P. TALTAVULL.
Ball-Target Thrower.

No. 202,301. Patented April 9, 1878.

Fig. 1.

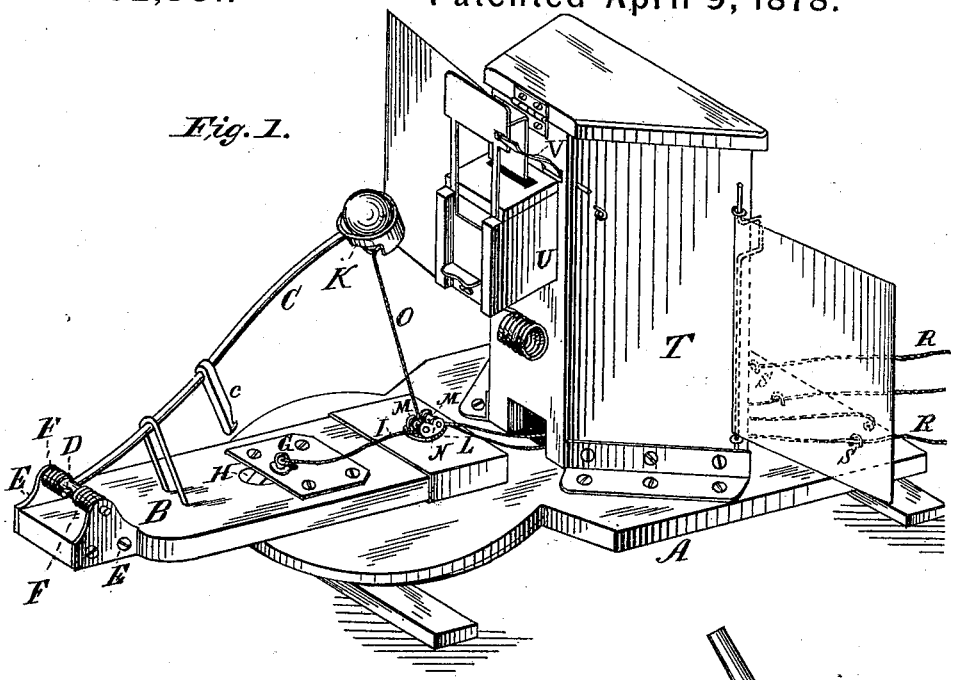
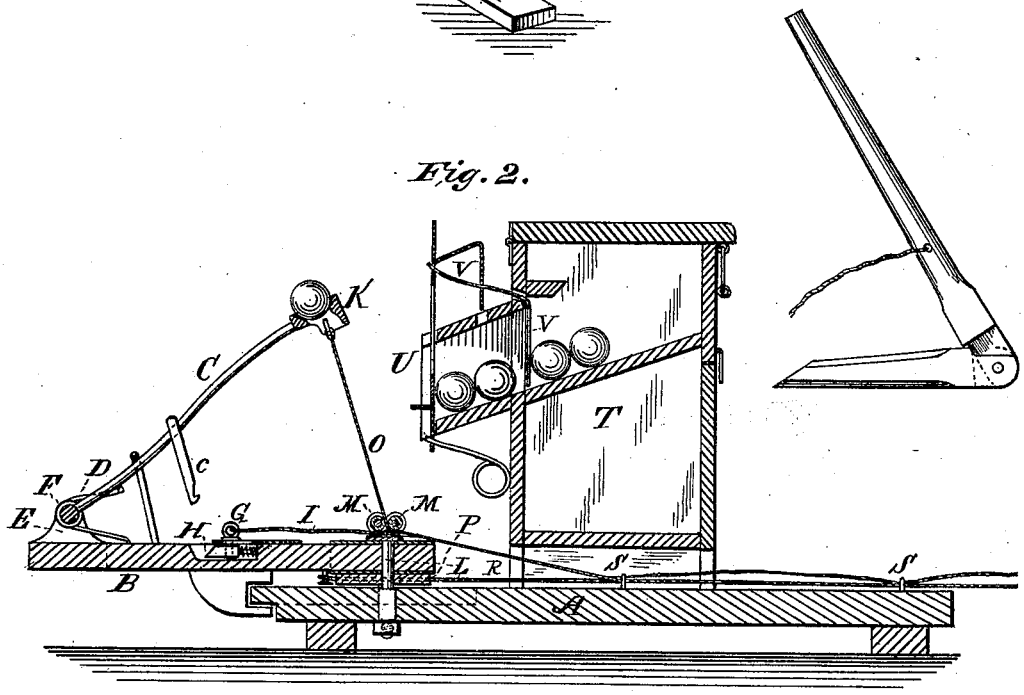


Fig. 2.



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UNITED STATES PATENT OFFICE.

PETER TALTAVULL, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN BALL-TARGET THROWERS.

Specification forming part of Letters Patent No. **202,301**, dated April 9, 1878; application filed March 22, 1878.

