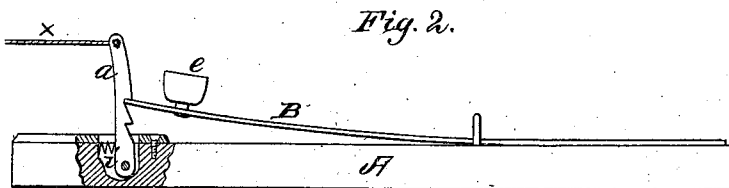
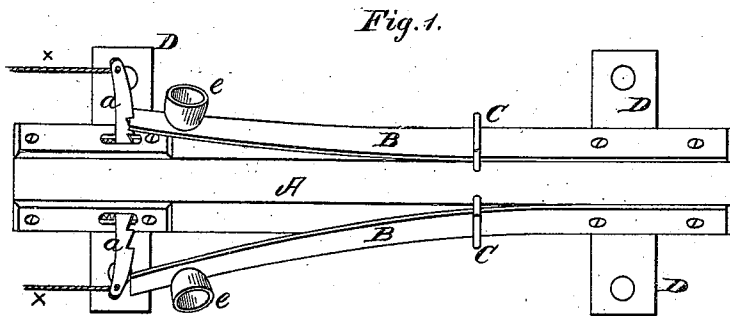


A. H. BOGARDUS.

BALL-THROWERS FOR SHOOTING PRACTICE.

No. 188,334.

Patented March 13, 1877.



WITNESSES

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ADAM H. BOGARDUS, OF ELKHART, ILLINOIS.

IMPROVEMENT IN BALL-THROWERS FOR SHOOTING PRACTICE.

Specification forming part of Letters Patent No. **188,334**, dated March 13, 1877; application filed February 22, 1877.

To all whom it may concern:

Be it known that I, ADAM H. BOGARDUS, of Elkhart, in the county of Logan and in the State of Illinois, have invented certain new and useful Improvements in Traps for Throwing Glass Balls for Shooting Practice; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of an apparatus for throwing glass or other balls into the air for shooting practice, the peculiarities of which will be hereinafter fully described.

To enable those skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

In the accompanying drawings, making part of this specification, Figure 1 represents a plan view of a double trap, and Fig. 2 a side view of a single one.

In the figures, A represents the base of the trap, which may be a board or piece of scantling, provided near each end with cross-pieces D; through which it is pinned to the ground. B represents a spring, made of steel or other suitable material, which is curved as represented, and which lies longitudinally of the base, having one end secured to the base and the other end free. Upon the free end is secured a cup, *e*, which is intended for holding the ball to be thrown. C represents a loop, which passes over the spring and into the base, for the purpose of keeping the spring in position. *a* represents a toothed bar, which

is pivoted at one end in a slot in the base. This bar stands in a vertical position, and is pressed toward the spring by means of a coiled spring, *i*. To the upper end of this bar is secured a cord, *x*, which passes back to the position of the shooter, and which is used for springing the trap. To use this trap the foot is placed upon the loose end of the spring, and said spring is pressed down until its end is caught in one of the notches of the bar. The ball is then placed in the cup. When the bar *a* is drawn back by means of the cord the spring is released and casts the ball into the air.

The speed of the ball can be increased by catching the spring in the lowest tooth of the bar, or regulated to suit the shooter by the various notches. I may use one, two, or more, springs upon the base for double or other shooting; and these springs may be so arranged as to throw the balls in different directions or at different angles to suit the party shooting.

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

The base A, provided with springs B B, upon which are secured cups *e e*, in combination with the notched bar and cord, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of February, 1877.

A. H. BOGARDUS.

Witnesses:

C. M. ALEXANDER,
FRANK GALT.