

F. B. MILLS,  
TARGET PIGEON.  
APPLICATION FILED MAY 15, 1907.

899,123.

Patented Sept. 22, 1908.

Fig. 1.

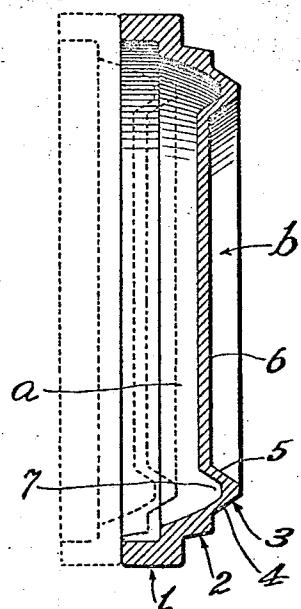


Fig. 2.

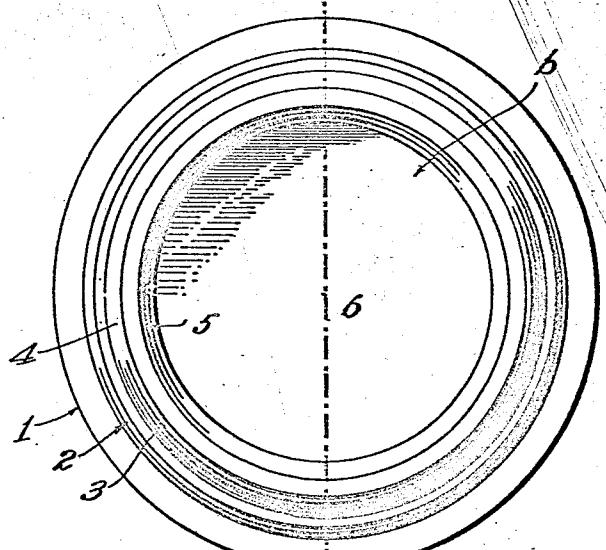


Fig. 3.

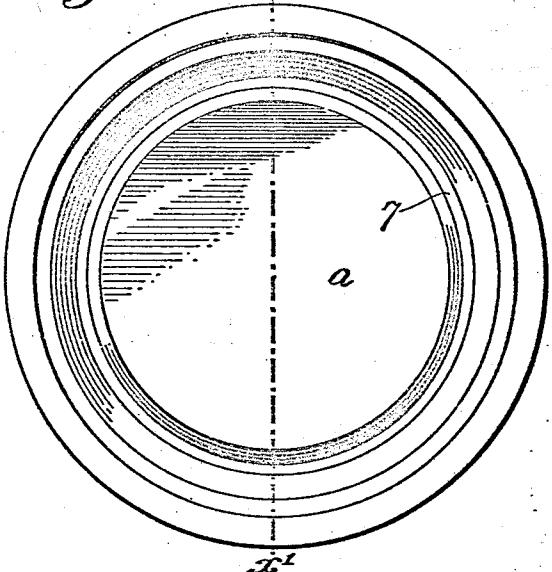
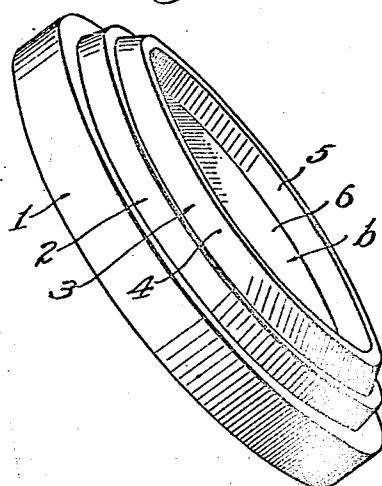


Fig. 4.



Witnesses

b. b. Holly.

J. Townsend

Inventor  
Fredrick B. Mills

by James R. Townsend  
his Atty

# UNITED STATES PATENT OFFICE.

FREDRICK B. MILLS, OF LONGBEACH, CALIFORNIA.

## TARGET-PIGEON.

No. 899,123.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed May 15, 1907. Serial No. 373,865.

*To all whom it may concern:*

Be it known that I, FREDRICK B. MILLS, a citizen of the United States, residing at Longbeach, in the county of Los Angeles and State of California, have invented new and useful Improvements in Target-Pigeons, of which the following is a specification.

This invention relates to frangible disks provided for target practice, and an object 10 of the invention is to produce a disk of a form superior to any heretofore known whereby the penetration of the disk by a bird-shot will invariably cause the disk to break.

15 As is well understood in the art, target pigeons for practice in marksmanship with shot-guns or rifles, are made of a circular form, being hollow on one side and are arranged to be thrown from a spring trap, the 20 character of the structure being such that when so thrown they sail through the air imitating in a measure the flight of a bird. It is necessary that such disks be of sufficient strength to allow them to be transported 25 without danger of breakage, and it is also necessary that they be sufficiently frangible to cause them to be broken when struck by bird-shot from a shot-gun. Various forms of such disks have heretofore been made, but 30 in practice I find that with all of such forms their structure is such that bird-shot may, in some instances, strike the same at such an angle that they will glance therefrom, and in other instances they will penetrate 35 the disk without breaking the same, so that the eye cannot in every instance, invariably determine, while the disk is in the air, whether or no a shot has taken effect thereon.

