

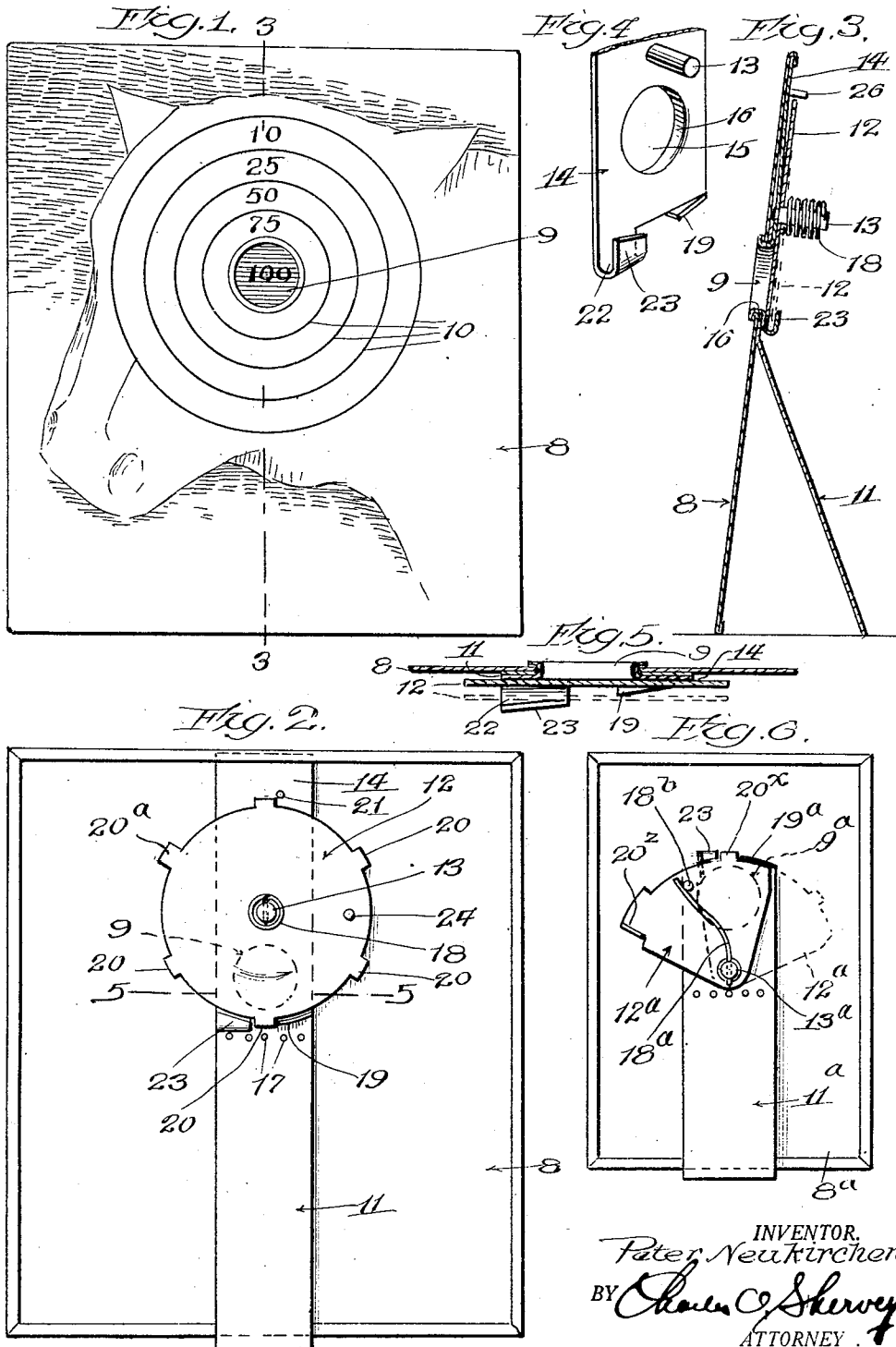
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TARGET

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TARGET.

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This invention relates to targets, and its principal object is to provide an attractive target intended primarily for use as a toy, although its use is not limited thereto. Another object is to provide a target having a "bull's eye" in the form of an aperture, behind which is a movable disk or plate, spring pressed in one direction and normally held against movement, but capable of being moved from one position to another across the aperture when struck by a slug, arrow, or other projectile.

Another object is to provide a simple, comparatively inexpensive and amusing target wherein the movable disk or plate may have a step by step movement, whereby the disk or plate may be actuated several times before it is reset. The invention consists in the several novel features of construction, arrangement and combination of parts hereinafter fully set forth.

The invention is clearly illustrated in the drawing accompanying this specification in which—

Figure 1 is a front elevation of a target embodying a simple form of the present invention;

Fig. 2 is a rear elevation thereof;

Fig. 3 is a vertical cross section taken on the line 3—3 of Fig. 1;

Fig. 4 is a perspective view of a fragment of the disk supporting element of the device;

Fig. 5 is a detail horizontal section taken on the line 5—5 of Fig. 2; and

Fig. 6 is a rear elevation of a slightly modified form of the invention.

