No. 811,636. PATENTED FEB. 6, 1906.

J. HEROLD.

TARGET.

APPLICATION FILED APR. 10, 1905.

Fig. 1.

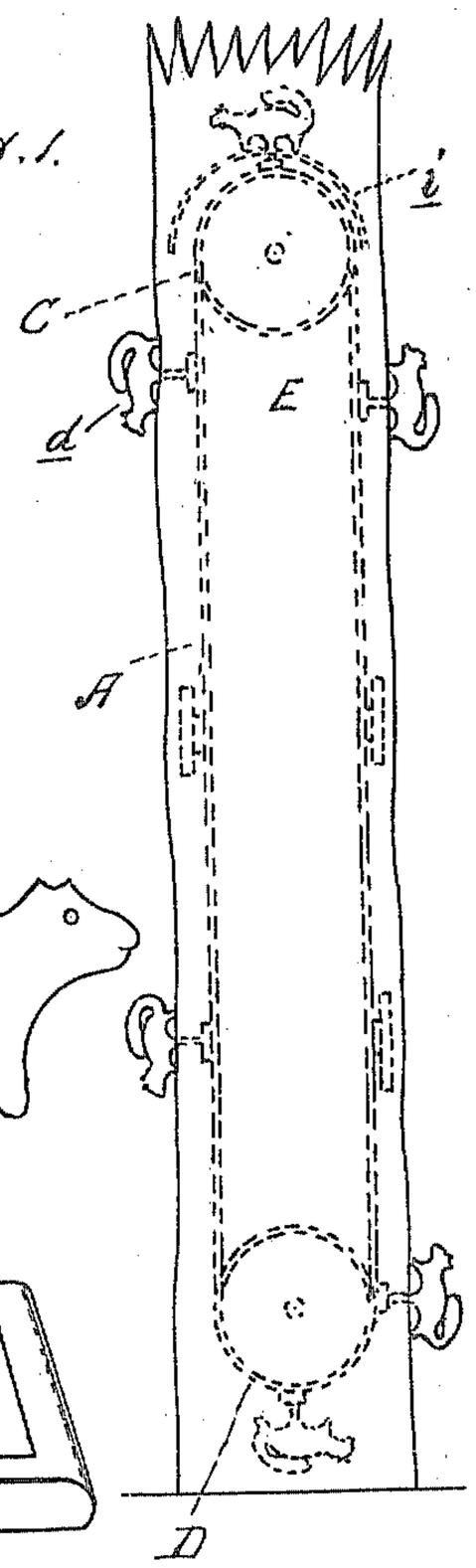


Fig. 5.

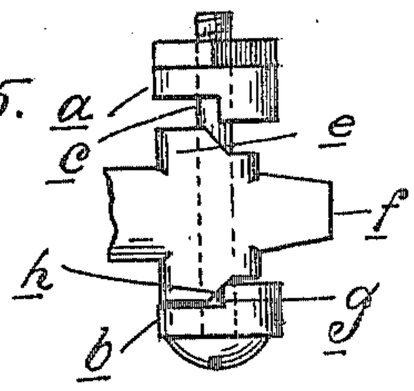


Fig. 4.

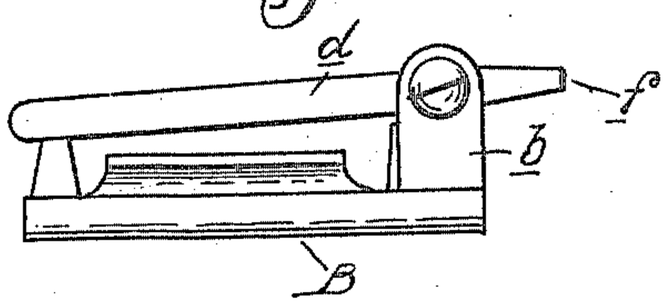


Fig. 3.

