

J. LORD.

Nipple and Guard for Fire-Arms.

No. 28,677.

Patented June 12, 1860.

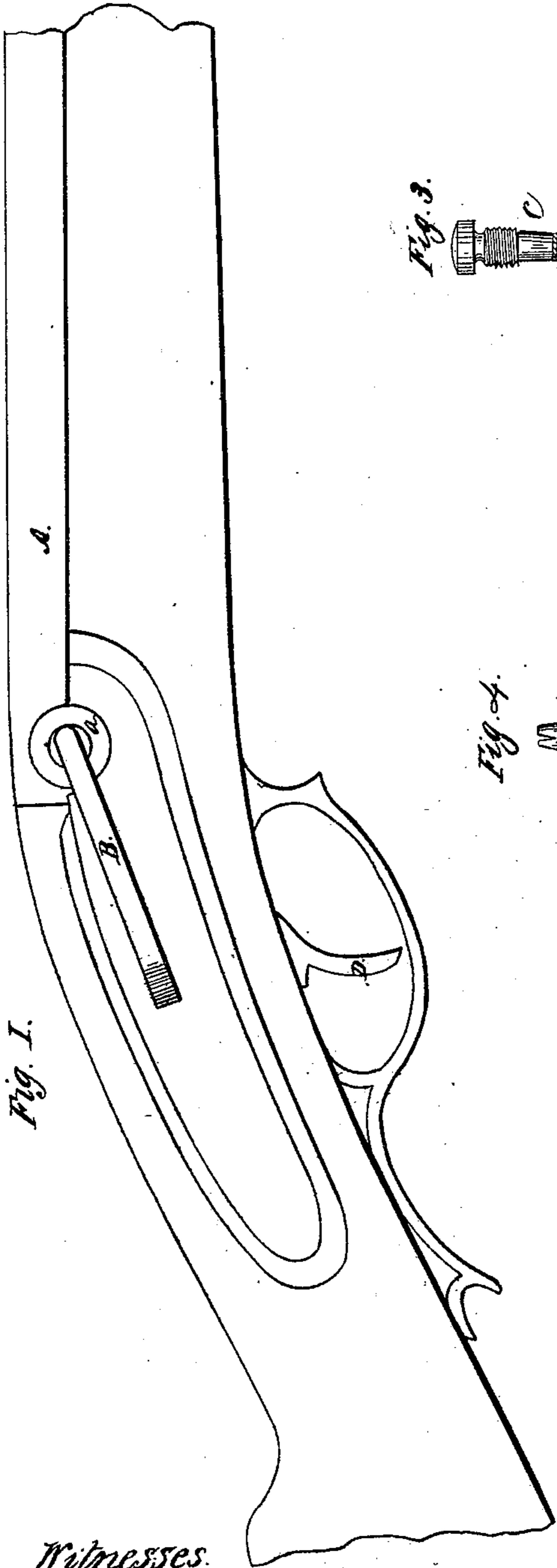


Fig. 1.

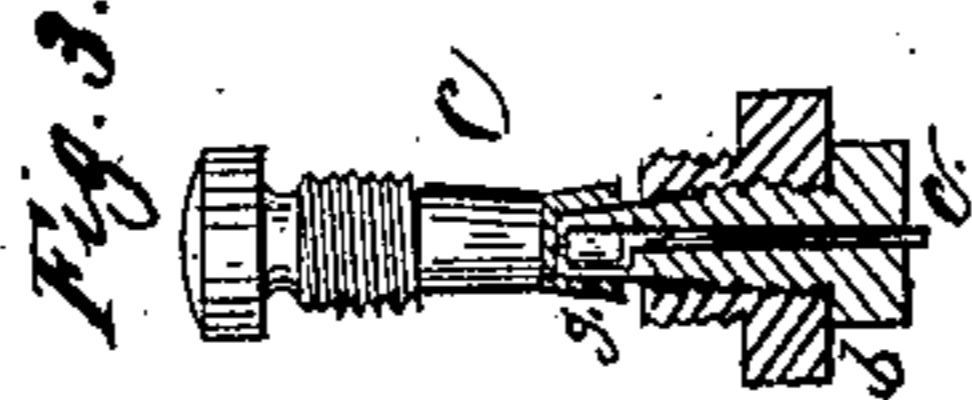


Fig. 3.



Fig. 4.

