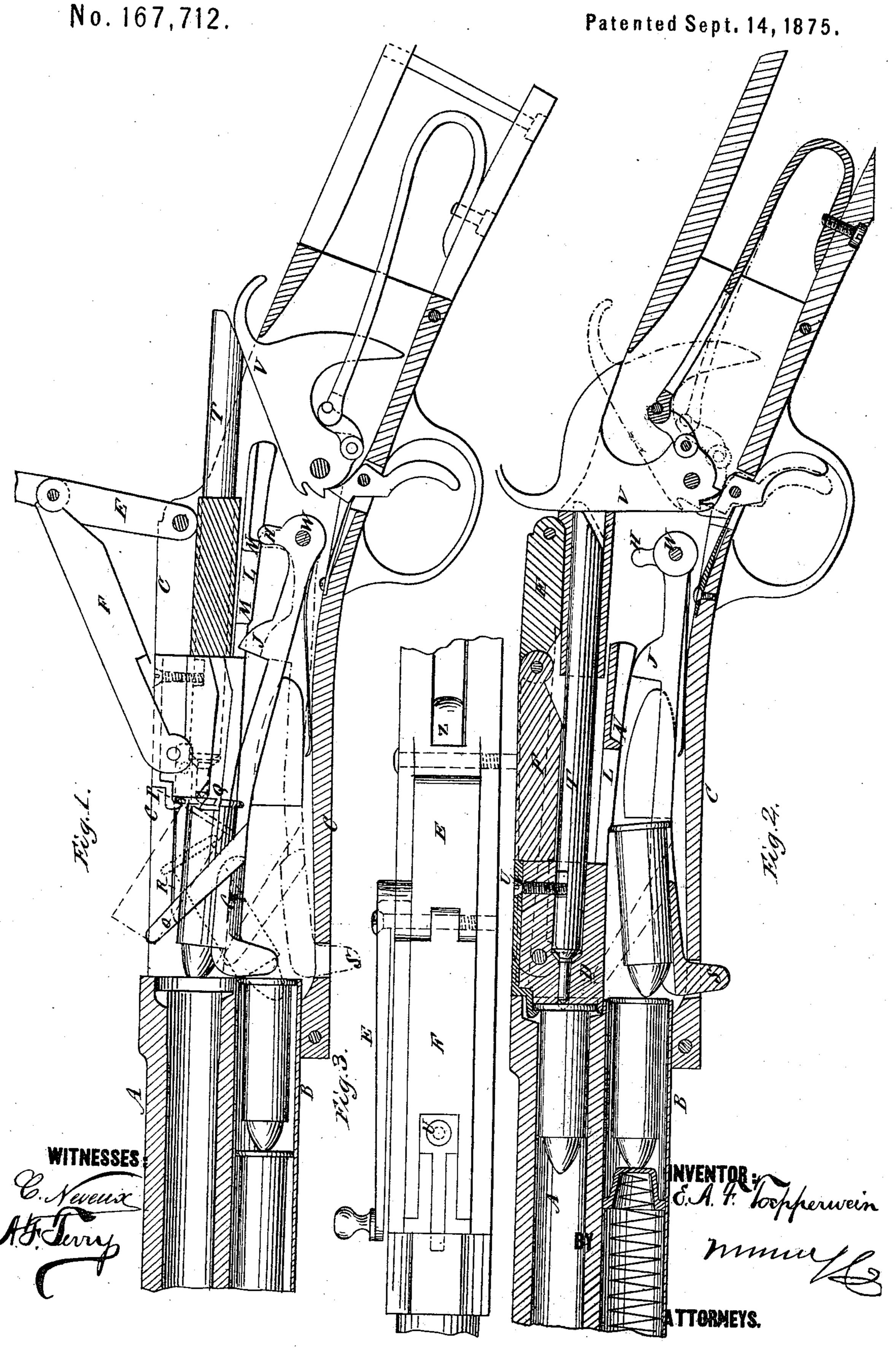
E. A. F. TOEPPERWEIN.

Magazine Fire-Arm.



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## UNITED STATES PATENT OFFICE.

EMIL A. F. TOEPPERWEIN, OF BOERNE, TEXAS.

## IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. 167,712, dated September 14, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, EMIL A. F. TOEPPER-WEIN, of Boerne, in the county of Kendall and State of Texas, have invented a new and Improved Repeating Fire-Arm, of which the fol-

lowing is a specification:

This improved repeating fire-arm is contrived with a sliding breech-block, which is drawn back by a crank on the right-hand side of the gun, connected with a pair of toggle-levers, pivoted, respectively, to the breech-closer and the breech-frame, and there is a cartridgelifter below the block, which is thrown up to present the cartridge to the barrel by an arm of the block just before it comes to rest in the backward movement. The shell is partly expelled by stops, against which the lower edge strikes at about the same time, and the new . cartridge finishes the work, and it is held in position by a spring, when the lifter drops back, till the breech-block pushes it in the barrel. The cartridges are put into the magazine through the opening made by sliding the breech-block back, the block being moved not quite far enough to throw up the lifter.

The whole apparatus is very simple, cheap, and reliable, and may be used with double-barreled arms using fixed ammunition.

Figure 1 is a longitudinal sectional elevation of the barrel and magazine, and side elevation of the breech, with the front plate removed. Fig. 2 is a longitudinal sectional elevation. Fig. 3 is a top view.

Similar letters of reference indicate corre-

sponding parts.

A is the barrel; B, the magazine; C, the breech. D is a sliding breech closer or bolt. F F' are a pair of toggle-levers, which are located at the top of the breech, hinged to each other, and, respectively, pivoted to the breech-closer and the breech-frame. A hand-lever, E, is secured to the toggle-lever E' at the side

of the barrel, so as to place it in convenient position for operating the breech-closer. G is the cartridge-lifter; H, the arm on the lifter for throwing it up; J, a projection for throwing it down; L, a bar on the breech-closer for working the lifter by the stops M and N; O, spring on the lifter to prevent the cartridge from throwing up too high; P, retractor; Q, stop for partially discharging the cartridge; R, spring for holding the cartridge when the lifter drops; and S, a guard on the lifter to keep the magazine closed while the lifter is raised.

The breech-closer carries the firing-pin T, which is secured in it by the screw U, so that it has the necessary freedom to move forward to strike the cartridge; but it is forced back when the closer goes back, and raises the hammer V. Thus, by pulling the crank E back to the position represented in Fig. 1, the shell is thrown out, a new cartridge presented, and the gun is cocked thereby; pushing the crank forward the cartridge is introduced, and the breech closed ready for firing.

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

1. The spring O, in combination with the cartridge-lifter, substantially as specified.

2. The bar L and stops M N on the breechcloser, in combination with the cartridge-lifter G, having the arm H and the projection J, and being arranged on a pivot, W, substantially as specified.

3. The combination of the spring R with the cartridge-lifter and the breech-closer, substan-

tially as specified.

EMIL ALBRECHT FERDINAND TOEPPERWEIN.

Witnesses:

AUGUST THEIS, J. T. STENDEBACH.