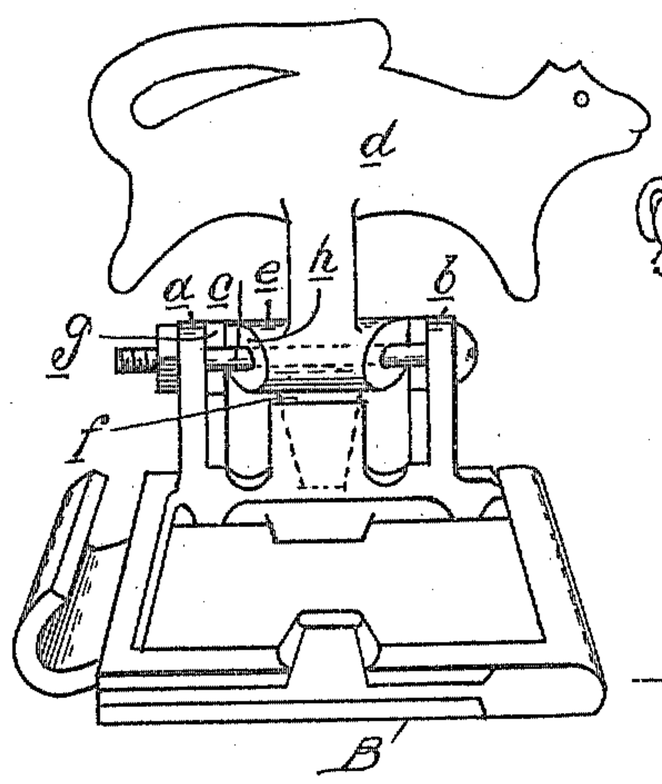
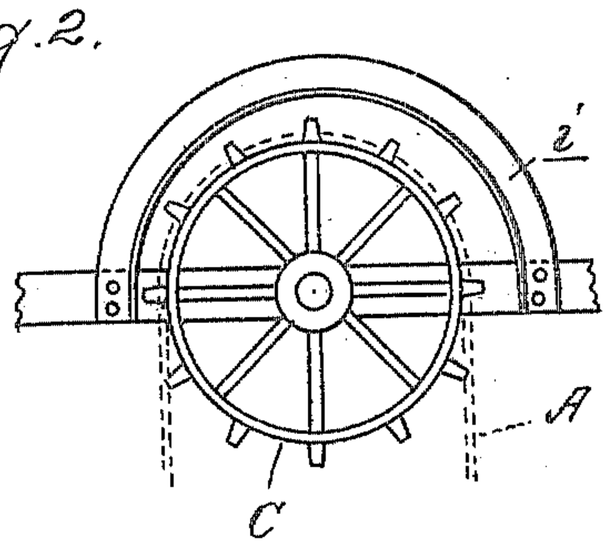


Fig. 2.



Witnesses
A. L. Habby
Amelia Williams

Inventor
John Herold
By James Whittemore
Atty.

UNITED STATES PATENT OFFICE.

JOHN HEROLD, OF DETROIT, MICHIGAN.

TARGET.

No. 811,636. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed April 10, 1905. Serial No. 254,879.

To all whom it may concern:

Be it known that I, JOHN HEROLD, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Targets, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates generally to shooting-galleries having a number of targets pivotally mounted upon one or more endless carriers, and particularly to a target mechanism of this construction wherein the carriers are arranged for vertical travel.

The invention consists in the novel construction of target mechanism, in means for locking the targets after being struck by the projectile, indicating that the target has been hit, and, further, in various details of construction, as will be more fully hereinafter set forth.

In the drawings, Figure 1 is a view in elevation of the complete target mechanism, the targets proper being arranged for vertical travel. Fig. 2 is a detail view of the mechanism for returning the targets to their initial position after being hit. Fig. 3 is a detached view of one of the targets, showing its attachment to the carrier. Fig. 4 is a view of the same mechanism, showing the target in its position after being hit; and Fig. 5 is a view in detail of the locking mechanism.

