BEST AVAILABLE COPY

Feb. 5, 1929. 1,700,880

H. P. CAMP

TARGET TRAP

Filed Dec. 10, 1926 2 Sheets-Sheet 1

Fig. 1.

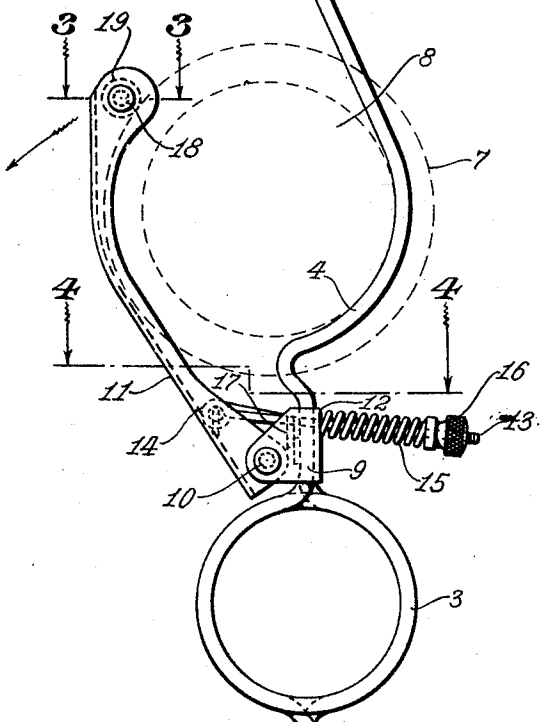


Fig. 2.

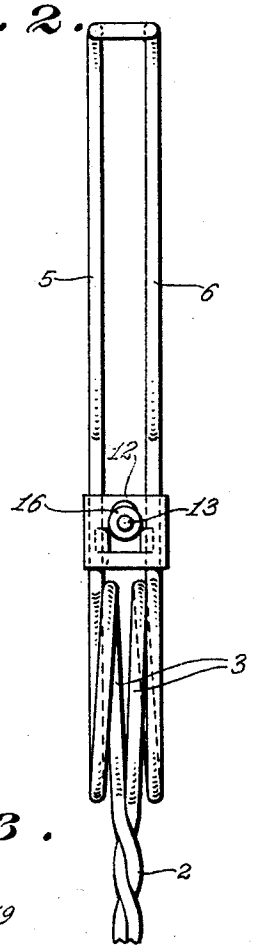


Fig. 3.

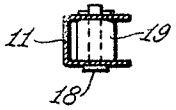


Fig. 5.

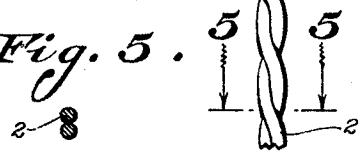


Fig. 6.

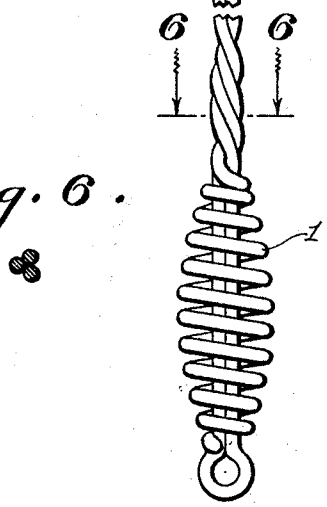
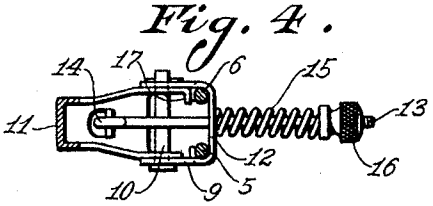


Fig. 4.



Inventor:
HENRY P. CAMP,
By John H. Bruninga
His Attorney.

Feb. 5, 1929. 1,700,880

H. P. CAMP

TARGET TRAP

Filed Dec. 10, 1926 2 Sheets-Sheet 2

Fig. 8.

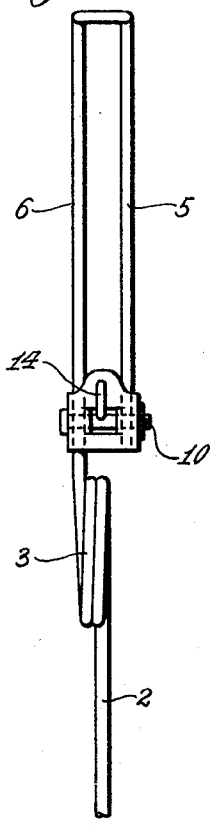


Fig. 7.

