

No. 747,710.

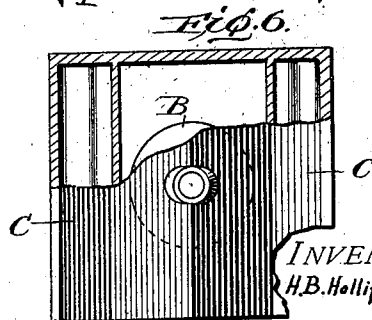
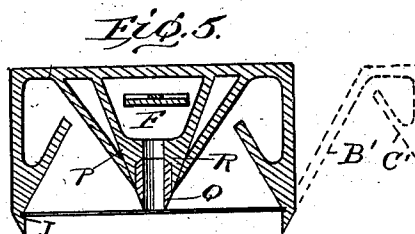
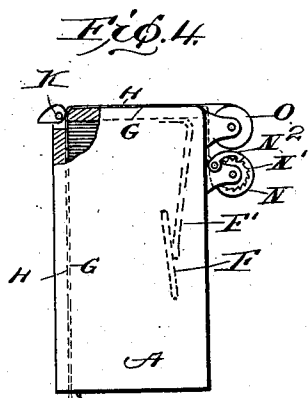
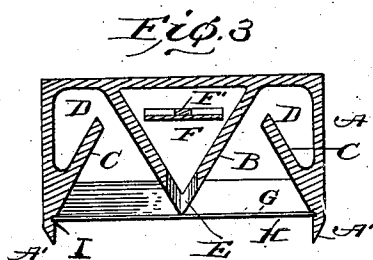
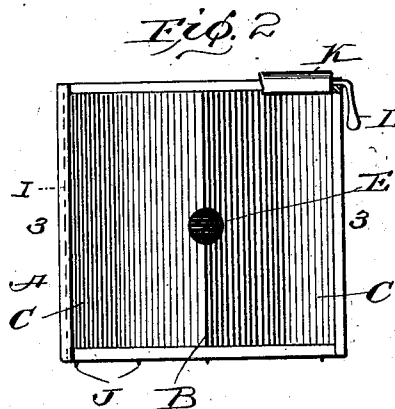
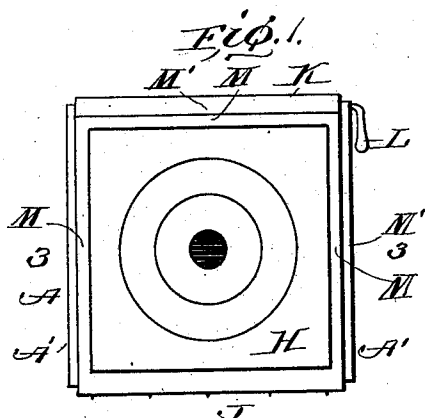
PATENTED DEC. 22, 1903.

H. B. HOLLIFIELD.

TARGET.

APPLICATION FILED FEB. 7, 1903.

NO MODEL.



WITNESSES:

J. M. Fowler
S. M. Brown

BY

Wallace Brown
Attorney.

UNITED STATES PATENT OFFICE.

HORATIO B. HOLLIFIELD, OF SANDERSVILLE, GEORGIA.

TARGET.

SPECIFICATION forming part of Letters Patent No. 747,710, dated December 22, 1903.

Application filed February 7, 1903. Serial No. 142,364. (No model.)

To all whom it may concern:

Be it known that I, HORATIO B. HOLLIFIELD, a citizen of the United States, residing at Sandersville, in the county of Washington and State of Georgia, have invented certain new and useful Improvements in Targets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In ordinary target practice with small-arms the score involves an element of chance, and there is liability to error, possibility of fraud, lack of indisputable records, and either slow work or danger for those near the targets. The target is usually a plane centrally-perforated metal plate having on its face rings concentric with the opening or bull's-eye and having behind the opening a metal plate or "bell" to announce audibly the passage of a projectile through such opening. It is common for each marksman to shoot five times in succession, after which the target is examined to determine his score, and then the marks made by the projectiles are painted out with a white coating material to fit the target for use by the next man. The size of a spot made by a projectile often depends upon the dryness of such coating, and it frequently happens owing to this and other elements of or depending upon mere chance that equally accurate shots are scored differently. So, too, should a dishonest marksman "bunch" his first four shots in the bull's-eye or elsewhere he may purposely miss the target with his fifth shot and then claim and receive credit for five bunched hits. A moment later the target being painted all possibility of detection or correction is lost. With targets of this kind set in line for simultaneous use it is quite unsafe to examine any target while any other is in use, and consequently nine sets of men may be obliged to wait until firing by a tenth set has ceased. To obviate all these and other evils, to retain all the advantages of the bull's-eye signal, and to secure many advantages which will hereinafter appear, is the general object of this invention. With such objects in view I provide a target adapted to retain all projectiles and parts thereof, to give a signal when a shot strikes the bull's-eye, and to furnish each

marksman paper target-faces (in duplicate, if desired) each bearing a record made by the projectiles themselves.

My invention may be embodied in various ways; but for the purpose of illustration I have chosen a form wherein all shots not in the bull's-eye strike a deflecting-surface having such an angle that the projectile follows it and passes into a pocket, where its momentum is wholly lost.