In the drawings thus briefly described, A represents a suitable carrier arranged for vertical travel. In this instance the carrier consists of a link belt made up of the links B of the construction shown in Fig. 3. The chain constituting the carrier passes over suitable wheels C and D, either one of which may be driven by any suitable mechanism (not herein shown) to cause the carrier to travel continuously. Each link of the belt is provided with a pair of spaced lugs *a b*, connected by a pivot-pin *c*. The target (in this instance an image representing a squirrel, designated by the reference-letter *d*) is pivoted between the lugs upon the link and adapted when struck to be thrown into position in parallelism with the carrier. Each image is provided with a tubular bearing *e*, engaging the pivot-pin, and with a depending arm *f*, adapted to strike the link proper when the image is in its operative position. The parts are so proportioned that the weight of the image will be on one side of the carrier, causing the image to sag, and thus lean and normally remain outward in its operative position.

Arranged in front of the carrier is a plate E, in this instance representing the trunk of a tree, which completely conceals the carrier, but is of a width to permit the image to project therebeyond, so that in operation the images will travel downwardly upon one side of the tree-trunk and upwardly upon the opposite side, the marksman shooting at the images as they appear.

In vertically-traveling carriers the image after being hit is liable to rebound and return to its normal position, making it difficult to determine whether the target has been actually struck. I have therefore provided means whereby the image after being hit and disappearing from view behind the plate in advance of the carrier will be retained in its concealed position until the image passes over the lower or upper wheel of the carrier, thus indicating clearly to the marksman that the shot has been effective. The means I preferably employ is a clutch mechanism formed by producing shoulders *g* upon the lugs or uprights, on the links between which the image is pivoted, and corresponding inclined shoulders *h* upon the tubular bearing of the image. When the target is in its operative position—that is, at right angles to the carrier and projecting beyond the plate—the shoulders *g* and *h* assume the position indicated in Fig. 3. After being struck by the projectile the image moves into parallelism with the carrier, and the two shoulders assume a position with reference to each other indicated in Fig. 5, the inclines preventing the image from resuming its forward position, but not preventing the return of the image to its outward or shooting position, by mechanism hereinafter to be described.

In passing over the lower wheel the image by gravity moves from its position in parallelism with the carrier into a right-angular position thereto and is in position to be shot at on the left-hand side of the plate representing the tree. When hit in this latter position, the image remains hidden until it reaches the upper wheel. Here a returning mechanism in the form of a plate *i* is employed, curved, as shown, to conform to the top of the wheel in the manner indicated in Fig. 2. In its downward position the arm *f* of the image projects outwardly, and as the image approaches the returning mechanism

the arm engages the plate, causing the return of the image to its initial or operative position.

What I claim as my invention is—

1. In a target mechanism, a pivoted target, in combination with positive locking means operatively associated with the target for retaining the latter in the position in which it is placed by the projectile.

2. In a target mechanism, the combination with a support, of a target pivoted thereon for rocking movement, and locking means operatively associated with the target for retaining the latter in the position in which it is placed when struck by the projectile.

3. In a moving target, the combination with an endless carrier arranged for vertical travel, of a plurality of targets pivoted thereon for rocking movement in parallelism with and in angular relation to the carrier, and an automatic lock for each target for retaining the latter in parallelism with the carrier.

4. In a moving target, the combination with a vertically-traveling carrier, of a plurality of pivoted targets thereon, and a clutch connection between each target and the carrier.

5. In a moving target, the combination with a carrier, of target-supports thereon, shoulders upon said supports, and targets pivoted to the supports, having shoulders adapted to engage the support-shoulders.

6. In a moving target, a carrier comprising links, a pair of uprights on each link having shoulders formed thereon, an image pivoted between each pair of uprights and provided with inclined shoulders engaging the upright shoulders, and a depending finger or arm upon each image adapted to contact with the carrier and limit the movement of the target in one direction.

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

JOHN HEROLD.

Witnesses:
AMELIA WILLIAMS,
EDWARD D. AULT.