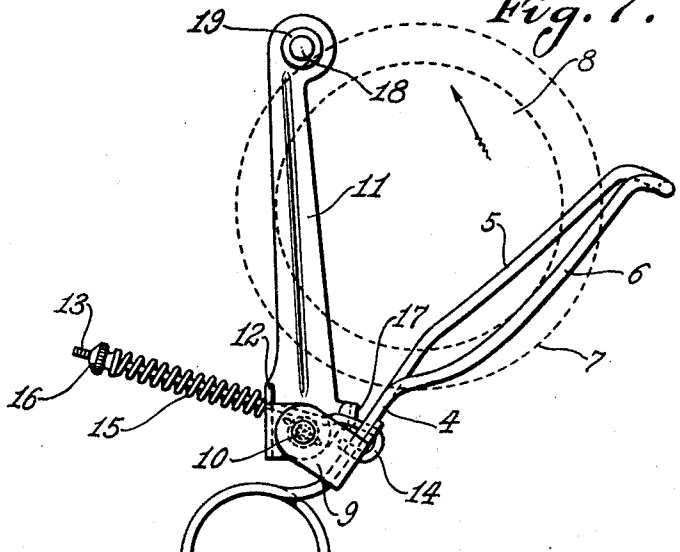
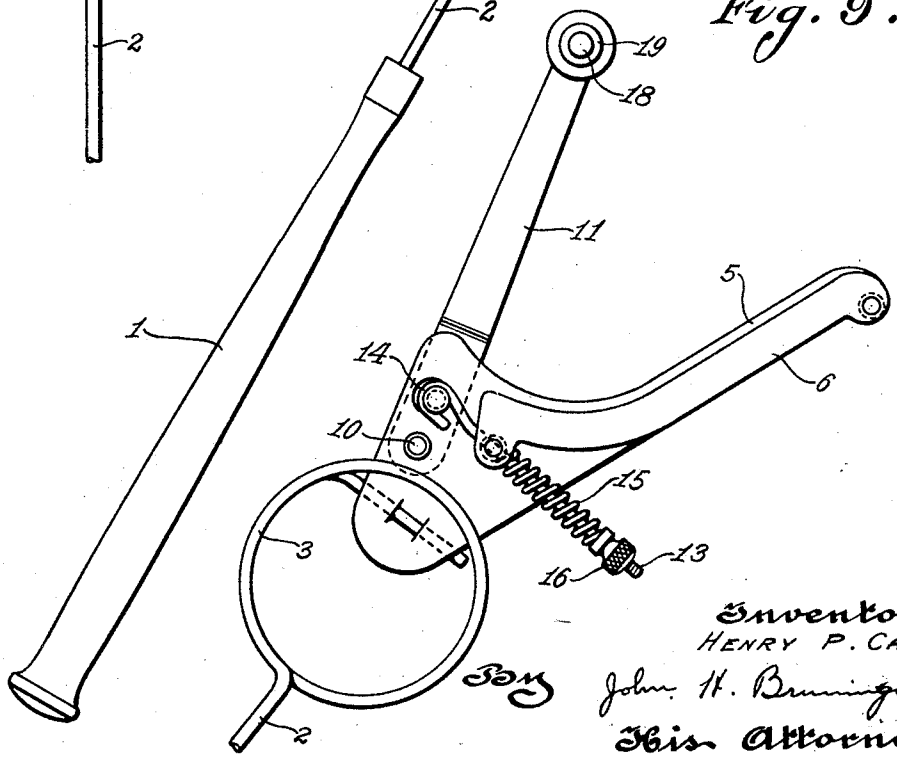


Fig. 9.



Inventor:
HENRY P. CAMP,
By John H. Bruninga.
His Attorney.

Patented Feb. 5, 1929. 1,700,880

UNITED STATES PATENT OFFICE.

HENRY P. CAMP, OF ALTON, ILLINOIS, ASSIGNOR TO WESTERN CARTRIDGE COMPANY, OF EAST ALTON, ILLINOIS, A CORPORATION OF DELAWARE.

TARGET TRAP.

Application filed December 10, 1926. Serial No. 153,793.

This invention pertains to target throwing devices, and more particularly to a hand thrower for clay targets such as are used for trap shooting practice.

One of the objects of this invention is to provide a simple device by means of which a clay target can be thrown from the hand in an effective manner.

Another object is to provide such a hand target thrower by which the target may be delivered with a sharp whipping action.

Another object is to provide such a thrower which will cause the target to leave the thrower with a rotary or whirling movement.

Another object is to provide a target thrower which may be used with either the right or left hand for throwing a target.

Further objects will appear from the following description, taken in connection with the accompanying drawing, in which

Figure 1 is a front view of a target thrower embodying this invention;

Figure 2 is a right-hand side view of Figure 1;

Figure 3 is a section on line 3—3 of Figure 1;

Figure 4 is a section on line 4—4 of Figure 1;

Figures 5 and 6 are sections on lines 5—5 and 6—6, respectively, of Figure 1;

Figure 7 is a front view of a target thrower showing another embodiment of this invention;

Figure 8 is a right-hand side view of a portion of Figure 7; and

Figure 9 is a front view, similar to Figure 7, showing another embodiment of this invention.

