

No. 634,826.

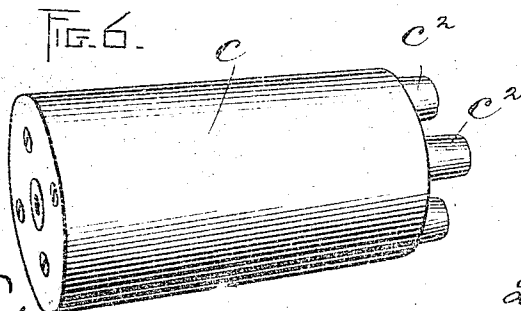
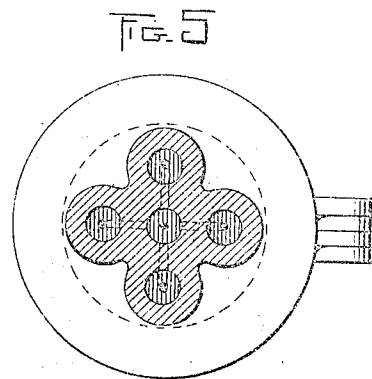
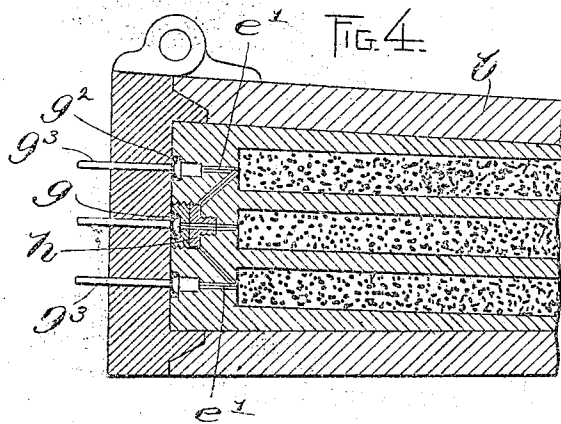
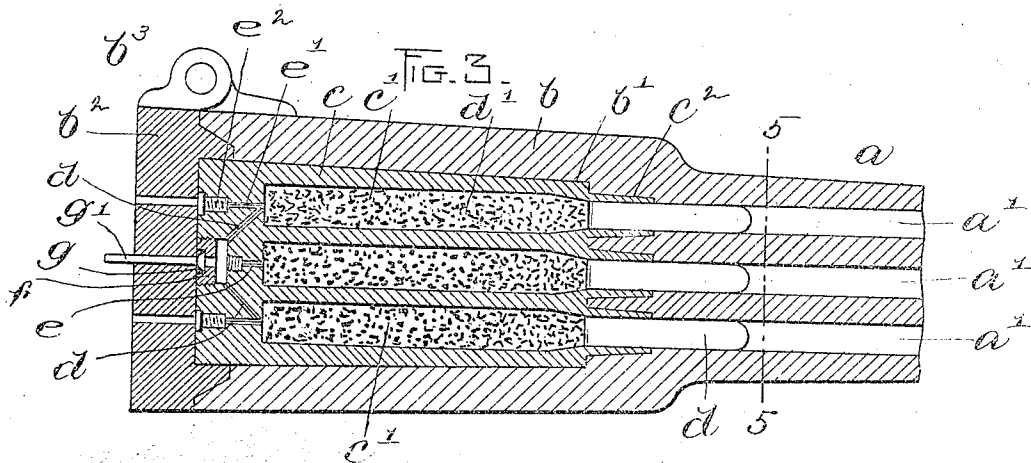
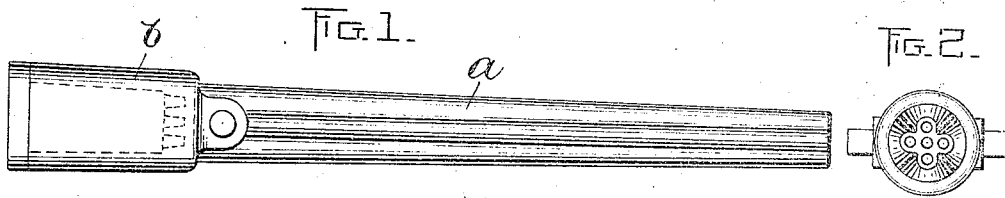
Patented Oct. 10, 1899.

L. MASINI.

CARTRIDGE FOR MULTIPLE CANNONS.

(Application filed Oct. 12, 1898.)

(No Model.)



WITNESSES:

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LORENZO MASINI, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO GEORGE A. SEIGLIANO, OF SAME PLACE.

CARTRIDGE FOR MULTIPLE CANNON.

SPECIFICATION forming part of Letters Patent No. 634,826, dated October 10, 1899.

Application filed October 12, 1898. Serial No. 693,330. (No model.)

To all whom it may concern:

Be it known that I, LORENZO MASINI, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Cartridges for Multiple Cannon, of which the following is a specification.

This invention has for its object to provide cartridges for breech-loading cannon adapted to simultaneously discharge a plurality of projectiles.