40 This invention relates specifically to an improvement in the form of said disks whereby the breaking of the disk by the shot while in the air is assured.

45 It also includes the construction herein-after particularly set forth whereby the disk is more perfectly balanced for true flight through the air.

50 It is important under the rules of target shooting that the disks shall invariably break when struck by a shot, for otherwise a lost bird is scored. It frequently occurs that a target may be hit so as to knock the dust out of the same, thus showing that the shot has taken effect, but under the rules, unless a perceptible piece is broken from the target it is 55 called a lost bird and does not score in favor

of the marksman who fired the shot. I have seen heretofore approved targets which have been penetrated by seven pellets without a visible piece being broken so that the shot could be scored in favor of the marks- 60 man.

I have carefully experimented with the target-pigeon invented by me and herein-after described, and have broken many by pellets fired by a hot-gun, but in no instance 65 has one of them been struck by a shot without being broken.

Another advantage from the new form of target-pigeon hereinafter described is the improvement in the flight thereof. 70

It will be noted that pigeons constructed in accordance with this invention fly truer and are less affected by wind.

The accompanying drawings illustrate the invention. 75

Figure 1 is a mid-section of the disk on line  $x^1-x^1$ , Figs. 2 and 3. Fig. 2 is a view of the disk from the right of Fig. 1. Fig. 3 is a view of the disk from the left of Fig. 1. Fig. 4 is a perspective view of a disk in flight. 80

In Fig. 1 dotted lines indicate the form of another target nested with the target shown, thus to make more apparent the peculiarities of the form illustrated.

The target comprises a hollow body having 85 formed integral therewith a series of diametrically diminishing uninterrupted annuli 1, 2, 3, the smallest of which is hollow and is in the apex of the body, and has outwardly and inwardly inclined walls 4, 5, respectively, 90 having uninterrupted annular faces, the inwardly-inclined wall 5 terminating in a flat diaphragm or plate 6 forming the floor of a plain faced dish on the obverse side of the target, the reverse side being hollow, and said 95 dish constituting about one-third the thickness or depth of the entire body. By this construction the target is provided with two open chambers  $a$ ,  $b$ , the latter being shallow as compared with the former, its depth being 100 somewhat over a third of the depth of the deeper hollow or chamber  $a$ , and said target acts on the air in such a manner as to fly with great steadiness and freedom through the air and at the same time is highly susceptible to be shattered by any shot that strikes it.

An annular channel 7 is formed in the inside face of the larger chamber, as clearly seen in Figs. 1 and 3. 110

In practical use, pellets from a shot-gun striking any of these targets in flight invariably break the same.

The composition of which the targets are made is that commonly used for the manufacture of target-pigeons.

The basal annulus 1 is thicker and deeper than either the middle annulus 2 or upper annulus 3 and the depth thereof approximates 10 the combined depths of the other two annuli, so that the mass of the body lies approximately in equal portions on the opposite sides of a medial plane parallel with the plane of the base, thereby bringing the center of 15 gravity approximately into the center of such medial plane and close to the inside face of the dish, thereby giving great stability of course, and steadiness of flight when the body is sprung from the trap.

20 It is to be noted that the outside face of the diaphragm 6 is located interiorly from the plane of the apex of the annular channel 7, and that the target is thus provided exteriorly of said diaphragm with a hollow wall 25 through both limbs of which a shot may pass after being deflected from the diaphragm 6, wherefore it is not necessary that the shot shall strike the diaphragm at such an angle as to pierce the same, and the probabilities 30 that every shot which strikes the target will be effective to break it, are greatly increased.

I claim:—

1. A target comprising an integral unit having a series of gradually-diametrically 35 diminishing uninterrupted annuli, the smallest of which has inwardly and outwardly inclined walls, the inwardly-inclined walls ter-

minating in a flat area and forming substantially a plain-faced dish on one side of the target, said dish constituting approximately 40 one-third the thickness of the unit.

2. A target comprising a hollow annular body having a depression centrally thereof in the uppermost portion forming a dish, said central depression being plain-faced and 45 bound by a hollow inclined wall, and constituting approximately one-third the thickness of the body.

3. A target comprising a hollow body having formed integral therewith a series of diametrically-diminishing uninterrupted annuli the smallest of which is hollow and is in the apex of the body and has inwardly and outwardly inclined walls, the inwardly-inclined wall terminating in a flat area forming a 55 plain-faced dish on one side of the target, the reverse side being hollow, and said dish constituting approximately one-third the thickness of the body.

4. A target comprising a hollow annular 60 disk having in the uppermost portion of the same a plain-faced depression bounded by a hollow annular wall having uninterrupted annular faces inclined inwardly and outwardly, and being in depth about one-third 65 the depth of the body.

In testimony whereof, I have hereunto set my hand at Los Angeles California this 7th day of May 1907.

FREDRICK B. MILLS.

In presence of—

JAMES R. TOWNSEND,  
CHRISTINE JOHNSON.

BEST AVAILABLE COPY