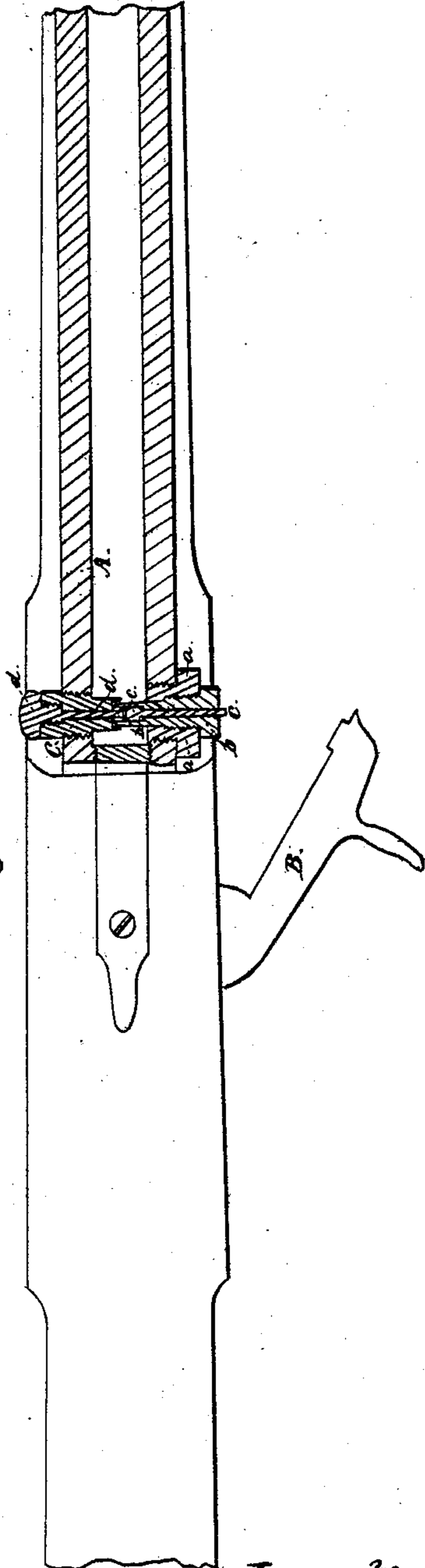


Fig. 2.

Witnesses.  
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# UNITED STATES PATENT OFFICE.

JAMES LORD, OF MINERSVILLE, PENNSYLVANIA.

## IMPROVEMENT IN FIRE-ARMS.

Specification forming part of Letters Patent No. 28,677, dated June 12, 1860.

*To all whom it may concern:*

Be it known that I, JAMES LORD, of Minersville, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in the Construction of Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a side view of a gun to which my improvements are applied. Fig. 2 represents a horizontal section through said gun. Figs. 3 and 4 represent detached views, hereinafter to be referred to.

My invention relates to the manner of exploding a percussion cap or pellet within the barrel of a gun or cannon, thereby dispensing with the use of a vent-hole, as said cap or pellet is in direct contact with the charge in the barrel, and also for the purpose of protecting the cap against the dampness of the atmosphere.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In Fig. 2, A represents the barrel of a gun. *a* represents a plug, which is screwed into the side of said barrel near the breech. Onto this plug is screwed a nipple, *b*, for the reception of the explosive cap, pellet, or pill, which is in contact with the thick end of the sliding rod *c*, by which it is exploded when the latter is struck by the hammer B. C represents another plug, which is screwed into the barrel A diametrically opposite the plug *a*. Into this plug is screwed a rod, *d*, which serves as an anvil for the pill to explode on when it is struck by the hammer. This arrangement, as represented in Fig. 2, is intended to be used with pellets or pills only. To prime the gun the rod *d* is unscrewed and is withdrawn from the plug C, and a pill is dropped into the cavity. This pill will drop down into the cap-shaped end of the nipple *b*, the bottom of

which is filled up by the thick end of the rod *c*. The end of the nipple is slotted, as represented in Fig. 4, so that when the pellet is exploded the fire may readily be communicated to powder of the charge. When the pellet or pill has been dropped to its proper place, the rod *d* is screwed down and the gun is now charged in the usual manner; and by pulling the trigger D, Fig. 1, the cock will strike the rod *c*, which latter explodes the pellet, (represented in red in Fig. 2,) whereby the gun is fired. When a percussion-cap is used, the parts have to be somewhat modified, but operate still in the same manner. In that case the end of the plug C which serves as an anvil to explode the cap on has a flat face, as represented in Fig. 3, and the end of the nipple *b* on which the cap is placed has no other cavity than that in which the rod *c* can slide. When this arrangement is to be used, the plug C is not withdrawn in priming the gun, but the nipple *b* is unscrewed. The cap *g* is placed on said nipple, which latter is then replaced, and is exploded when struck by the hammer. By this arrangement I dispense with the use of a vent-hole, thereby preventing any leakage and insuring the firing of the gun when the cap is exploded, as it is almost in contact with the powder in the barrel. Neither is the cap exposed to the dampness of the atmosphere or to rain, as it is entirely closed up in the barrel of the gun.

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

The combination of parts herein described for exploding a cap, pellet, or pill within the barrel of a gun or cannon without the use of a vent-hole, substantially in the manner and for the purposes herein set forth.

JAMES LORD.

Witnesses:

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