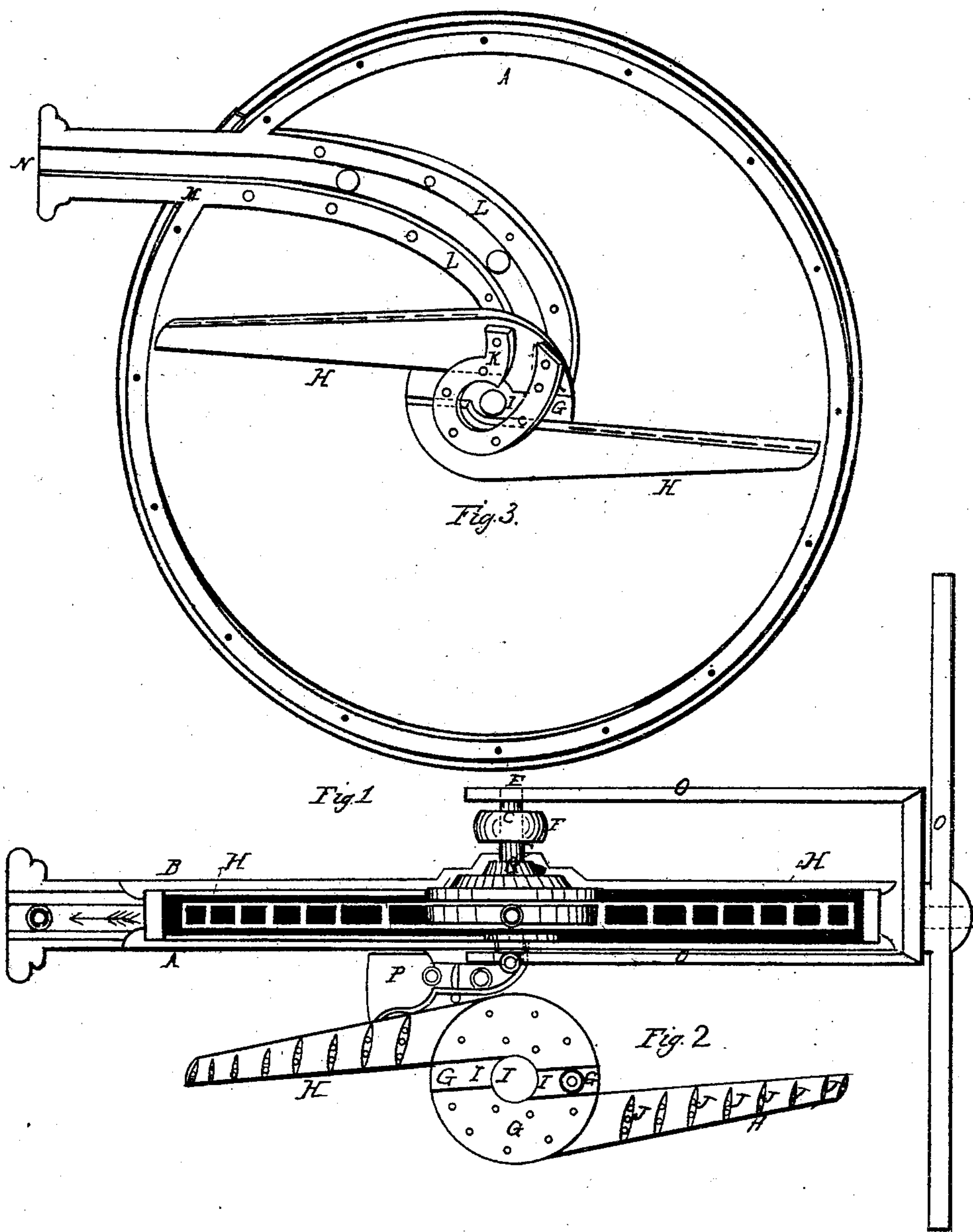


R. McCARTY.
Machine Gun.

No. 1,049.

Patented Dec 31, 1838.



UNITED STATES PATENT OFFICE.

ROBERT McCARTY, OF NEW YORK, N. Y.

MACHINE FOR THROWING BALLS, SHOT, &c.

Specification forming part of Letters Patent No. 1,049, dated December 31, 1838.

To all whom it may concern:

Be it known that I, ROBERT McCARTY, of the city, county, and State of New York, have invented a new and useful Machine for Throwing Balls, Shot, &c.; and I do hereby declare that the following is an exact and faithful description of the same.

See Figure 1 in the annexed drawings, which represents a metallic cylindrical case or box about one and one-fourth inch deep and three feet in diameter, formed of two disk-plates, A B, united by flanges at the periphery. At right angles through the center of one of these plates is suspended a spindle or arbor, C, having one bearing at D in said plate and one in a frame attached to the same at E.

Nearly on the center of the arbor is a whirl, F, over which the band passes for propelling the same. Upon the large end of said arbor, at G, within the case, Fig. 1, is fixed a chuck or face-plate, upon which is secured the propelling-arms H H, the inner ends of which are firmly riveted to or made entire with the periphery, and extending on tangent lines from two opposite sides of the same, leaving a sunken recess between them at I, its bottom being formed by the face-plate G, and nearly on a level with the disk-plate through which the arbor passes. (See Fig. 2.)

* The propelling-arms H H may be made solid, or of two thicknesses of sheet-steel, tapering from the face-plate to the ends, braced apart, as exhibited in Fig. 2, by wedge-shaped studs J J J J J, and firmly riveted together through the same, leaving open intermediate spaces, which makes the arms much lighter and less impeded by atmospheric resistance.

Upon the inside surfaces of the disk-plates A B are raised, about one-fourth inch from the same, corresponding scrolls, K L, the former of which commences at the center and the latter at the periphery of the face-plate G, and, running directly opposite in a circuitous snail or scroll shaped course, pass off through the periphery nearly on a tangent with the same at M, Fig. 3, where they are united in halves and form a tube or barrel, N.

The office of the scroll is to guide the balls in their passage from the center, where they are introduced, through the funnel or hopper (see Fig. 1) as they are propelled around by the arms along the same, and are thrown out at the tube or barrel N, Fig. 3. The proper curve of the scrolls will depend upon the form of the propelling-arms, (which may be straight or curved,) and may be best ascertained by marking the natural track of the ball, which may be done by placing the machine horizontally and forcing the ball, (which may be covered with raw paint,) with the arms, around on one of the disk-plates, upon the face of which the painted track will describe the correct line for the scroll.

The machine may be used in a horizontal position; but I prefer the vertical, as represented in the sectional view, Fig. 1, and supported upon bearings at O. It may be placed upon a carriage or otherwise, and propelled by steam or manual power, terminating by a band upon the whirl F.

The mode of elevating, &c., may be on the common plan of ordnance, or otherwise.

In operating, the arms should be made to revolve at as high speed as the machine can bear, and the balls introduced in proportion to the propelling-power. They may be arranged in a spiral or zigzag tube and let in by means of a gate, or thrown into the hopper P by hand or otherwise.

What I claim in the above-described machine as my own invention, and desire to secure by Letters Patent, is—

The throwing of balls, shot, &c., by the combined action of centrifugal and projectile forces, as hereinabove set forth, without reference to the particular form of the propelling-arms or face-plate by which the same are projected.

New York, August 17, 1838.

ROBERT McCARTY.

Witnesses:

WALTER HUNT,
ALBERT FOWLER.