G. SCHARFFE.

BREECH LOADING GUN.

No. 16,070. Patented Nov. 11, 1856.

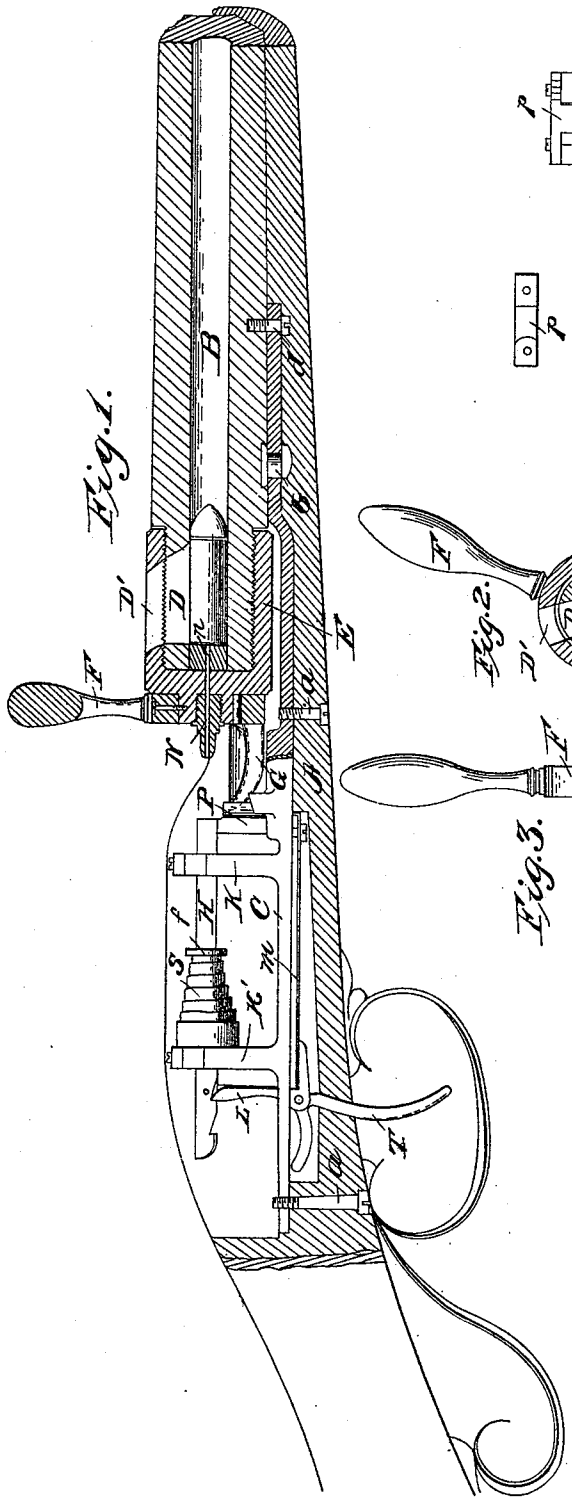


Fig. 1.

Fig. 2.

Fig. 3.

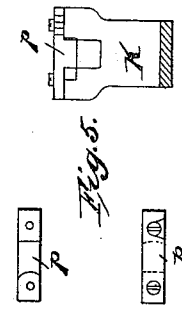


Fig. 5.

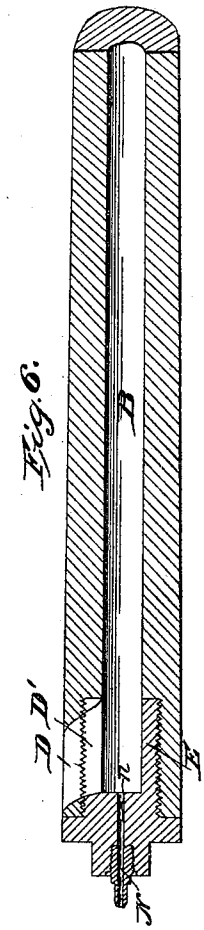


Fig. 6.

