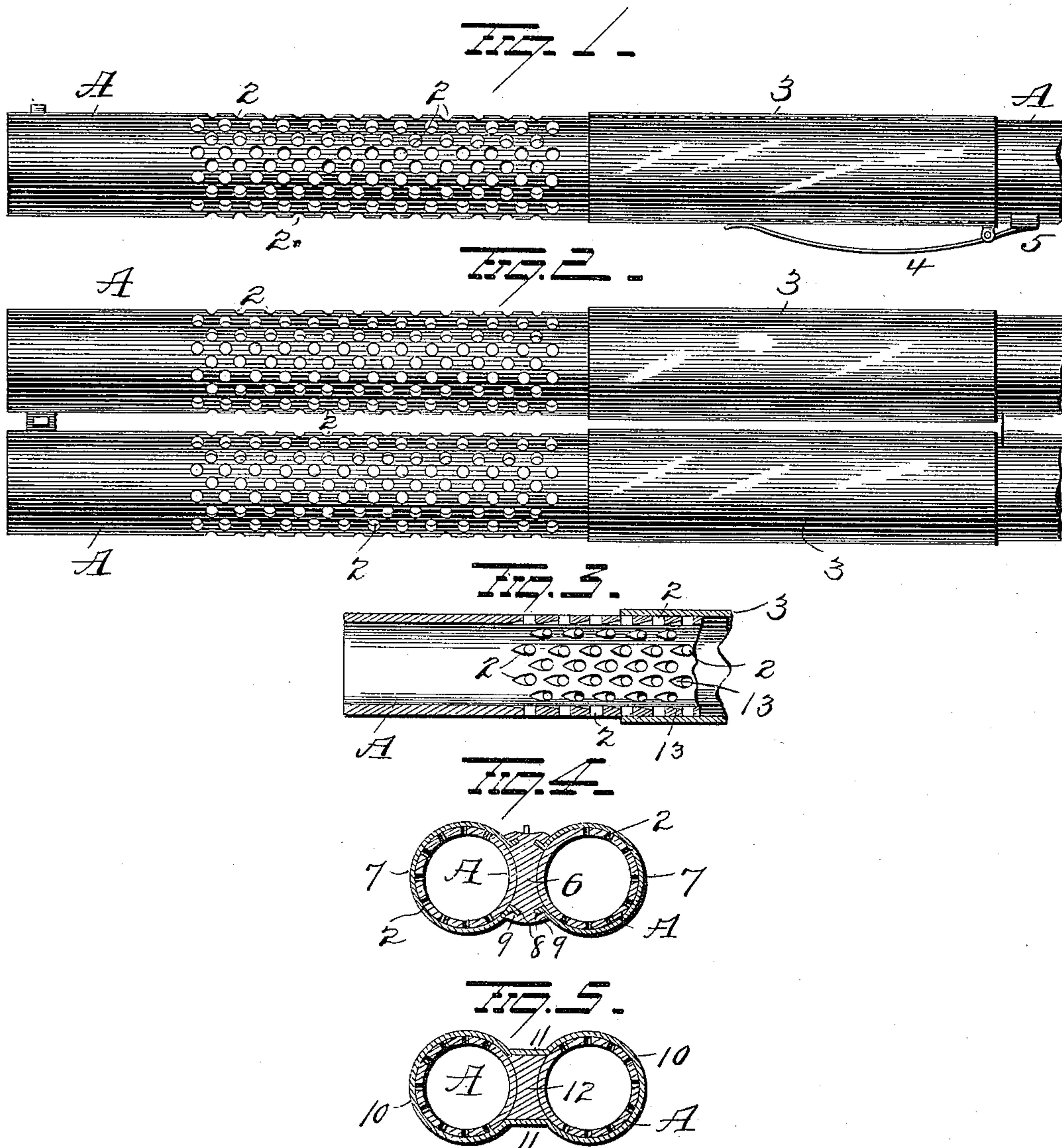
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L. PETERSON.

GUN BARREL.

(Application filed May 13, 1898.)

(No Model.)



WITNESSES
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LEWIS PETERSON, OF MADRID, IOWA.

GUN-BARREL.

SPECIFICATION forming part of Letters Patent No. 618,901, dated February 7, 1899.

Application filed May 13, 1898. Serial No. 680,607. (No model.)

To all whom it may concern:

Be it known that I, LEWIS PETERSON, of Madrid, in the county of Boone and State of Iowa, have invented certain new and useful Improvements in Gun-Barrels; 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 an improvement in gun-barrels, the object being to provide improved means for regulating the escape of the powder-gases before the shot leaves the gun-barrel, whereby the charge of shot may be either maintained closely associated or made to disperse or scatter on leaving the muzzle.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of a gun-barrel embodying my invention. Fig. 2 is a view in elevation of a double barrel, showing my invention applied thereto. Fig. 3 is a longitudinal sectional view representing the interior walls of the perforations, holes, or openings in the gun-barrel; and Figs. 4 and 5 are transverse sections illustrating modifications.

A represents a single gun-barrel provided at a suitable distance from its muzzle with a series of perforations or openings 2, which latter may be of any desired form or shape and may be arranged in rows or otherwise around the gun-barrel. Located on said barrel is a sliding sleeve or casing 3, adapted to close or partially close the holes or openings 2, and secured to said sleeve or casing 3 is a spring-arm 4, the forward end of which contacts against the sleeve or casing, while the rear end thereof carries a friction-shoe 5, which latter rests in contact with the gun-barrel and holds said sleeve or casing in any predetermined position on the gun-barrel.

