## B. TEIPEL.

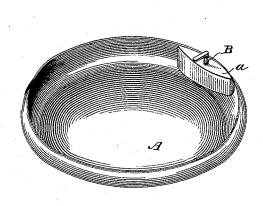
## FLYING TARGET.

No. 305,117.

Patented Sept. 16, 1884.

Fig.1.

Fig. 2.



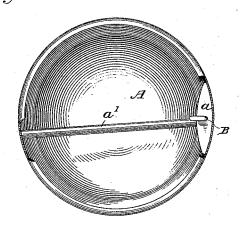
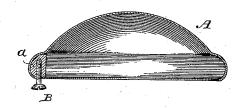
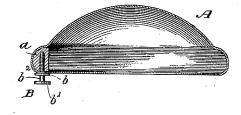
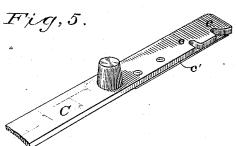


Fig.3.

Fig.4.







Witnesses

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Inventor

## United States Patent Office.

BENJAMIN TEIPEL, OF COVINGTON, KENTUCKY.

## FLYING TARGET.

SPECIFICATION forming part of Letters Patent No. 305,117, dated September 16, 1884.

Application filed May 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN TEIPEL, of Covington, in the county of Kenton and State of Kentucky, have invented certain new and 5 useful Improvements in Flying Targets, of which the following is a specification.

Since the invention some years since by George Ligowsky of a dished or inverted saucer-shaped flying target nearly all artificial to targets for field use have followed the principle and conformed to the essential outlines indicated by him, whether such targets have been molded from clay or constructed of glass, or had applied to them a lining or coating of fulminate or other explosive, or contain a dispersive powder.

My present invention relates to such targets, cupped or dish-shaped, formed of any suitable material, and adapted, whether by resonance, frangibility, explosiveness, or other distinguishing character, to indicate the effective-

ness of a shot.

Heretofore these targets have, as a rule, been provided with a tongue projecting outwardly 25 from the periphery, and either permanently secured by cement or otherwise or clasped temporarily thereto. This tongue was grasped in the spring-jaws or clamp of the target-trap, and constituted in the target itself the physi-30 cal instrumentality by which it was thrown and its spinning or whirling movement imparted; but having to prize itself forcibly from between the clamping jaws as it left them, and projecting outward, as it did, from the circum-35 ference of the target, it also interposed to a considerable degree an obstacle to the rapidity and efficiency of the throw and to this axial whirling movement.

My invention does away with the need of 40 the radially-projecting tongue and with the throwing-clamp of the target as heretofore used, and is applicable to any form of clay pigeon formerly thrown by that contrivance.

It consists in applying (whether permanently or detachably is immaterial) a block or seat of wood or other material, of suitable shape, to the inner rim of the target, to which block is secured a downwardly-depending pivot. This pivot may have any one of several shapes.

It may be an L-shaped pivot having the lower 50 portion beneath the elbow somewhat flattened, or it may be an ordinary screw with a somewhat enlarged head. I prefer, however, a pivot which may be said, briefly, to consist of a head composed of two disks connected by a 55 neck which forms the pivot proper.

In the drawings, Figure 1 is a perspective view of a target provided with a pivot of the first form above indicated; Fig. 2, a bottom plan view of a target having a detachable pive 60 ot applied thereto. Figs. 3 and 4 are details of the second and third forms of pivots, and Fig. 5 a detail of a throwing-arm adapted for

use with the preferred form.