Referring to said drawing, and to Figures 1 to 5 inclusive, the reference character 8 designates the body of the target, here shown in the form of a rectangular sheet or plate, having its marginal edges folded back upon themselves to stiffen the sheet or plate. The body is formed with an aperture 9 around, which is a series of concentric circles 10 which are depicted on the front face of the body portion, and said front face may be otherwise ornamented or bear the representation of the head of an animal, of which one of its eyes is formed by the aperture 9.

The device may be in the form of an easel, having a leg or brace 11 shown as secured to the back of the body, for supporting the target in an upwardly inclined position. On the back of the body is a movable disk or plate 12 which extends behind the aperture 9 and is movable from one position to another across

said aperture, said disk being spring actuated in one direction and normally held against movement, but capable of partial rotation whenever struck by a slug, arrow, or other projectile.

In the preferred form of the invention, the disk 12 is rotatably mounted upon a stud or pin 13 which projects rearwardly from the back of the body 8, and said stud may be rigidly secured on a disk supporting member 14, here shown in the form of a strip of metal arranged on the back of the body 8, and having its upper edge portion secured under the folded edge portion of the body. Said disk supporting member 14 extends beyond the aperture 9 and is formed with an aperture 15 concentric with the aperture 9.

An annular rim or flange 16 is formed on the disk supporting member 14 around the aperture 15, and said rim or flange extends through the aperture 9 of the body and is turned back and clinched down upon the body so as to rigidly connect the disk supporting member therewith.

The leg or brace 11 may extend beyond the aperture 9 and may contain an aperture concentric with the apertures in the body and disk supporting member, and the apertured part of the leg or brace 11 may lie between the body portion 8 and the disk carrying member 14, so that when the flange 16 is clinched down upon the body portion, the leg or brace 11 becomes rigidly attached to the body portion. The leg or brace may contain a line of perforations 17 extending transversely across the leg which weaken the leg at that place, whereby the leg may be readily bent back from the body to extend at an angle thereto, as shown in Fig. 3, and thus support the target in a substantially upright position.

The disk 12 is loosely mounted upon the stud 13 and is capable of tilting laterally thereon, and a coiled tension spring 18 is provided for rotating the disk on the stud and for yieldingly holding the disk against the disk supporting member 14. One end of said spring is secured to the stud 13 and the other end is secured to the disk, and the tension of the spring is exerted to rotate the disk in the direction of the arrow indicated thereon in Fig. 2. Means are provided for holding the disk stationary except when struck by a slug, arrow or other projectile, and, as shown, said means comprise a shoulder or lug 19 formed on the lower edge of the disk supporting member 14, which shoulder is

arranged to be engaged by any one of a number of lugs 20 formed on the margin of the disk 12.

Preferably, the outer edge of the shoulder 19 is inclined, as shown in Figs. 4 and 5, whereby when the disk is turned back to reset it, the lugs 20 may ride over the shoulder 19. To prevent the spring from being wound too tightly, one of the lugs, designated by 20^a, may be made longer than the other lugs and the pin 21 may be provided on the disk supporting member 14 in position to be engaged by said lug 20^a at the place where the disk is fully reset.

As has been explained, the disk is capable of tilting laterally upon the stud 13 when struck by a slug, or other projectile, and when it is tilted, the lug 20 (which is in engagement with the shoulder 19) becomes released therefrom, whereby the spring 18 acts to rotate the disk and, at the same time, to swing the disk back against the disk supporting member 14, so that when the succeeding lug 20 reaches the shoulder 19, it will come in contact therewith and arrest the further rotation of the disk until it is again released from the shoulder.

To prevent the disk from being forced an unnecessary distance away from the disk carrying member 14, a guideway 22 is provided on the disk supporting member, which guideway may be formed by providing a tongue 23 on the lower edge of the disk supporting member and bending it upward, as seen in Fig. 4. The space between the tongue 23 and the main portion of the disk supporting member is made wide enough to permit the disk to be moved laterally sufficient to disengage the lug 20 from the shoulder 19. A knob or handle 24 is provided on the disk 12, whereby it may be turned to wind up the spring.

In use, the disk is turned in a clockwise direction until the lug 20^a strikes the pin 21. One of the lugs 20 is consequently brought into position at the side of the shoulder 19 and the disk is held by said shoulder against rotation, which would otherwise be caused by the spring 18. A toy gun, pistol, bow, or the like, may be used for firing at the target, and whenever a slug, arrow, or other projectile, strikes the disk 12, through the aperture 9, the disk is tilted back, thereby disengaging the lug 20 from the shoulder 19 and the spring 18 immediately rotates the disk and, at the same time, presses it back against the disk supporting member 14, so that when the succeeding lug 20 reaches the shoulder 19, it encounters the shoulder and arrests further rotation of the disk. The disk may be thus actuated until the long lug 20^a strikes the pin 21, whereupon the disk must be reset.

