T. M. SMITH.
Ball-Trap.

No. 212,996. Patented Mar. 4, 1879.

FIG. I.

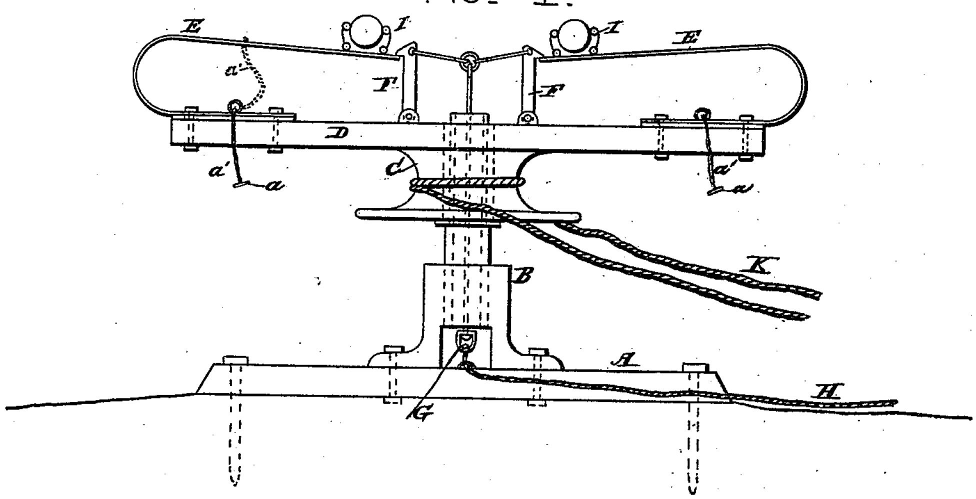
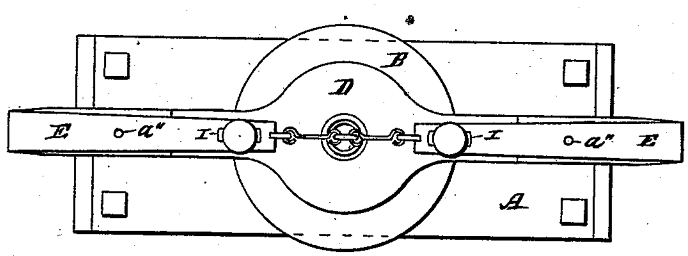


FIG. II.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

THOMAS M. SMITH, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN BALL-TRAPS.

Specification forming part of Letters Patent No. **212,996**, dated March 4, 1879; application filed January 13, 1879.

To all whom it may concern:

Be it known that I, THOMAS M. SMITH, of the city of Baltimore and State of Maryland, have invented certain Improvements in Ball-Traps, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in traps for projecting breakable balls to be fired at, the said balls, while in the air, representing birds on the wing; and it consists in the novel construction of certain parts of the device, as will hereinafter fully appear.

In the drawings forming a part hereof, Figure 1 is an exterior elevation of the improved trap, and Fig. 2 a plan of the same.

Similar letters of reference indicate similar parts in both views.

A is the base-board of the trap, which is fastened to the ground by means of drive-bolts. B is the stand, consisting of a hollow column secured to the base-board, adapted to support at its upper end the drum C and revoluble arms D D, to which the said drum is attached. The arms, two of which are preferably used, are provided with the duplicated springs E, secured at their lower ends upon pieces of rubber or other flexible material to increase their elasticity. The upper ends of the springs approach the center of the trap, in order to admit of their being connected by the triggers F, which are operated by a system of wires terminating at the lower end of the stationary columnar stand B. A swivel, G, admits of the rotation of the wires without twisting the line H, used to spring the trap.

The balls to be projected are confined on the springs near their ends by means of spring-clamps I.

The pulley or drum C, with its connections, is revolved by means of a rope, K, which is wound around the said drum, as shown. The elasticity of the springs may at any time be reduced by passing the pins *a* at the ends of the cords *a'* through the holes *a''* in the upper sections of the springs E, thereby shortening the use of the springs when released from the triggers.

The trap is rotated, as before described, and when sufficient velocity is attained is sprung, the balls being thereby projected from the trap, the several forces acting upon the balls at the time of their projection, and the varying position of the balls during their revolution prevents any computation by the shooter of the direction which the balls will take, thereby increasing the utility of the device as an educational medium in gunning practice.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a rotary ball-trap, the duplicated springs E, having spring ball-clamps I, combined with means for shortening the rise of the springs E when released, and thereby decreasing their projectile force, substantially as specified.

2. A rotary ball-trap consisting of a stand and central pivot, the drum C, arms D, duplicated springs E, having spring ball-clamps I, and devices for decreasing the projectile force of the springs E when released, combined with a trigger mechanism, substantially as specified.

In testimony whereof I have hereunto subscribed my name this 30th day of December, A. D. 1878.

THOMAS M. SMITH.

Witnesses:
JNO. T. MADDOX,
CHARLES L. MORAN.