The invention consists in the improvement which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a breech-loading cannon embodying my invention. Fig. 2 represents a front end elevation of the same. Fig. 3 represents a longitudinal section of the breech and a part of the barrel portion of the cannon. Fig. 4 represents a view similar to Fig. 3, showing a modification. Fig. 5 represents a section on the line 5 5 of Fig. 3. Fig. 6 represents a perspective view of the cartridge.

The same letters of reference indicate like parts in all the figures.

In the drawings, *a* represents the steel barrel portion and *b* the steel breech portion of my improved breech-loading cannon. The barrel portion is provided with plurality of bores *a'*, which may be of any desired number, five being here shown. These bores may all be formed in a single body or block cast with or otherwise formed on the breech *b*, as shown in the drawings, or each bore may be formed in a separate barrel, the barrels being formed on or secured to the breech. The breech *b* is provided with a single chamber *b'*, which communicates with all the bores *a'* and has its rear end closed by a movable breech-block *b²*, which may be hinged at *b³* to the breech or otherwise secured.

c represents a steel cartridge, which is formed to accurately fit the chamber *b'*, said cartridge having a plurality of chambers *c'*, corresponding in number and arrangement to the bores *a'*, and a rear end wall extending across the rear ends of the chambers. The forward end of the cartridge is provided with

a series of projections *c²*, through which the chambers *c'* extend, said projections being formed and arranged to enter enlargements formed in the rear ends of the bores *a'*, as shown in Fig. 3. When the cartridge is loaded, each of the chambers *c'* contains a projectile *d* and a charge *d'* of powder or other explosive material behind the projectile. To simultaneously ignite the explosive charges in the chambers *c'*, I provide a series of channels *d²*, extending through the rear end wall of the cartridge from the chambers *c'* to a cap-receiving cavity formed in the rear side of the end wall of the cartridge. Said cavity contains a cap-holder *f*, which is preferably screwed into the cavity and is provided with a suitable percussion-cap or fulminate *g*. When the cartridge is loaded, the explosive charges in the chambers *c'* are caused to fill the channels *d²* and the inner portion of the cavity *e*, so that when the cap is exploded by a firing-pin *g'* or other suitable means the charges in all the chambers will be simultaneously ignited and the projectiles will be forced through the bores *a'*.

If it is desired to discharge the projectiles one at a time, the portion of the cavity *e* in the rear end of the cartridge that is shown as left open for the reception of the explosive material in Fig. 3 will be closed by a filling-piece *h*, as shown in Fig. 4, said closing-piece having a passage through it communicating with the channel *d²*, that enters the central chamber *c'*, so that the cap *g* will ignite the charge only in the central chamber. Additional passages *e'* are provided, which extend from the other chambers through the end of the breech-block and are provided at their outer ends with caps *g²*, which may be exploded by independent firing-pins *g³* or by any other suitable means.

It will be understood that when the gun is to be fired a cartridge *c*, properly loaded, is placed in the chamber *b'*, the breech-block *b²* being then closed and the charges ignited in the manner above described. By providing for a simultaneous discharge from a plurality of barrels it will be seen that the projectiles discharged will cover a considerable area and therefore do effective work at a distant point.

After each discharge the cartridge will be removed to be reloaded and another inserted.

The firing-pins are here shown as fitted to slide in orifices in the breech-block; but it is obvious that the charges in the cartridge may be ignited by any suitable means and that my invention is not limited to any particular means for accomplishing this result.

When all the charges of the cartridge are to be ignited simultaneously, as shown in Fig. 3, the passages *e'* are closed by screw-threaded plugs *e''*, these plugs being removed when the charges of the cartridge are to be exploded independently, as shown in Fig. 4.

I claim—

1. A cartridge having a rear end wall, a plurality of chambers extending through its front end, and a plurality of reduced passages extending rearwardly from the rear ends of the chambers through the said end wall and adapted to receive firing devices, said cartridge having forward projections adapted to enter the rear enlarged ends of the barrels of a multibarreled gun.

2. A cartridge having a plurality of chambers extending through its front end, a wall extending across its rear end, reduced passages extending from the rear ends of the chambers through said wall, and fulminating devices at the rear ends of said passages, for igniting charges therein, said cartridge having forward projections adapted to enter the

rear enlarged ends of the barrels of a multibarreled gun.

3. A cartridge having a plurality of chambers extending through its front end, a wall extending across its rear end, a cap or fulminate receiving cavity in said wall, and a plurality of passages extending through said wall and connecting said cavity with the chambers, whereby the charges in the chambers may be fired simultaneously by a fulminate in said cavity, said cartridge having forward projections adapted to enter the rear enlarged ends of the barrels of a multibarreled gun.

4. A cartridge having a plurality of chambers, a rear end wall extending across the rear ends of the chambers, reduced passages extending through said end wall from the chambers and adapted to receive fulminates, and means for closing said passages whereby any desired number of chambers may be made inoperative, said cartridge having forward projections adapted to enter the rear enlarged ends of the barrels of a multibarreled gun.

In testimony whereof I have affixed my signature in presence of two witnesses.

LORENZO MASINI.

Witnesses:

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