In the modified form illustrated in Fig. 6, a segmental plate 12^a is employed instead of a disk, which plate is loosely mounted upon a

stud 13^a, as in the preferred form. Said plate is arranged behind the aperture 9^a and has a lug 20^a arranged to engage with the shoulder 19^a, as in the preferred form. A lug 20^a is provided on the plate 12^a for engagement with the tongue 23 of the guideway.

The plate 12^a is spring pressed in one direction by a flat spring 18^a, one end of which is secured in the stud 13^a and the other end of which engages with a pin 18^b secured to the plate 12^a. A lug 11^a is secured to the body 8^a and acts to support the device in an upright inclined position. In this form of the invention, the plate 12^a must be reset each time that it has been struck by a slug; otherwise, the operation of the device is precisely that of the preferred form.

I claim as new, and desire to secure by Letters Patent:

1. In a target, the combination of a target body having an aperture therein, a tiltable plate movably mounted on the back of said target body and movable from one position to another across said aperture, a spring connected at one end to a stationary element on the target body and engaging said tiltable plate at its other end, and a stationary shoulder on the back of said body against which said tiltable plate is held by said spring; said spring acting, when the tiltable plate is released from said shoulder, to move said tiltable plate from one position to another.

2. In a target, the combination of a target body having an aperture therein, a tiltable disk-like plate rotatively mounted on the back of said target body, and movable in a step by step manner from one position to another across said aperture, a coiled spring connected at one end to a stationary element on said target body, and connected at its other end with said tiltable plate, and a stationary shoulder on the back of said target body against which said tiltable plate is held against rotation by said spring; said spring acting, when the tiltable plate is released from said shoulder, to rotate said tiltable plate.

3. In a target, the combination of a target body having an aperture therein, a tiltable disk-like plate rotatively mounted on the back of said target body, said tiltable plate having circumferentially arranged lugs at its margin, a coiled spring connected at one end to a stationary element on said target body, and connected at its other end with said tiltable plate, and a stationary shoulder on the back of said target body against which said lugs are held, one at a time, by said spring; said spring acting when a lug of said tiltable plate is released from said shoulder to rotate said tiltable plate and thereby bring a succeeding lug into engagement with said lug.

4. In a target, the combination of a target body having an aperture therein, a tiltable plate movably mounted on the back of said

target body and movable from one position to another across said aperture, a spring, connected at one end to a stationary element on the target body and engaging said tiltable plate at its other end, a guideway in which said tiltable plate is guided and wherein said tiltable plate has a limited amount of lateral play, and a stationary shoulder on the back of said body against which said tiltable plate is held by said spring, said spring acting, when the tiltable plate is released from said shoulder, to move said tiltable plate from one position to another.

5. In a target, the combination of a target body having an aperture therein, a foot on the back of said target body, having an aperture therein surrounded by an annular flange, said flange entering the aperture of the target body and being clinched down on the front face of the target body, and a tiltable plate rotatively mounted on the back of said target body and movable from one position to another behind said apertures, and spring means for rotating said plate.

6. In a target, the combination of a target body having an aperture therein, a foot secured to the back of said target body, a stud secured to and projecting rearwardly from the back of said target body, a disk-like plate rotatively mounted on said stud and movable in a step by step manner across said aperture, means for limiting the distance of travel of said disk-like plate, and a coiled spring secured to and surrounding said stud, and having one end secured to said disk-like plate.

7. In a target, the combination of a target body having an aperture therein, a stud secured to and projecting backwardly from said target body, a disk-like plate rotatively mounted on said stud and capable of being

tilted thereon, said disk-like plate having a plurality of spaced lugs on its margin, a shoulder adapted to be engaged successively by said lugs, and a coiled spring secured to and surrounding said stud and having one end secured to said disk-like plate.

8. In a target, the combination of a target body having an aperture therein, a stud secured to and projecting backwardly from said target body, a disk-like plate rotatively mounted on said stud and capable of being tilted thereon, said disk-like plate having a plurality of spaced lugs on its margin, one of which is longer than the others, a shoulder adapted to be engaged successively by said lugs, a stop member arranged to be engaged by said longer lug, a coiled spring secured to and surrounding said stud and having one end secured to said disk-like plate, and a handle on said disk-like plate whereby said plate is rotated to wind up the spring.

9. In a target, the combination of a target body having an aperture therein, a stud projecting rearwardly from said body, a tiltable plate rotatively mounted on said stud and movable from one position to another across said aperture, a spring connected at one end to said stud and at its other end to said plate, said spring acting to rotate said plate and to yieldingly press it toward the body, and a stationary shoulder on the back of said body against which said tiltable plate is releasably held by said spring.

10. In a target, the combination of a target body, of a tiltable plate movably mounted on said target body and movable from one position to another relative to said body, and a shoulder on said body for releasably holding said tiltable plate against movement.

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