No. 380,394. PATENTED FEB. 25, 1908.

G. NICOLAI.

TARGET TRAP.

APPLICATION FILED AUG. 24, 1907.

Fig. I

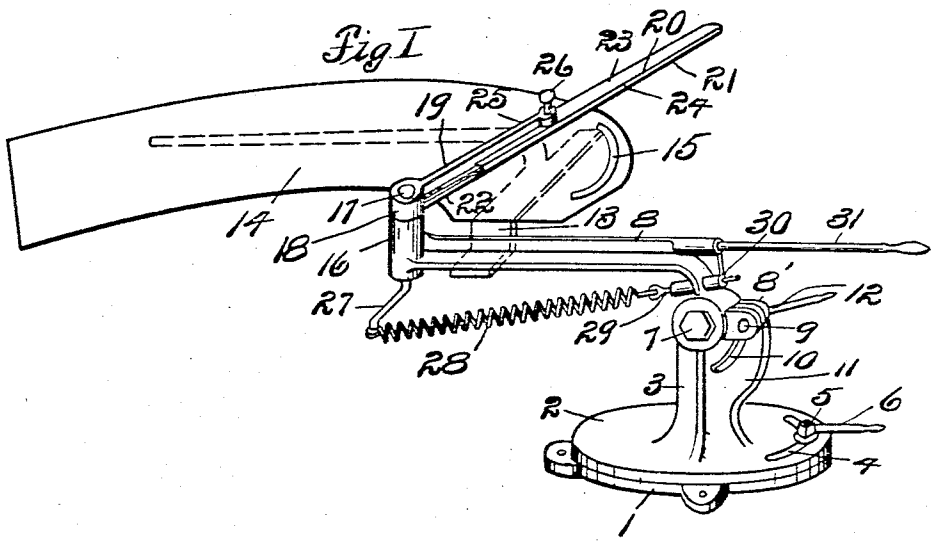


Fig. II

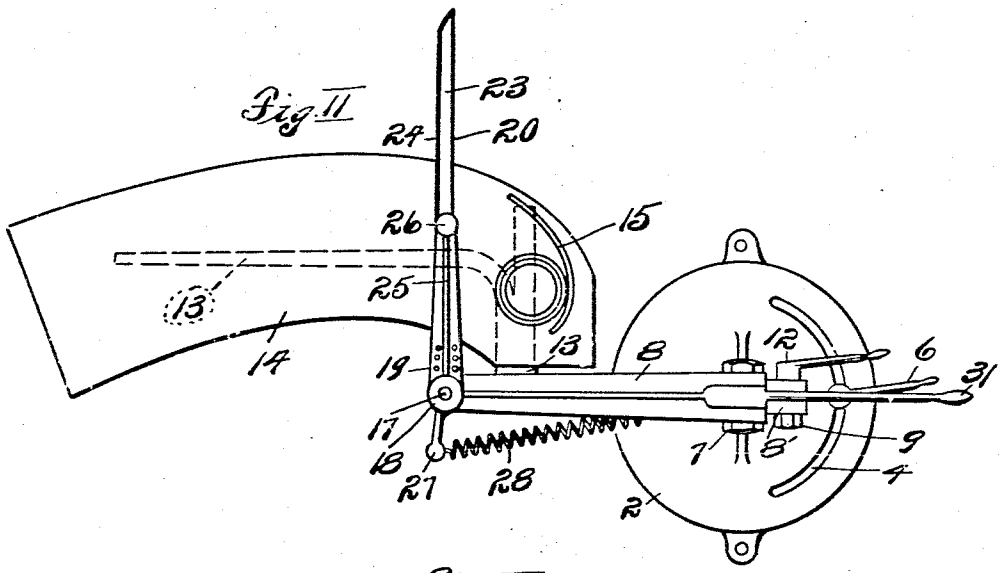
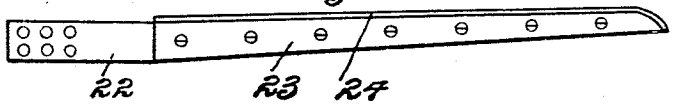


Fig. III



Fig. IV



WITNESSES:

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TARGET-TRAP.

No. 880,394. Specification of Letters Patent. Patented Feb. 25, 1908.

Application filed August 24, 1907. Serial No. 390,041.

To all whom it may concern:

Be it known that I, GEORGE NICOLAI, a citizen of the United States, residing at Denver, in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Target-Traps; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to target traps, and more particularly to traps for throwing clay targets; the object of my invention being to provide a device of that class which is simple and economical both in construction and operation. In accomplishing this object I have eliminated the customary carrier in which the target is usually gripped during the discharging swing of the carrier arm, and have provided a platform upon which the target may rest, and a throwing arm adapted for sweeping the target along, and discharging same from said platform.

A further object is to provide the improved details of structure which will presently be fully described and pointed out in the claims, reference being had to the accompanying drawings, in which like reference numerals refer to like parts throughout the several views, and in which:—

Figure I is a perspective view of a target trap constructed according to my invention. Fig. II is a top plan view of same. Fig. III is an enlarged edge view of the target throwing arm. Fig. IV is an enlarged top plan view of same.