Referring to the drawing, 1 designates a handle of wood or other suitable material, by means of which the device is manipulated. On the end of the handle 1 is mounted or formed a resilient extension 2, which may be constructed of a length of spring wire formed into a curl or loop 3. Rigidly formed or mounted on the end of the extension 2, and beyond the loop 3, is an arm 4. This arm is formed so as to provide top and bottom guides 5 and 6, spaced from each other so as to permit the flange 7 of the target 8 to pass between such guides. The arm 4 and its guides may be formed by bending the wire into the form shown in the figures; or it may be constructed of sheet metal suitably formed, or by other means. There is thus provided a rigid arm 4 at the end of a flexible handle and extending in prolongation thereof.

Mounted on the arm 4 is a pivot support 9, which has pivoted thereto at 10 a second arm 11. The arm 11 may be constructed of sheet metal or other suitable material and is pivoted so as to move in substantially the same plane as the guides 5 and 6. In the embodiment of Figure 1, the arm 11 has a channel form adapted to receive the target between its flanges. In Figures 7 and 9, the arm 11 is flat and arranged to provide a backing against which the target may rest. One or the other of the arms 4 or 11 may be provided with an abutment 12, which is perforated to permit the passage therethrough of an adjusting rod 13. This rod is formed with a hook or eye 14, which engages the other arm. The free end of the rod 13 is surrounded by a spring 15, which bears at one end against the abutment 12 and is retained at its other end by an adjusting nut 16 threaded on the end of the rod.

The spring 15 provides means for tensioning the arm 11 so as to urge the same towards the arm 4, in order to grip the target. A stop 17 formed on the arm 11 is adapted to engage a stop on the pivot support 9, or other suitable abutment on the arm 4, so as to limit the inward movement of the arm 11. The end of the arm 11 has mounted thereon a pin 18, surrounded by a rubber collar 19 or other suitable friction member.

In the embodiment of Figures 1 and 2, the arms 4 and 11 are both formed so as to be symmetrical with respect to the plane of the target. The target can, therefore, be placed in the thrower between the arms 4 and 11 in either position; that is, so as to face either way. This is made possible by the symmetrical construction of the arms. In this embodiment also the loop 3 is formed of two loops of wire oppositely coiled, as shown in Figure 2. This renders the handle equally flexible in either direction.

In the use of this device, the target 8 is placed with its flange between the guides 5 and 6 and its flat side resting upon the guide 5 and the arm 11 in Figures 7 and 9. The arm 11 is drawn to the left against the tension of the spring 15, in order to insert the target, and is then released so as to bring the abut-

ment 19 into engagement with the rim of the target. The target is then resiliently held or clamped between the two arms. The operator, then grasping the end of the handle 1, swings the device to the rear and then forwardly and upwardly with a quick whipping movement. During the acceleration of the device, the loop 13 permits the handle to flex under the force applied by the operator. Towards the end of the swing, the resiliency of the loop 13 brings the arms forward with a sharp whipping action so as to force the target out of the thrower. In leaving the device the target slides along the guides 5 and 6 while the frictional engagement with the abutment 19 retards that side of the target. Consequently, the target is released with a rolling movement which causes it to spin during its subsequent flight.

It will be seen that this invention provides a simple and inexpensive target throwing device, and one which is effective in action. The target is easily inserted between the arms and is securely held until the end of the throwing movement, when it is released with a rotary movement. The nut 16 provides for adjustment of the tension of the arm 11, so as to adjust not only the friction at the abutment 19, but also the force with which the target is held in the arms.

It is obvious that various changes may be made in details of construction without departing from the spirit of this invention; it is, therefore, to be understood that this invention is not to be limited to the specific details shown and described.

Having thus described this invention, what is claimed is:

1. A hand target thrower, comprising, a flexible handle, an arm rigidly connected with said handle and providing a guide for the target, a second arm pivoted on said handle adjacent said first arm and having a friction abutment adapted to engage the target, and means for tensioning said second arm, said arms having target-engaging elements symmetrically formed with respect to the plane of the target.

2. A hand target thrower, comprising, a flexible wire handle having oppositely coiled spring loops formed therein, and a target holder carried by said handle having its parts symmetrically positioned with respect to the plane of the target.

3. A hand target thrower, comprising, a flexible handle, an arm rigidly connected with said handle and having a pair of guide rails symmetrically positioned with respect to the plane of the target and adapted to receive the target, and a second arm pivoted adjacent said first arm and having a friction abutment tensioned to engage the target.

4. A hand target thrower, comprising, a flexible handle of wire, an arm on said handle formed of a wire looped back upon itself to form parallel guide rails, and a second arm pivoted to said first arm and having a friction abutment tensioned to engage the target.

In testimony whereof I affix my signature this 19th day of November, 1926.

HENRY P. CAMP