To all whom it may concern:

Be it known that I, PETER TALTAVULL, of Washington, District of Columbia, have invented certain new and useful Improvements in Traps for Throwing Balls; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in traps for throwing or casting balls for target-shooting at flying objects; and it has for its object to provide a means for automatically setting the spring and cup for discharging the balls, for automatically dropping the balls successively into the cup, as required, and for releasing the spring, so as to discharge the deposited ball into the air, as more fully hereinafter specified.

To this end my invention consists in a base or platform provided with a table, swiveled thereto, adapted to be swung at any angle, carrying a spring-arm, and pivoted at a point directly under the cup when the arm is depressed; a receptacle for holding the balls, and certain devices for automatically dropping the balls one at a time successively into the cup secured to the arm; a downwardly-projecting spout, provided with a double reciprocating slide, which is held in its normal position by means of a spring, and is adapted to be automatically operated by the arm to deliver the balls; and an agitating-arm, extending into the receptacle, and operated by the said double slide to deliver the balls from within the spout, as more fully hereinafter specified.

In the drawings, Figure 1 represents a perspective view of my invention and Fig. 2 a vertical longitudinal section of the same.

The letter A represents a horizontal platform or base, to the front end of which is swiveled a table, B, which carries the arm C, which is secured at its lower end to a shaft, D, journaled in standards E secured to or formed with the table B at its front end. Said shaft D is encircled by the spiral springs F, which may be rigidly attached at one end to the table B, and at the other to the arm C or its shaft, in such manner as to tend to elevate said arm suddenly when given full play. The arm C is provided with a catch, *c*, which is adapted to engage and be held by a trigger, G, when said arm is fully depressed, the said trigger being pivoted in a slot, H, formed about midway between the two ends of the table B, the said trigger having attached to it a line, I, extending to the rear, by means of which it may be operated to release the arm C. Upon the upper end of the arm C is formed or secured a cup, K, in which the ball to be thrown or cast is held. A stud or pivot, L, secures the table B to the base or platform A. The lower part of said stud or pivot, which passes through the base, is made square, for the purpose of holding it in its place and preventing it from turning. The part which passes through the table is made round, thereby permitting said table to swing at any point within a half-circle. The said stud or pivot must be so placed that the operating-line will bring the cup, when swung at an angle, directly under the trough and receive the ball successfully. The upper end of the stud or pivot L is provided with two (may be one or two) grooved pulleys, M M, journaled in a head, N, attached to or formed upon the upper end of said stud or pivot, said pulleys serving as a guide for the trigger-operating line, and the line O extending to the rear of the apparatus, by means of which the arm C may be depressed. Immediately under the rear end of the table B, and attached thereto, is a pulley, P, centering on the stud or pivot L, and serving as a guide for the lines R R, the ends of which are secured to the table by means of a screw-eye, and cross each other, extending through guides S S, attached to the base A, and to the rear of the apparatus, their ends being within ready reach of the operator.

The letter T represents the receptacle in which the balls are kept, having extending forwardly an inclined spout, U, so located with respect to the arm C and its cup that any ball released from said receptacle will fall into said spout and be dropped into the cup at the end of the arm C.

The letter V represents a lever extending through the front of the receptacle, the front end of said lever being arranged to be oper-

ated by the vertically-reciprocating slide, in such manner that, as the slide is reciprocated to deliver the balls, the inner end of said lever will serve as a finger to arrange the balls in the receptacle for proper distribution through the spout.

The receptacle for the balls has in all instances to be founded upon or built on the base which carries the casting or active parts of my device; and I take advantage of this to combine therewith the necessary screens for concealing the working parts of the apparatus and the direction in which the balls are to be thrown.

The operation of my invention will be readily understood from the foregoing description.

In setting the apparatus the arm C is drawn down so that the catch thereof will engage the trigger secured to the swiveled table. In being brought to this position it depresses the outer end of the double slide, allowing one ball to be dropped into the cup, which is in position to receive it.

As there is considerable more force required to bring the arm C to position to be locked for subsequent work than in any of the other devices, I provide the line by which it is operated with a lever or other device, which may be secured in the ground at any established distance, so as to give leverage for operating the device.

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

1. A receptacle for balls provided with an inclined spout and with a vertically-reciprocating double spring-gate or cut-off, in combination with the spring-arm of a ball-thrower, arranged as shown and described, whereby the gate is operated to admit a ball to the cup when the arm is depressed, substantially as specified.

2. In combination with the receptacle and reciprocating double slide or gate, an agitating-arm extending into the receptacle, and operated by said slide or gate to deliver the balls from within the spout, substantially as specified.

3. In a ball-trap, the combination of a base or platform, A, a swiveled or pivoted plate, B, carrying a spring, C, and pivoted at a point directly under the cup when the arm is depressed, a receptacle for balls provided with spout and cut-off, all relatively arranged, as shown and described, so that the parts will operate together to drop a ball into the cup in whatever position the plate B is turned, substantially as specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

PETER TALTAVULL.

Witnesses:
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WILLIAM FITCH.