(No Model.)

J. S. BRIGGS.

FLYING TARGET.

No. 291,287. Patented Jan. 1, 1884.

Fig. 1.

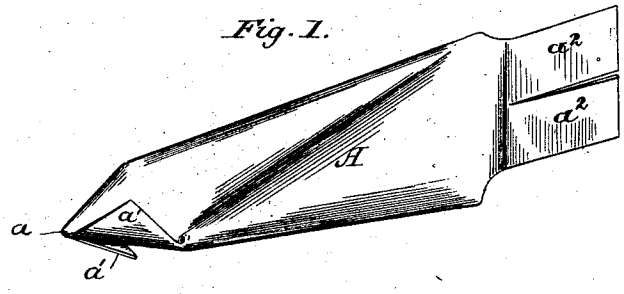


Fig. 2.

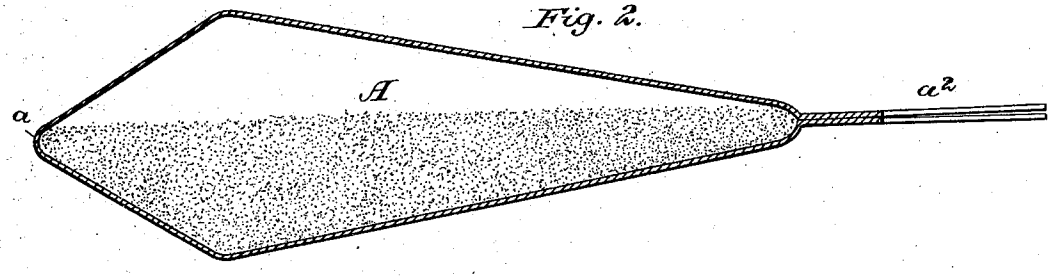


Fig. 3.

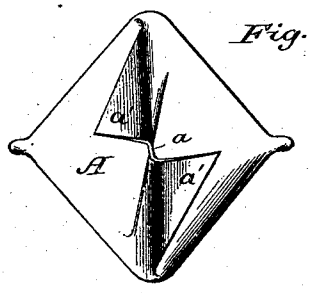


Fig. 4.

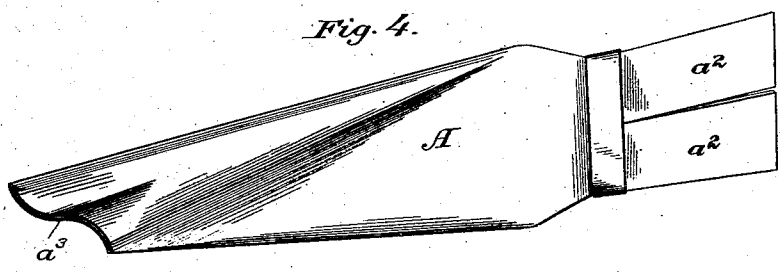


Fig. 5.

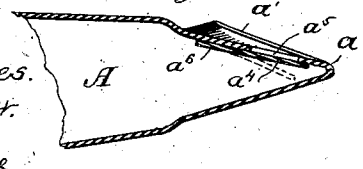
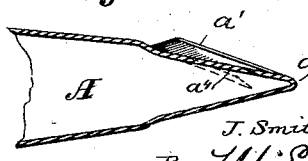


Fig. 6.



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UNITED STATES PATENT OFFICE.

J. SMITH BRIGGS, OF KANKAKEE, ILLINOIS.

FLYING TARGET.

SPECIFICATION forming part of Letters Patent No. 291,287, dated January 1, 1884.

Application filed November 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, J. SMITH BRIGGS, of Kankakee, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Flying Targets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in flying targets for use in connection with a trap-shooting apparatus.

The object of the invention is to produce a rotary movement in the target in its passage through the air when thrown from a trap, whereby its course is made more certain, and also whereby the dust or powder contained in the target, as proposed by the construction contemplated in this case, will fly from the target as it rotates, and thus clearly indicate to the eye the fact that the target has been struck and punctured by a shot.

To these and other ends my invention consists in the matters hereinafter set forth, and pointed out in the claims.

Figure 1 is a perspective view of a flying target constructed as proposed by my invention. Fig. 2 is an axial section of the same. Fig. 3 is an end view of the same. Fig. 4 is a perspective view of a modified form of the target shown in Fig. 1. Figs. 5 and 6 are fragmentary sectional views, showing modified forms of the target.

The flying target shown in the accompanying drawings is more especially intended for use in connection with the trap or target throwing device described and claimed in an application for patent filed by me on the second day of July, 1883; but such a target may be used with any suitable trap.