UNITED STATES PATENT OFFICE.

GUSTAV SCHARFFE, OF NEW YORK, N. Y.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **16,070**, dated November 11, 1856.

To all whom it may concern:

Be it known that I, GUSTAV SCHARFFE, of New York, in the county and State of New York, have invented certain new and useful Improvements in Breech-Loading Guns; 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.

Figure I represents a longitudinal section of the gun. Fig. II is a section through the breech. Fig. III is a view of the cam attached to the breech and acting upon the hammer. Fig. IV is a section of the gun-barrel with the breech-piece screwed into the inside of the same, and Fig. V is an end view of the hammer-guides.

The nature of my invention consists in the manner and in the construction of the lock acted upon by the breech, so that by the action of opening the same the hammer of the lock will be cocked.

A is the wooden butt-end of the gun.

B is the barrel.

C is the lock-frame, attached through the bolts *a a* to the wooden butt-end, and through the hook *b* and bolt *d* to the barrel B.

D is an opening in the upper side of the barrel, near the end, to admit the cartridge into the barrel.

E is the breech-cap, screwed on the outside of the barrel, as shown in Fig. I, and screwed into the inside of the barrel, as shown in Fig. IV, with an opening, D′, corresponding with the opening D in the gun-barrel. The breech-cap E, when turned partly round, will cover up the opening D perfectly tight.

N is the nipple to receive the percussion-caps, screwed into the end of the cap E, and communicating with the inside of the gun-barrel B through the vent-hole *n*.

F is a handle fastened to the end of the cap E to turn the same by, and provided with a projection, G, or cam acting upon the hammer, as will be hereinafter described.

H is the hammer, consisting simply of a rod guided in the bearings K and K′, attached to the frame C.

f is a collar fast on the hammer H, between which and the bearing K′ a spiral spring, S, is situated, so as to act upon the hammer to push the same against the percussion-cap on the nipple N when relieved from the action of the lever L. On the forward end of the hammer H is a projection, P, attached, against which the cam G acts.

L is a lever attached to the spring *m*, by the action of which said lever is always pressed against the under side of the hammer H, holding the same locked when required.

T is the trigger, attached to the lever L to pull said lever away from the hammer H.

For needle-guns the darting needle will be fastened into the end of the hammer H, and the nipple N in that case dispensed with, the cap and bottom of the barrel being provided with a suitable hole to allow the needle to pass through.

The operation of the gun is as follows: When the gun requires to be loaded, the handle F, and consequently with the same, the breech-cap E is turned round, so that the openings D and D′ correspond, (as represented in the drawings,) through which opening the cartridge is introduced into the barrel B. By the turning round of the handle the cam or projection G acts upon the projection P, fast on the end of the hammer H, and pushes thereby said hammer, backward until the lever L has come into the notch *o* on the under side of the hammer, and holds thereby the same in that position. The lever F is now turned down again, so as to close up the opening D. A percussion-cap is placed upon the nipple N, when the gun will be ready to discharge. A slight pressure on the trigger T brings the lever L out of the notch *o*, relieving thereby the hammer H, when the spring S acts upon the same so as to discharge the gun.

To facilitate the taking out of the hammer the caps *p*, Fig. V, are made so as to turn upon one bolt, the hole for the second bolt being slotted out, by which arrangement by loosening this one bolt in each cap the same can be turned on one side and the hammer taken out.

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

1. The manner of cocking the hammer by the opening of the breech, substantially as described.

2. The arrangement and construction of the hammer, operated in the manner specified.

3. Screwing the breech-cap E either upon or into the gun-barrel, said breech-cap being provided with a hole corresponding with a hole in the gun-barrel, by the unscrewing of which said breech-cap the hammer is cocked and both holes are brought above each other, so as to admit the cartridge, while by the screwing up of said breech-cap the hole in the gun-barrel is closed up again, substantially as described.

GUSTAV SCHARFFE.

Witnesses:
HENRY E. ROEDER,
M. WEINKE.