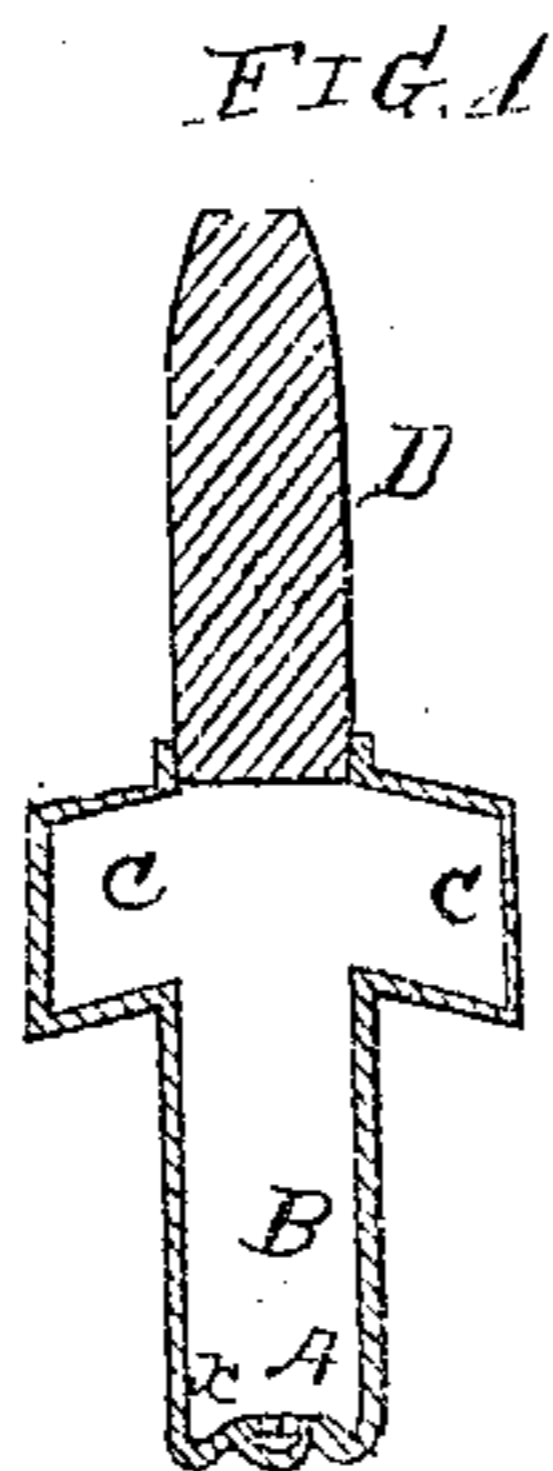
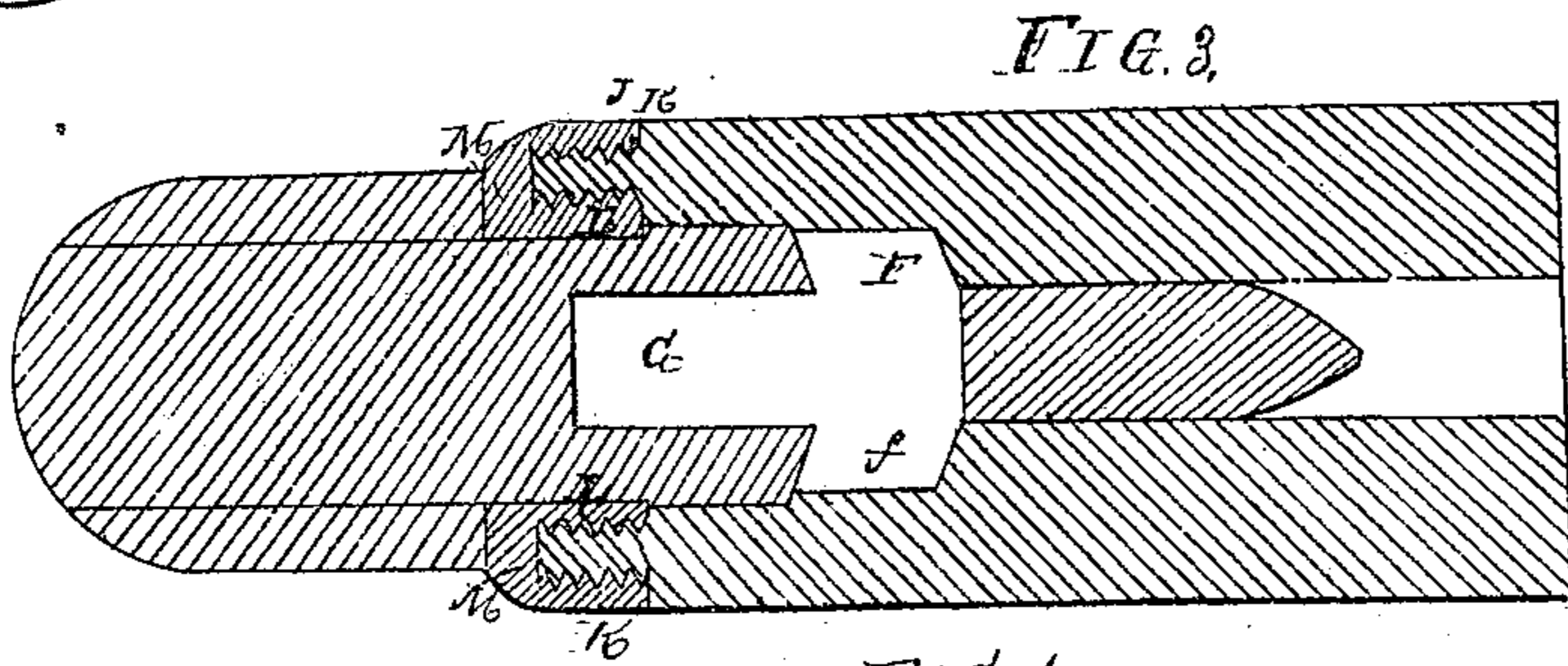