A is the target, which is preferably made hollow and contains dust or fine powder, preferably only in sufficient quantity to partially fill it. Said target is preferably constructed of paper, but may be made of any other perforable material, such as thin sheet metal. The said target is provided with devices which tend by their contact with the air to give it a rotary motion when projected from the trap, whereby if the target is struck and perforated by a shot the dust therein will sift out through the perforations so made, or will be thrown out by centrifugal force if the target is rotating with sufficient rapidity to effect such result.

A preferable form of target embracing the features mentioned is illustrated in the drawings, Figs. 1, 2, and 3, in which the shell thereof is made originally in cylindric form and then flattened at its ends in planes at right angles with each other, the front corners, a', of the flattened portion of the ends being bent down upon the inclined lines meeting at the axial line of the target so as to form a pointed end, a, and the said corners a' being allowed to project laterally, so as to present inclined surfaces or wings, which give to the target a rotary motion in its passage through the air when thrown from a trap. The rear flattened portion of the target is preferably extended so as to form tail-flanges a^2, to steady the target in its course, and said tail-flanges may be laterally deflected in the same direction as the wings a', with the object of assisting the said wings in giving a rotary motion to the target; or they may be both bent to one side, with the result of giving the target a spiral or erratic course in its passage through the air. The target described may be of any desired size; but as preferably constructed it is made of about the size of a pigeon, both as to length and diameter.

The targets shown in Figs. 1, 2, and 3 are intended to be made of paper cylinders, flattened at their ends, as described, and pasted together at the inner faces of such flattened ends, the corners of the front end in the process of making them being simply folded over at the proper angle to form the wings a', and allowed to dry, the powder or dust being introduced previous to the closing of one of the ends.

The targets, when constructed in the manner described, may be quickly made and of inexpensive materials, and they may therefore be produced in quantities at a very small cost.

In Fig. 4 a modified form of the head of the target shown in Figs. 1, 2, and 3 is illustrated, in which the front end of the cylinder forming the target is flattened and then bent into an S shape or ogee-curve, a^3, at the edge, and tapered back to the body of the target, so as to form inclined surfaces calculated to give a rotary

motion to the target in the same manner as the wings a'. In the said figure a strip of sheet metal is shown as bent around the flattened rear portion of the target, which strip serves to close the said rear end.

Other devices applied to the targets may be used to give them a rotary motion—as, for instance, spiral flanges upon the exterior of a cylindrical target, said flanges being adapted to fit in spiral grooves or to engage with corresponding spiral flanges in the barrel or receptacle of the trap in which the target is placed preparatory to being discharged.

In order to facilitate the ejection of the dust contained in the target after it has been struck or perforated by shot, an opening provided with a valve constructed to open inwardly may be formed in its front end, as shown in Figs. 5 and 6, so as to admit air to its interior in its forward motion, and to thereby force the dust therefrom through the perforations. In Fig. 6 the valve is shown as formed by cutting out a portion of the body of the target, so as to form an inwardly-opening flap, a^4. In Fig. 5 an opening, a^5, is made in the forward end of the target, and a separate piece, a^6, secured to the interior of the target, so as to form a flap, a^4, to cover said opening.

The valve constructed as described is calculated to admit a current of air during the forward movement of the target, and at the same time to prevent the exit of dust while the target is being transported, or in case it is placed with its forward end downward. The flap a^4 is preferably placed with its free end toward the front end of the target, so as to more certainly retain the powder when thrown forward in the target. If it is found necessary, paper may be pasted over the valved apertures last mentioned at the time of its manufacture, so as to prevent the escape of dust, such paper to be broken or torn away previous to placing the target in the trap.

I claim as my invention—

1. The combination, with a hollow perforable flying target containing dust, of means upon the target, constructed to give a rotary motion thereto during its passage through the air, substantially as described.

2. The combination, with a hollow perforable flying target containing dust, of wings upon said target, constructed to give a rotary motion thereto in its passage through the air, substantially as described.

3. The combination, with the hollow flying target, composed of paper or similar perforable material, containing dust, of wings upon said target, constructed to give a rotary motion thereto in its passage through the air, substantially as described.

4. A hollow perforable flying target containing dust and provided with spiral wings in front, and a tail, substantially as described.

5. A hollow dust-filled flying target, composed of a paper tube flattened at its ends, so as to form deflecting-surfaces, constructed to give a rotary motion thereto in its passage through the air, substantially as described.

6. A flying target composed of a paper tube flattened at its ends in intersecting planes and containing dust, substantially as and for the purpose set forth.

7. A flying target composed of a paper tube flattened at its ends in transverse planes, and having its flattened portion at its front end bent to form wings a', and its flattened rear portion extended to form a tail, a^2, substantially as described.

8. A hollow perforable flying target containing dust, and provided with an inwardly-opening valve, a^4, in its front portion, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

J. SMITH BRIGGS.

Witnesses:
C. CLARENCE POOLE,
P. J. ELLIOT.