(No Model.)

F. M. SHIELDS.

MACHINE GUN.

No. 282,787. Patented Aug. 7, 1883.

Fig. 1.

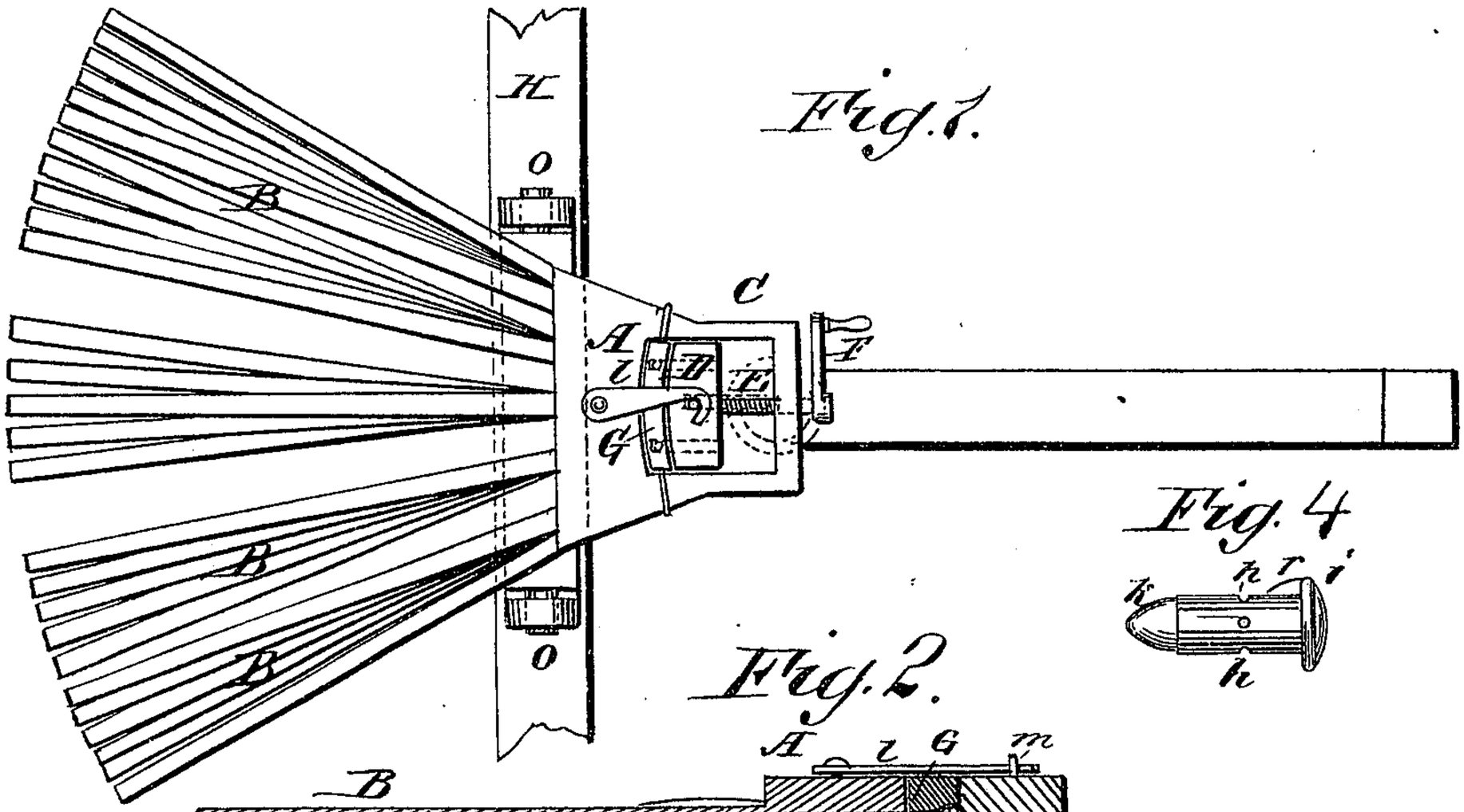


Fig. 4

Fig. 2.

