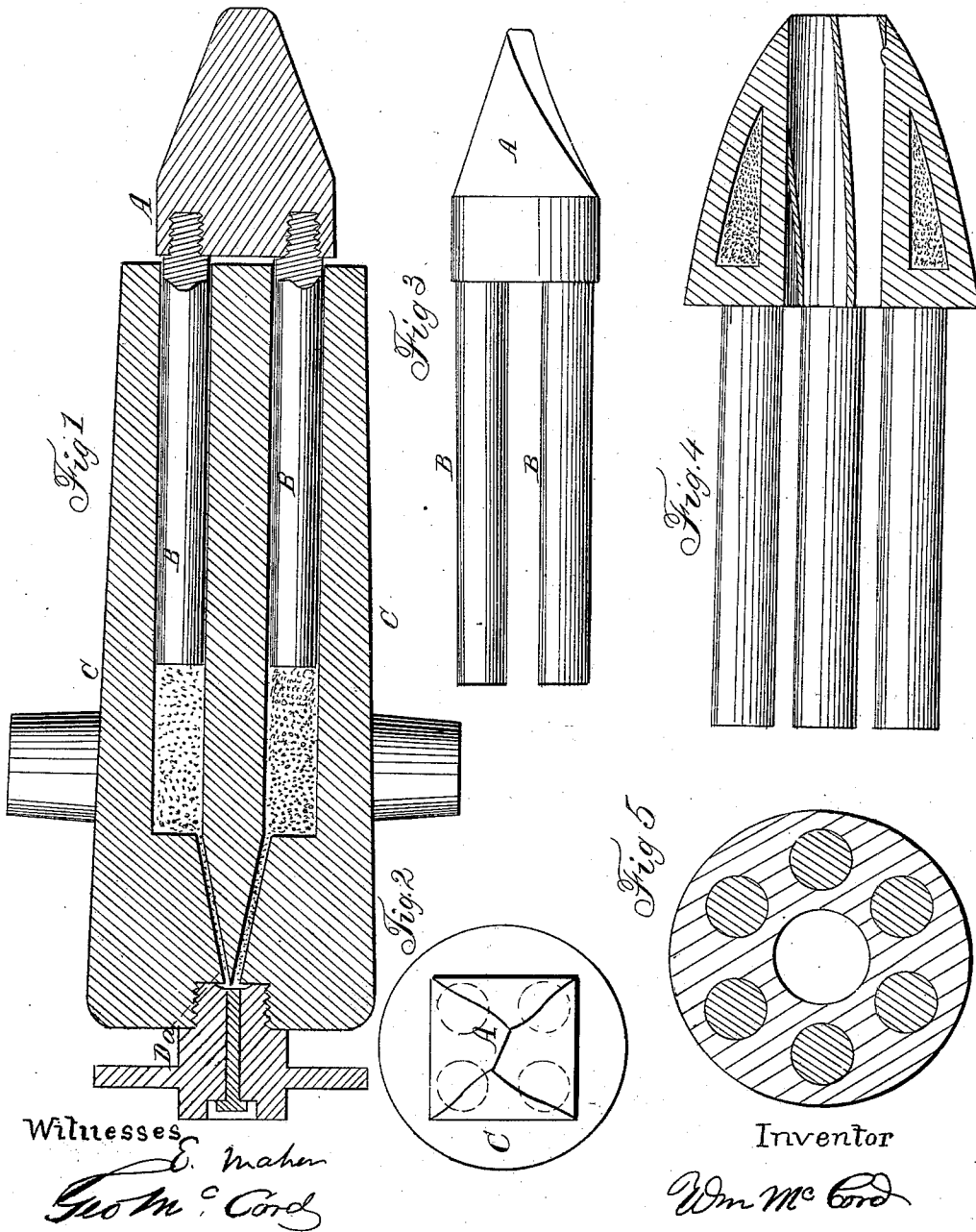


W. McCORD.

Projectile.

No. 39,940.

Patented Sept. 15, 1863.



# UNITED STATES PATENT OFFICE.

WILLIAM McCORD, OF SING SING, NEW YORK.

## IMPROVEMENT IN PROJECTILES FOR MANY-CHAMBERED GUNS.

Specification forming part of Letters Patent No. **39,940**, dated September 15, 1863; antedated November 1, 1862.

*To all whom it may concern:*

Be it known that I, WILLIAM McCORD, of Sing Sing, in the county of Westchester and State of New York, have invented a new and improved projectile whose impelling force is derived from a series of barrels or bores formed in a single cannon; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a section of a many-bored cannon with the improved projectile attached. Fig. 2 is a front view of the same. Fig. 3 is a side elevation of the projectile detached from the cannon. Fig. 4 is a longitudinal section of a modification of the projectile in form of a bomb-shell. Fig. 5 is a rear end view of the same.

Similar letters in the figures refer to corresponding parts.

This invention consists in attaching to the forward end of a series of pistons designed to be inserted in corresponding bores of a gun a peculiarly-formed steel chisel or sharp block in such a manner as to enable it, when shot by the cartridges acting against the ends of the pistons, to readily penetrate the object against which it may strike.

The steel chisel-shaped or forward portion, A, of the projectile is made spiral or winding on its four tapering surfaces, for the purpose of giving it a corresponding winding movement through the air in its projection, and from this tapered portion it extends with parallel sides the required distance to give, with the pistons B, the necessary weight to correspond with the several charges of powder and calibers of the gun. The pistons B are firmly secured to the rear surface of the chisel-shaped portion A, and their extended ends are made to exactly fit the calibers of the chambers of the gun. They are of course arranged parallel with each other, and made the required length to enable their ends to be driven home on their respective cartridges.

The cannon for firing this projectile is made in outward form similar to those in use, and may be bound by steel or wrought-iron bands to give additional strength. Its bores correspond in number and size with the pistons of chisel-shaped shot or projectile.

The gun is fired by a cap or wafer affixed to a circular piece, D, screwed into the rear end of the gun C, the perforation through the center of which extends to a chamber, a, with which openings from the several chambers of the gun communicate, so as to fire all of them simultaneously.

It will be observed from a perusal of the foregoing that in addition to the extraordinary destructive effect arising from the chisel shape of the forward part of this projectile the fact that the ends of the pistons B, which are subjected to the impelling-power, can be multiplied in number with a corresponding number of bores in the gun C. A very massive and heavy projectile can be thrown without danger. As a great portion of the lateral force from the charges in the respective bores acts on the solid body of metal between them, the strain this way will be neutralized. This being the case, there will not be that tendency to tear the metal apart as in single guns.

If desired, the forward part, A, may be made round and tapering to a point, with twisting grooves in the tapered sides to give the necessary whirl through the air; or it may have a hole through its center, with spiral wings on its sides to produce the latter effect. Between this hole and outer surface a concentric cavity may also be formed to contain powder, and thus convert the projectile into a bomb-shell. Furthermore, the pistons may be made hollow and charged with rocket-powder, to explode at a stated time after they leave the gun, to assist in the propulsion of the projectile, the discharge from the several pistons being such as to assist the twisting motion.

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

The before-described projectile, formed of a steel or other hard-metal chisel-shaped front, as described, with pistons B attached to the rear of the same, for insertion into the corresponding bores of a many-chambered gun, as herein set forth.

WM. McCORD.

Witnesses:

E. MAHER,  
GEO. McCORD.