When it is desired to equip a double-barrel gun with my invention, each barrel is perforated and provided with a sliding sleeve or casing, as above described and as will more

fully appear by reference to Fig. 2 of the drawings.

In the construction shown in Fig. 4 the barrels A are provided with the perforations or openings 2, which, however, do not entirely encircle the barrels, as is the case in Figs. 1 and 2, but are confined in that portion of the barrels not covered by the rib 6, which latter is located between and connects said barrels. Each of said barrels is provided with a split sleeve or casing 7, adapted to encircle that portion of the barrel not covered by the rib 6, the outwardly-bent ends 8 of said sleeve or casing being fitted within the grooves or guideways 9 9 of rib 6, whereby said sleeve or casing may be moved back and forth on the gun-barrel for the purpose of closing or opening the perforations or holes 2 in said gun-barrel.

In Fig. 5 the openings or perforations 2 are located in the manner last described and are opened and closed by a single sleeve or casing 10, which latter embraces both barrels, the connecting-sections 11 11 of said sleeve or casing having a sliding contact with the upper and lower faces of rib 12, which latter, as before described, is located between the two barrels and has for its main object the support of said barrels.

In the construction shown in Figs. 4 and 5 the sliding sleeves or casings are made to snugly fit the gun-barrels, so that they will remain in any predetermined position by frictional contact with said barrels and connecting-ribs, thus rendering the employment of locking mechanism unnecessary. However, should it at any time become advisable to use locking devices I wish it understood that I do not confine myself to the mechanism illustrated in Fig. 1 of the drawings, as many other forms of locking means might be resorted to without departing from my invention.

It is obvious that no matter how smooth the bore of the gun-barrels might be the shot in their passage through the perforated section of the barrel would to some extent contact with the forward walls of the perforations or openings, resulting in retarding and chipping off edges of the shot and tending to temporarily choke the barrel, thus seriously in-

terfering with the massed shot during its passage through the barrel. In order to overcome this great objection, I have deemed it expedient to locate in front of each perforation or opening a groove or channel 13, which latter at its deepest portion is in communication with said perforation or opening, from which point and in an outward direction said channel or groove gradually decreases in depth until the point of juncture with the surface of the bore is reached. By thus removing a portion of the forward wall of each of said perforations or openings it will be apparent that a free and unobstructed passage at this point is provided and all liability of retarding the movement or changing the direction of the shot constituting the charge is absolutely avoided.

When it is desired to use the gun for close or short range shooting and the like, the perforations 2 are first closed by sliding the sleeve or casing 3 sufficiently in a forward direction so as to completely cover said openings or perforations, whereby all avenues of escape for the powder-gases, which immediately follow the charge after explosion takes place, is closed, thus maintaining the barrel practically closed except at the muzzle, at which point the powder-gases will cause the shot to scatter.

When it is desired to prevent the shot from scattering, as in long-distance shooting or for shooting at small objects, the casing or sleeve 2 is moved to a position on the gun-barrel so as to expose all or any desired number of the openings or perforations, as occasion may require, and when the charge in the gun is fired the powder-gases immediately following the shot will upon reaching said openings or perforations escape therethrough, thereby relieving the charge of pressure from the powder-gases as it leaves the muzzle, thus preventing a disunion or a scattering of the shot composing said charge.

If desirable, the interior of the sleeves or casings may be lined with asbestos or other suitable material for the purpose of more thoroughly guarding against the escape of the powder-gases through the openings or perforations when the latter are closed by said sleeve or casing and also for the further purpose of reducing friction between the contacting parts.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

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

1. A barrel for shotguns provided at a point beginning rearwardly of its muzzle with a series of openings or perforations and means for closing all or any number of said openings or perforations.

2. A barrel for shotguns provided at a point beginning rearwardly of its muzzle with a series of openings or perforations, a sleeve or casing adapted to close all or a portion of said openings or perforations and means for locking said casing or sleeve in any predetermined position on the gun-barrel.

3. A barrel for shotguns provided at a point beginning rearwardly of its muzzle with a series of openings or perforations and internal communicating grooves or channels leading from the front edge of the openings or perforations, a sleeve or casing adapted to close all or a portion of said openings or perforations and a spring-actuated friction-shoe for holding said sleeve or casing in any desired position on the gun-barrel.

4. The combination of two gun-barrels, each of which is provided at a point beginning rearwardly of its muzzle with a series of openings or perforations, a sleeve or casing for each barrel, each sleeve adapted to move on its barrel for the purpose of closing all or a portion of the perforations or openings in said barrel, and a rib located between said barrels and serving as a guide for said sleeves, substantially as set forth.

5. The combination of two gun-barrels, each of which is provided at a point beginning rearwardly of its muzzle with a series of openings or perforations, a split sleeve or casing adapted to embrace and move back and forth on each of said barrels and a rib located between said barrels and provided on its sides and at points adjacent to its top and bottom faces with grooves for the reception of the bent ends of said split sleeve, whereby the latter will be movably supported and held against accidental displacement, substantially as set forth.

6. A barrel for shotguns provided at a point between its ends with a series of openings or perforations and internal tapering grooves or channels leading from the front edge of the openings or perforations.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LEWIS PETERSON.

Witnesses:

C. B. HUTZEL,
ALBERT GERLING.