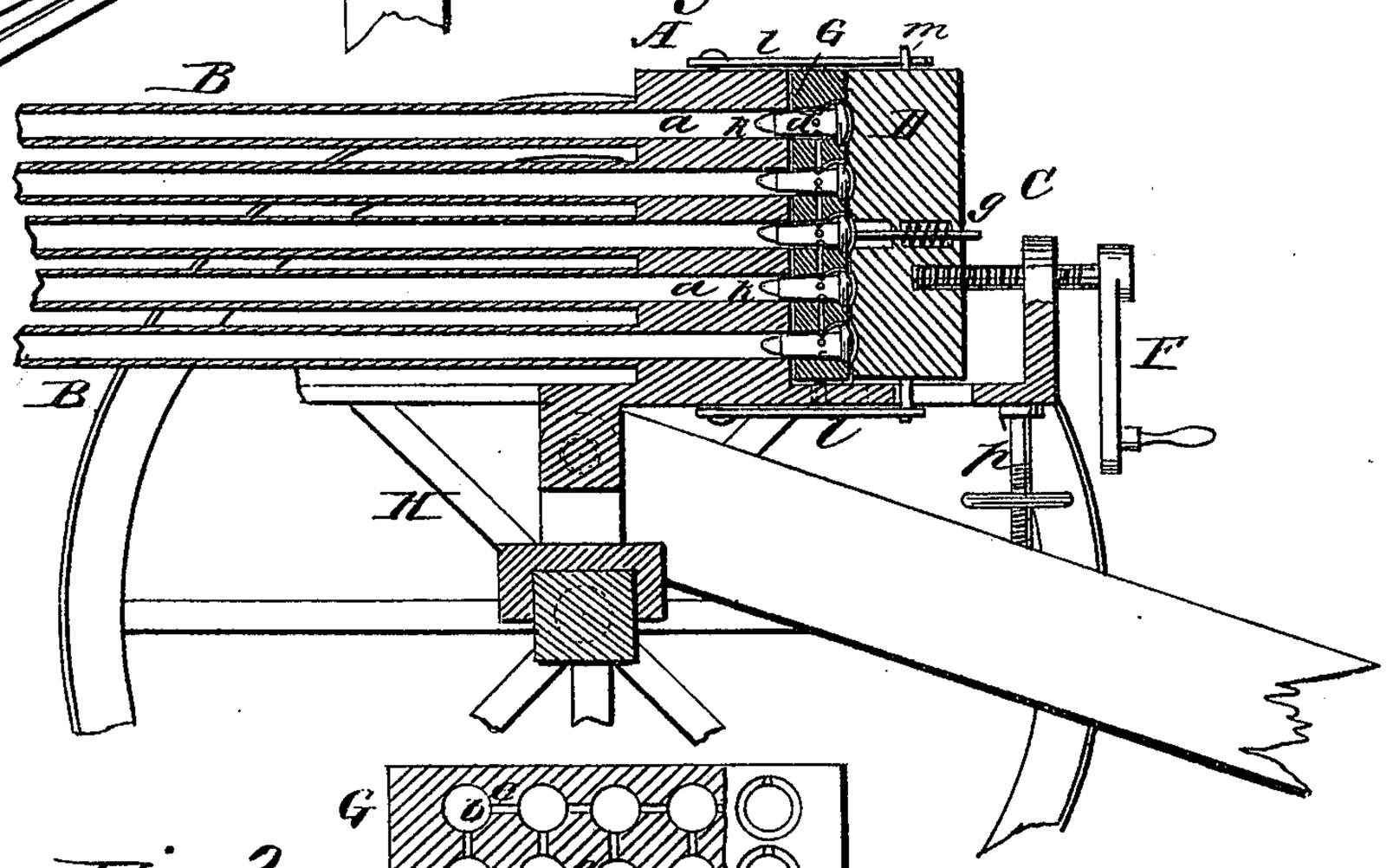
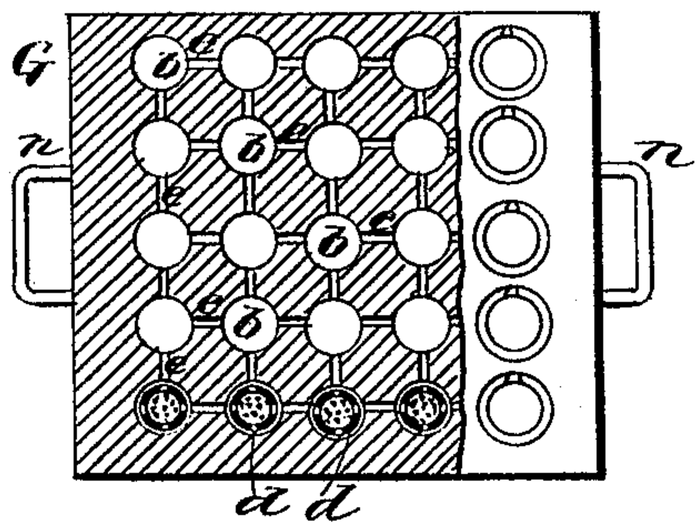


Fig. 3.