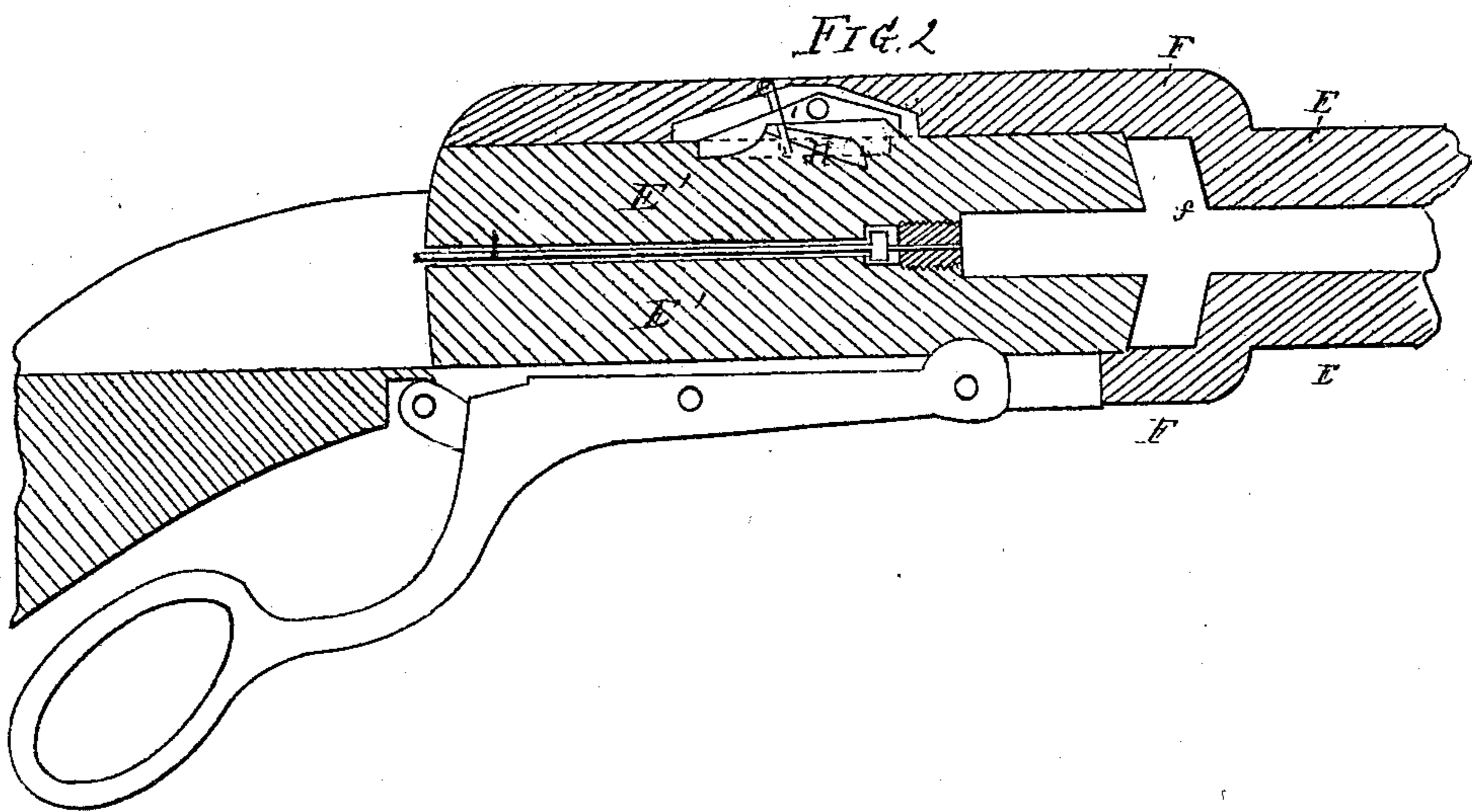


