

954,583.

H. C. PEPPER.
TARGET TRAP CARRIER.
APPLICATION FILED APR. 21, 1909.

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Fig. 1.

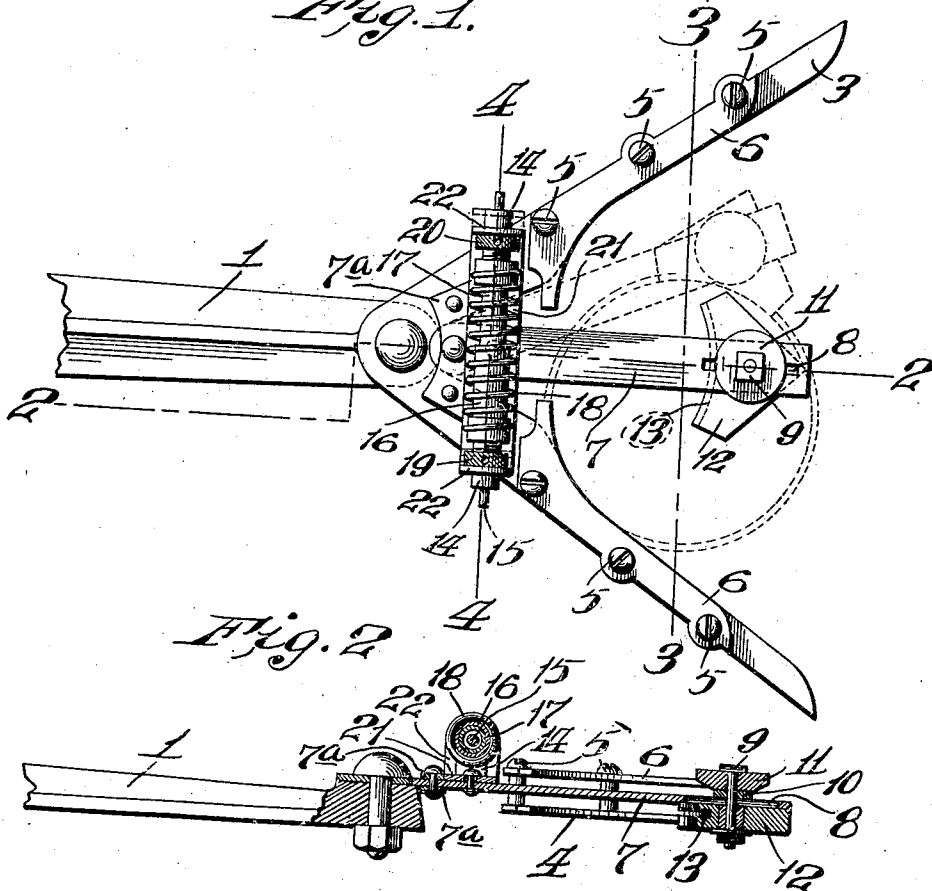


Fig. 2.

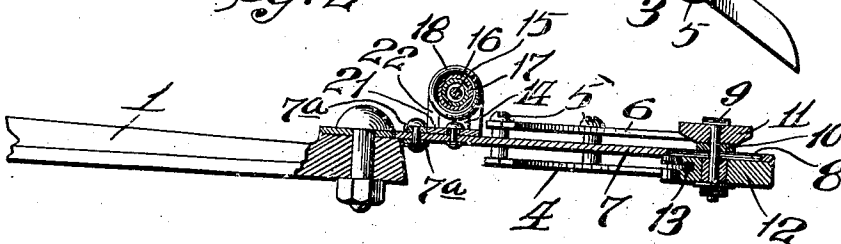
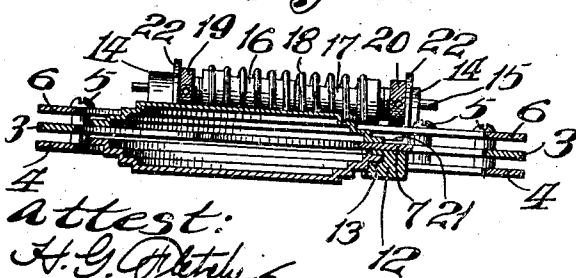
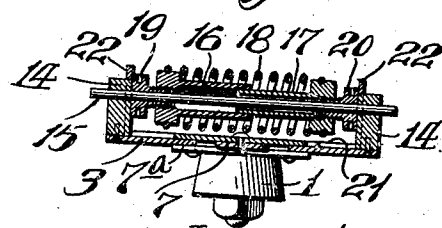