A is the target proper, having attached 65 thereto or formed therein against the inner rim a seat, a, of suitable material and dimensions to secure a pivot-pin, B, of metal or hard wood. Ordinarily the seat will be of wood, as a conveniently light and cheap material, 70 glued to the inside of the rim, and the pivotpin can and advisably will be made in the form of a metal screw driven into the seat; but, as above intimated, the shape of this pin may considerably vary. In the first figure it 75 is shown as L-shaped, the lower portion or horizontal portion of the L directed inwardly toward the axis of the target and flattened. This will be used with a throwing-arm of peculiar form, for which reference may be made 80 to an application for improvement in targets filed concurrently herewith by me; and in applying a target furnished with this pivot to such throwing arm the inner portion is intended to come against a stop or shoulder behind 85 the notch in said arm and determine the position of the target thereon until it is delivered. The second form of pivot illustrated is an ordinary screw, and in using it the traparm, besides the notches for the reception of 90 such pivot, will be furnished with a plate upon which the body of the target will rest when applied to said arm, as also indicated in the above application. A third and preferable form consists of a screw or spindle driven into 95 the seat and exposing a head consisting of two disks, b b', united by a neck,  $b^2$ , which forms the pivot proper. Sufficient of a throwing-

arm, C, is illustrated in detail in Fig. 5 to explain the operation of this last-named pivot, in connection with the more extended description given in my application upon the trap it-5 self. Said throwing arm is at its outer end a flat bar of metal of given thickness, and the space between the disks of the pivot is just sufficient to admit the thickness of said arm snugly, but not tightly. The end of the arm 10 has notches c—one or more—which receive the neck of the pivot, and when the target is applied to said arm this neck enters the notch, while the disks pass one on each side of the arm, presenting sufficient surface thereto to steady and hold the target in position in the plane in which the arm is to sweep. A light spring, e', will ordinarily be applied to the under side of the arm and arranged to press upon the bottom of the lower disk of the pivot 20 with just sufficient force to prevent accidental displacement. A stop will also be arranged upon the upper surface of the arm, to determine the angle which the target shall take with reference to the length of the arm. In 25 describing these three forms of pivots I do not intend it to be inferred that they are the only forms that can be adopted, or that my invention is limited to their use alone, since any pivotal pin that is properly located upon the 30 target may be used with beneficial results, the only requisite being that it shall be sufficiently eccentric to the axis of the target. eccentricity is obtained, as herein indicated, by placing the pin just within the rim; but I 35 do not, however, limit myself to a pivotal pin placed within the rim, since I am aware that it may be made to depend from a block or plate projecting outwardly from the rim and operate with effect, though not with so great ben-40 efit, since this projecting block or plate is open to one of the disadvantages indicated in the preamble—to wit, the resistance it affords to the whirling movement—but not to the other disadvantage—the resistance that the pressure 45 of the clamp upon the projecting tongue heretofore used offered to the escape of the pigeon from the throwing-arm. In Fig. 2 of the drawings I have shown a

detachable seat for the reception of the pivot-

pin. For illustration simply, this seat a, which 50 is suitably shaped to fit within and closely against the inwardly-curved rim of the target, is held in place by an independent rod or pin, a', of wood, long enough to reach nearly across the target, and of sufficient flexibility to be 55 sprung in between the seat and the opposite side of the target, and hold such seat by frictional contact in the manner of a brace. In practice, however, I may find it advisable to attach a spring-arm to the seat either of suf- 60 ficient length to cross the target diametrically and be sprung within its rim somewhat in the manner of the wooden bar illustrated, or else extending from said seat in either direction within the rim slightly past the transverse di- 65 ameter of said target, and in explaining said detachable pivot-seat I do not intend to limit myself to the particular means described or shown, but contemplate holding it in position and making it capable of being detached by 70 any suitable means.

I claim as my invention—

1. A flying target having a dependent throwing-pivot placed eccentrically to its axis, substantially as described.

2. A flying target having a throwing-pivot depending beneath it just inside the peripheral rim, substantially as described.

3. The combination, with a flying target, of a seat applied to the inner periphery of its rim, 80 and a throwing-pivot depending from said seat and adapted to enter a notch in the throwing-

arm of the trap.

4. The combination, with a flying target, of a throwing-pivot depending beneath the plane 85 of its bottom, and composed of two disks united by a neck, which forms the pivot proper, said neck being adapted to enter the throwing-arm and said disks to embrace the arm

snugly, one on each side thereof.
5. The combination, with a flying target, of a detachable seat applied to its inner periphery and bearing a dependent pivot-pin, substantially as set forth.

BEN. TEIPEL.

Witnesses:

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