L. A. MERRIAM..
FIREARM.

No. 86,091.

Patented Jan. 19, 1869.



Witnesses.

J. M. Brown
J. P. ...

Inventor.

L. A. Merriam

United States Patent Office.

LINCOLN A. MERRIAM, OF NEW YORK, N. Y.

Letters Patent No. 86,091, dated January 19, 1869.

IMPROVEMENT IN FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, LINCOLN A. MERRIAM, of the city, county, and State of New York, have invented a new and useful Improvement in Fire-Arms; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in so constructing the powder-chamber and cartridge that the continued burning of the powder shall increase the pressure of the gas upon the shot while it is moving through the bore of the gun.

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

In constructing my cartridge, I place the fulminate in a cup, stamped in the end of the cartridge, resembling a percussion-cap opening inward, and upon the fulminate I place a perforated piece of metal, securing it by compressing the sides of the cup upon it, as seen in *a*, Figure I.

I next place a small column of powder, B, to act directly upon the base of the shot D in exploding, and additional powder, C, in the form of a disk or ring, at the base of the shot D.

The barrel E E', Figure II, I construct in two sections—either section may be made movable; and the powder or cartridge-chamber *f*, I form at their junction in the following manner: The bore of the muzzle-section, E, of the barrel, I enlarge at the end toward the but, so as to admit of the but-section E' (worked by a hinged lever and brace) sliding nearly to the base of the enlargement, where it meets with a shoulder, bevelled to form a close joint, and the space between the bottom of the enlargement and the end of the sliding but-section E' of the barrel receives the disk or ring-portion of the charge or cartridge, and the column-portion of the charge or cartridge is received in the bore of the sliding but-section E' of the barrel.

The cam H, adjusted to the sliding section of the barrel, guides the column-portion of the cartridge to its place; and after the discharge, the cam-stop L, worked by the sliding section E of the barrel, throws the shell from the cartridge-chamber.

I also bind together the sections of the barrel by what I denominate the duplex-coupling J, Figure III, which I construct in the following manner:

I cut a single or triple thread, K, on the outer surface of a tube, and a corresponding thread, L, on the inner surface of the tube. I then sink, in the cap or coupling, an annular-slot, M, or groove, to fit the end of the tube; after allowing for the thread, and this groove, I thread to fit the threads on the outer and inner surfaces of the tube.

Now, whereas it takes time for powder to burn, and for the shot to move through the bore of the gun, and since, by proper arrangement, the burning of the powder may be timed to the movement of the shot, so as to impart greater accuracy and velocity to the shot, with less recoil and strain to the gun,

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

1. The duplex coupling or joint described, each part consisting of inside and outside screw-threads, fitting into corresponding threads on the other part, for the purposes set forth.

2. The powder-chamber G and its enlargement F, when so arranged, in relation to each other and the projectile, that when loaded for use, both parts shall communicate freely and form one chamber, as set forth.

3. The cartridge, when the projectile is so arranged, in relation to the chambers B and C, that they shall freely communicate with each other, in the manner and for the purposes set forth.

LINCOLN A. MERRIAM.

Witnesses:

D. H. TUTTLE,
ANDREW BLAKE.