Fig. 3.



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Fig. 4.



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UNITED STATES PATENT OFFICE.

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TARGET-TRAP CARRIER.

954,583.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRY CREIGHTON PEFFER, a citizen of the United States, and resident of East St. Louis, Illinois, have invented certain new and useful Improvements in Target-Trap Carriers, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a target trap carrier, the object of my invention being to construct a simple carrier for the throw arm of a target trap, and which carrier is adapted to hold two targets and arranged to throw them simultaneously and in different courses.

A further object of my invention is to provide a carrier which holds two targets, the upper target held with its convex surface upwardly and the lower target with its concave surface upwardly.

A further object of my invention is to provide a carrier combining the merits of a right and left hand throwing target trap, and capable of throwing two targets simultaneously, one in a straight course and the other in a curved or spiral course.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts hereinafter described, claimed and shown in the accompanying drawing, in which:

Figure 1 is a plan view of a carrier of my improved construction showing the position of a target in dotted lines; Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1; Fig. 3 is a transverse section taken on the line 3—3 of Fig. 1; and Fig. 4 is a section taken on the line 4—4 of Fig. 1.

Referring by numerals to the accompanying drawing: 1 designates the throw arm of the trap which carries the target carrier. The carrier comprises a V shaped plate 3, which is connected at its point or apex with the throw arm 1, and arranged beneath the arms of this plate 3 are arms 4 which are spaced apart from said arms 3, being connected thereto by pins or rivets 5.

Arms 6 are arranged immediately above the central portions of the arms of the plate 3, said arms 6 being comparatively shorter than the arms of said plate 3 and being connected thereto by the pins or rivets 5 before mentioned.

7 designates a finger which is pivotally

connected at its rear end to straps fixed to the arms of the plate 3 adjacent its apex, and formed in the outer portion of this finger is a slot 8 in which is adjustably positioned a pin or bolt 9 on the upper end of which is arranged a collar 10, and a flanged collar 11 of greater diameter than the collar 10. Loosely arranged on the lower portion of the pin or bolt 9 is a substantially triangular block 12, in one edge of which is formed a horizontally disposed curved groove 13. Fixed on the arms of the plate 3 adjacent the point where the finger 7 is pivoted to said plate, and at opposite sides thereof, are perforated uprights 14, through which is a horizontally disposed fixed shaft 15, telescopically embracing said shaft, are the sleeves 16 and 17 around which is coiled an expansive spring 18. Each of the sleeves 16 and 17 are internally threaded at their outer ends and adapted to be engaged by the knurled nuts 19 and 20. A stirrup 21 is pivotally connected with the finger 7 and its upright end portions 22—22 and its lower body portion are slotted to permit its movement relative to the uprights 14 fixed to the arms of the plate 3. The nuts 19 and 20 engage the upright end portions of the stirrup and by reason of their being acted on by the spring 18 the finger 7 is normally held in a line parallel with the throw arm. When the finger 7 is drawn in a given direction the entire stirrup with each of its uprights 22—22 is drawn in the same direction, the upright 22 toward which the finger moves passing over the fixed upright 14 on the same side and the knurled nut held between said upright 14 and the opposite upright 22 carried by the stirrup thus compressing the spring 18.