Referring more in detail to the parts: 1 designates the trap base, which may be secured to a suitable foundation. Revolubly mounted on base 1 is the base flange 2 of the frame standard 3, said flange having an arcuate slot 4 through which a stud 5, rigidly mounted on base 1, projects. Stud 5 is threaded at its upper end and carries a hand nut 6 by means of which the flange 2 may be locked in a desired position on base 1.

Pivoted to standard 3 by means of a bolt 7 is a frame 8, which is provided near its base with a yoke 8', the arms of which are perforated to receive a bolt 9, which extends therethrough, and through an arcuate slot 10 in a flange 11 on standard 3; said bolt being preferably rigid with said arms, and having a loose fit in said slot, in order that it may travel freely in the slot when it is desired to tilt the frame to vary the elevation of the target. Bolt 9 is threaded at one end and carries a hand nut 12, which may be tightened against the yoke and draw the yoke arms against flange 11 to lock said parts together. Supported on a bracket 13, carried by frame 8 is a platform 14, which projects forwardly from the side of said frame, and on which the target is seated, and over which the target travels when being discharged.

15 designates a guide rail, against which the target is placed when seated on platform 14.

At the free end of frame 8 is a shaft bearing 16, and revolubly mounted in said bearing is a shaft 17, upon which is keyed a collar 18 of a laterally projecting bracket 19. Rigidly secured to bracket 19 is the target throwing arm 20, which is preferably formed of a bottom strip 21, of metal, having a projecting portion 22 secured to bracket 19, a top strip 23, of metal, and an intermediate strip 24, of leather or like material, which strip 24 projects slightly from the edge of the arm body, and is adapted for engagement with the target. Bracket 19 is provided with a finger 25, which projects over the arm body, and carries a set screw 26, by which said arm is adjusted vertically to secure a proper target engagement.

Shaft 17 projects below the bearing 16, and is there provided with a crank 27, which projects from the shaft in a direction opposite to that of the throwing arm, and on the end of said crank is mounted one end of the coil spring 28; the other end of said spring being secured to a bolt 29 which is carried by frame 8; said bolt having a nut 30 by which it is moved forwardly or back, to secure a proper tension of the spring.

31 designates a handle on frame 8, by means of which the frame may be conveniently moved, when it is desired to vary its angle or elevation.

When in use, the frame is set at a desired angle by means of the bolt and slot arrangement previously described, and the throw arm 20 drawn back behind the platform rail 15. As arm 20 is drawn back, the crank 27 is moved forwardly, tensioning spring 28. When the arm is in the position noted, a tar-

get is placed on the platform, against rail 15, and the throw arm eased forward into engagement therewith. Upon receiving a signal from the shooter, the trap operator releases the throw arm, which is then rapidly revolved by the retraction of spring 28, and in its revolution sweeps the target forwardly over the platform, and discharges it therefrom. By providing the throw arm with a target engaging portion of leather or like material, there is a tendency of the target to hold thereagainst, instead of sliding along the edge of the arm, which causes a revolution of the target as it is swept outwardly, until, at the moment of leaving the platform, it is revolving very rapidly, which action imparts a steady and even flight to the target.

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

1. A target trap comprising a platform adapted for the support of a target prior to and during the initial portion of the target flight, a revoluble arm adapted for engagement with a target near the arm base prior to discharge and for moving such target outwardly on said platform and along the arm during the discharge, and means for actuating said arm.

2. A target trap comprising a platform, a curved flange projecting from the face of said platform and forming the rear abutment of a forwardly unobstructed target seat, a revoluble throw arm extending across and beyond said seat, and means for actuating said throw arm.

3. A target trap comprising a target supporting platform, a throw arm revolubly mounted at one end and adapted for initial engagement with a target near the arm mounting and for longitudinally progressing engagement with the target during the arm revolution, and means for actuating said throw arm.

4. A target trap comprising a platform adapted for supporting a target in initial inert position and during a portion of the target flight, a throw arm having a revolubly mounted base and adapted for engagement with said target near the arm base when the target is in its inert position, and for longitudinally progressive engagement with said target during the initial portion of the target flight, a friction inducing member on said arm, and means for actuating said arm, substantially as and for the purpose set forth.

5. In a target trap, the combination with target supporting means of a target throwing arm comprising top and bottom body portions and an intermediate portion of a relatively yielding material, said intermediate portion being extended beyond the top and bottom portions at the target engaging edge, for the purpose set forth.

6. In a target trap, the combination with a suitable frame, of a target supporting platform carried by said frame, a throwing arm revolubly mounted on said frame and adapted for movement over said platform in a plane substantially parallel with said platform, said arm comprising top and bottom body portions and an intermediate portion of relatively yielding material adapted for engagement with a target seated on said platform, and means for actuating said throw arm.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE NICOLAI.

Witnesses:

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HAZEL REID SACKETT.