In the accompanying drawings, Figure 1 is a front elevation of my target; Fig. 2, a like view, certain parts being removed; Fig. 3, a section on the line 3 3, Figs. 1 and 2; Fig. 4, a side elevation; Fig. 5, a view similar to Fig. 3, showing modifications; and Fig. 6, a front view of part of the device seen in Fig. 5.

In the figures, A represents a preferably rectangular forwardly-open box, which may be of steel. Within the box is a wedge-shaped portion B, whose vertical front edge lies nearly in the plane of the front of the box and whose faces slope rearwardly outward at the same angle. From the lateral walls of the box plates C extend rearwardly inward at a small angle nearly to the faces, respectively, of the part B, the proportions always being such that the angle made by the plates with the corresponding faces of the wedge are acute. The parts thus far described form what may be called the "body" of the target. If a projectile come from the front and strike the wedge B, it is deflected thereby into one of the pockets D behind the plates C, whence it cannot escape until it has lost its momentum, when it drops by gravity. If such projectile first strike one of the plates C, it is deflected thereby and caused to strike the wedge, the result being the same as before.

The wedge has at the middle point of its edge a rearwardly-extending bull's-eye opening E, and in the rear of this opening is a signal device, shown in this instance as a simple rearwardly and downwardly inclined resonant plate F, preferably supported by a spring F'. In the particular apparatus illustrated this signal is actuated by direct impact of the projectile; but this is not essential.

Across the open front of the box extends a cloth sheet G, and over the front face of the sheet is placed a target-face H, of paper or

the like, bearing the usual bull's-eye and rings, both cloth and paper having their lateral edges in grooves I cut in the projecting side walls A', which are beveled from the target-face to deflect therefrom stray shots which may strike these walls. The lower edge of the cloth may be held below by small hooks J upon the bottom of the box, which in the drawings is shown as a mere strip across the front side of the box. Both cloth and paper are clamped above against the front edge of the box-top by a revoluble steel bar K, having a curved eccentric face and normally held out of clamping position by a weighted crank L. When the parts to be clamped have been properly adjusted, this crank is swung forward, rotating the bar and clamping the parts and at the same time bringing the bar to such position that it cannot deflect toward the target-face any shot which may chance to strike it.

To secure perfect adjustment of the target-face, so that its bull's-eye spot may accurately register with the opening in the body of the target, the target-face may be printed with marks M at quadrantal points to be brought in line with like marks M' upon the parts which lie alongside the margins of the target-face when the latter is in place. Sometimes the target-face is covered by a duplicate registering-face, so that the shots may make duplicate records, one for the marksman and the other for the organization of which he is a member. The chance that an ordinary series of shots will so cut the paper and cloth that the number of shots and the exact location of each cannot be accurately known is so small of to be practically of no moment.

The cloth and the paper may be the end portions of long strips carried by rollers in any convenient location. Such rollers may, for example, be located, as shown, upon the back of the box, one roller, N, carrying cloth and the other, O, bearing paper, and the former may be provided with a ratchet-wheel N' to be engaged by a pawl N², whereby the cloth after engagement with the hooks may be drawn taut and secured before the target-face is adjusted. After the five shots or other number fired by each marksman the clamp is released and the target-face is drawn downward and torn off as a record, and the new face thus brought forward is adjusted ready for the next marksman. Usually the cloth, which aids in keeping the target-face plane and prevents tearing out large pieces of the same by a series of shots, is changed only after a large number of shots.

In the apparatus above described shots striking the bull's-eye at the right or left of its center pass rearward a short distance before they enter the opening E, and this has not been found objectionable. If, however, this is to be avoided, the opening E is properly enlarged to receive the smaller end of a conical frustum P, projecting forward from the rear of the box and having an axial bull's-eye opening E', as shown in Figs. 5 and 6. With either form of the target-body when it is desired to change the diameter of the bull's-eye a steel bushing Q is inserted, both bushing and target-body being provided with suitable shoulders, as at R, to prevent rearward displacement of the bushing.

It is obvious that many changes may be made in the construction and arrangement of parts without passing the proper limits of my invention, and I therefore wish to claim my devices both broadly and specifically, it being novel, so far as I am aware, to combine a target device whereby the shots record themselves with devices whereby certain shots operate a signal and to combine either of such devices with a target adapted to retain all projectiles and parts of the same which strike the target-face.

What I claim is—

1. The combination with a target-body adapted to retain all projectiles striking the target-face, of a signal device, and means whereby all shots striking within a specified area on said face and no others operate said device.

2. In a target, the combination with a body having its front surface sloping rearwardly from a central bull's-eye opening, and means for arresting projectiles which have passed rearwardly along said surface.

3. In a target, the combination with a centrally-perforated body adapted to retain projectiles striking it in front, of a signal device in the rear of the perforation, a sheet of cloth or the like removably fixed in the front of said body, and a target-face of paper or the like immediately in front of said sheet and with its bull's-eye in registry with said opening.

4. A non-perforable target-body having its front face sloping rearwardly from a central bull's-eye opening.

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

HORATIO B. HOLLIFIELD.

Witnesses:

WALLACE GREENE,

EDWIN S. CLARKSON.