When my improved carrier is ready for use, the nuts 19 and 20 are adjusted on the sleeves 16 and 17 to give the desired tension of the spring 18 to normally maintain the finger in a central position between the arms of the plate 3, and to load the carrier, or position the targets therein, the finger is manually engaged and swung to one side or the other and the target is positioned with its concave face downwardly on top of said finger with a portion of its flange engaging one of the arms of the plate 3 and one of the arms 6, and against the collar 10 beneath the flange collar 11. A second target having its concave face upward or in an inverted position, with reference to the first

target, is arranged beneath the finger 7 with a portion of its flange between one of the arms of the plate 3 and one of the arms 4, and said flange also engages in the groove 13 formed in the block 12. Thus a pair of targets are held in the carrier, one immediately over the other, one of which has its convex face uppermost and the other its convex face held downwardly.

10 The trap is now operated in the usual manner, and when the throwing arm stops after it is swung, the sudden stoppage of the momentum of said arm causes the finger 7 to shift slightly to one side to permit the 15 two targets to leave the carrier, and in leaving, said targets will be given rotary motion as their edges bear against the edge of the block 12 and collar 10. By reason of this rotary motion, and, also, by reason of the 20 inverted position of one of the targets, said targets are caused to take different paths of travel during flight, the uppermost target with its concave surface held downward being thrown in a straight course, and the 25 lowermost target with its convex face held downward being thrown in a spiral or curved course.

The finger 7 can be readily shifted from one side to another corresponding to the desired movement of the throwing arm, and the block 12, against which the lowermost target is positioned, is readily swung on the pin or bolt 9 so as to engage the flange of the lowermost target at either side.

35 The pin or bolt 9 can be adjusted longitudinally relative to the finger 7, so as to accommodate targets of various diameters. This adjustment serves also to vary the paths of travel of the targets, in that, by the 40 engagement of the collar 10 and the block 12 at different positions on the periphery of the flange of the target the degree of rotation of the target in flight is varied.

A carrier of my improved construction is 45 very simple and inexpensive, and can be attached to any suitable trap and provides simple means whereby two targets are thrown simultaneously in different courses, or with it I can also throw a single target 50 and give it a greater variety of movement and can also control its line of flight.

I claim:

1. In combination with the throw arm of a target trap, a plate, having arms, fixed 55 to the end of the throw arm, a spring held finger between the arms of the plate and means carried by the finger for holding one target with its convex face upwardly and

a second target with its concave face upwardly.

2. In combination with the throw arm of a target trap, a plate, having arms, fixed to the end of the throw arm, a spring held finger between the arms of the plate, means carried by the finger for holding a target with its concave face upwardly, which means are adjustable longitudinally relative to the finger.

3. In combination with the throw arm of a target trap, a plate, having arms, fixed to the end of the throw arm, a spring held finger between the arms of the plate, means carried by the finger for holding a target with its convex face upwardly and means for holding a second target with its concave face upwardly, which latter means is pivoted to the finger.

4. In combination with the throw arm of a target trap, a plate, having arms, fixed to the end of the throw arm, a finger pivoted between the arms of the plate, a spring acting on the finger, means for adjusting the tension of the spring, means carried by the finger for holding a target with its convex face upwardly, and means carried by the finger for holding a second target with its concave face upwardly.

5. In combination with the throw arm of a target trap, a plate, having arms, fixed to the end of the throw arm, a finger pivoted between the arms of the plate, a spring acting on the finger, means for adjusting the tension of the spring, means carried by the finger for holding a target with its convex face upwardly, and means pivoted to the finger for holding a second target with its concave face upwardly.

6. In combination with the throw arm of a target trap, a plate, having arms, fixed to the end of the throw arm, a slotted finger pivoted between the arms of the plate, a spring acting on the finger, means for adjusting the spring, a bolt carried by the finger within the slot, means carried by the bolt for engaging a target to hold it with its convex face upward, and means rotatably carried by the bolt for engaging a second target with its concave face upwardly.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

HARRY CREIGHTON PEFFER.

Witnesses:

EDWARD E. LONGAN,
E. L. WALLACE.