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FRANCIS M. SHIELDS, OF COOPWOOD, MISSISSIPPI, ASSIGNOR TO HIMSELF, SARAH T. SHIELDS, WILLIAM D. CORNWELL, LOUIS LIEBENFELD, HENRY HERMAN, MARCUS W. CONNER, JOHN F. SHARP, AND JAMES N. WOODWARD, ALL OF LOUISVILLE, MISSISSIPPI.

MACHINE-GUN.

SPECIFICATION forming part of Letters Patent No. 282,787, dated August 7, 1883.

Application filed January 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. SHIELDS, of Coopwood, in the county of Winston and State of Mississippi, have invented a new and Improved Gun, of which the following is a full, clear, and exact description.

The object of my invention is to provide a gun for war purposes, especially adapted for use in forts and upon fields for resisting charges by troops in mass.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved gun. Fig. 2 is a vertical longitudinal section of the same in larger size. Fig. 3 is a sectional face view of the shell carrier or holder. Fig. 4 is a view of the cartridge.

A is the breech, formed with numerous horizontal chambers *a*, corresponding to the barrels B, which are attached to the breech A and radiate therefrom; or, in place of using a breech-piece, as shown, the barrels may be soldered or brazed together to form the breech. The barrels extend to the right and left of the center, and are planed at such an angle from each other that each barrel will scatter the shot over an area of six feet at a distance of about one hundred yards, that having been found the distance at which the most effective work is done in warfare, and the distance at which a shotgun will distribute its charge with the greatest effect. The barrels are placed in a series, one above another—one, two, or three series at each side of a center one—so as to equalize the recoil. At the rear of the breech A, and attached thereto, is a frame, C, that receives a sliding breech-piece, D, fitted for engaging grooves in the sides of the frame. E is a screw connected to the frame C and engaging the breech-piece D, and F is the handle on the screw, whereby it can be turned for moving the breech-piece back and forth.

G is the charge or shell holder or carrier, shaped to fit between the breech A and movable breech-piece D. This plate or carrier is formed with apertures or chambers *b*, corresponding to the chambers in the breech A, for receiving the shells or cartridges *d*, and the apertures *b* are connected by small vent-holes or passages *e*, that allow communication from one chamber to another. At the center of the movable piece D is a firing-pin, *g*, that is to be fitted for being struck by a hammer in any usual manner for firing the shells or cartridges in the center chamber of the gun.

The shells or cartridges, as shown most clearly in Fig. 4, are formed with side vent-holes, *h*, corresponding in position with the vent-passages *e*, so that when a center shell is exploded the flame will pass from one chamber to another, and thus cause the simultaneous explosion of all the shells. The shells are formed at their flanged ends with side projections, *r*, for retaining the vent-holes in register with vents *e*, and with rounded knobs or projections *i*, and the breech-piece D is made with concave recesses for fitting over the rounded ends *i* of the shell. At their forward end the shells are fitted with wads *k*, of conical form, which assist the entry of the shells into the chambers *a*, and the shells are also made long enough to extend into the chambers *a*, so as to prevent any escape of gas.

l l are hooks attached to the breech A for catching upon pins *m* on the breech-piece D, for holding the latter in place when it is closed, and the shell-carrier G is provided with handles *n*.

The gun is provided with side trunnions, *o*, by which it is supported upon a suitable carriage, H, and the carriage is provided with a screw, *p*, for use in raising and lowering the gun.

In the use of this gun a number of shell-carriers, G, will be provided, ready loaded with shells, so that when one is fired the breech-piece D will be moved back, a second plate or shell-carrier put in place, and the breech-piece then moved up again. The charge of shrapnel or shot is to be placed in the chambers *a* of the breech. In firing the gun, it is to be sighted over the center barrels, so that at the discharge the shot will be equally distributed in all directions.

The ends of the barrels are made concave to fit the convex form of the shell-holder, and the shell-holder may be made to fit grooves in the breech to prevent escape of gas.

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

The combination, with the body of the gun having chambers *a* and barrels B, of the removable shell-holder G, having chambers *b*, connected by passages *e*, and the movable breech-piece D, provided with the central firing-pin, *g*, as shown and described.

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Witnesses:
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