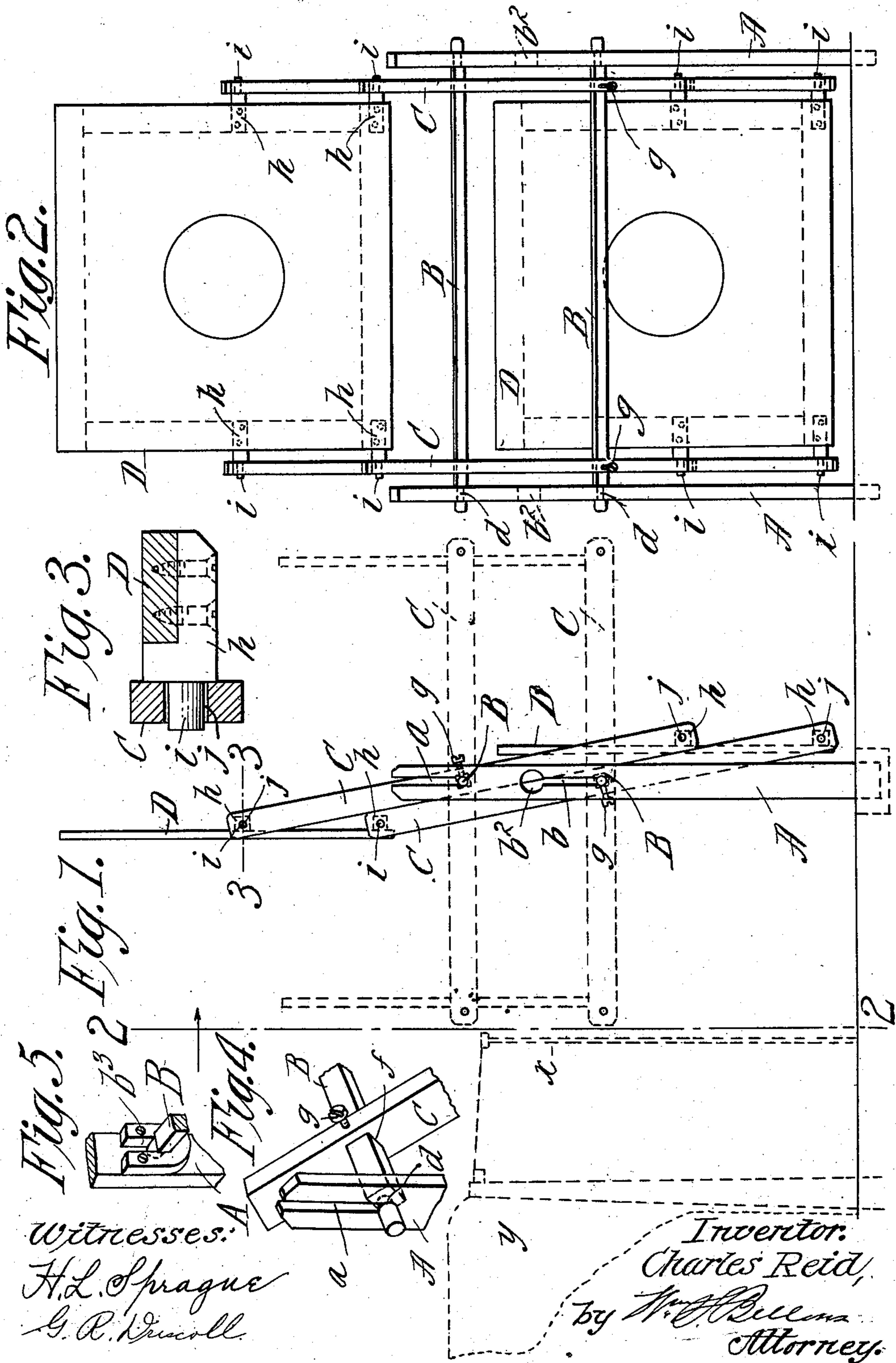


No. 891,566.

PATENTED JUNE 23, 1908.

C. REID.  
RIFLE TARGET.

APPLICATION FILED JUNE 13, 1907.





# UNITED STATES PATENT OFFICE.

CHARLES REID, OF DUBLIN, IRELAND.

## RIFLE-TARGET.

No. 891,566.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed June 13, 1907. Serial No. 378,733.

*To all whom it may concern:*

Be it known that I, CHARLES REID, a British subject, and resident of Dublin, Ireland, have invented certain new and useful Improvements in Rifle-Targets, of which the following is a full, clear, and exact description.

This invention relates to rifle targets and has for its object to provide a simple and cheaply erected apparatus for carrying two targets, or a target and dummy, in balanced arrangement, avoiding the necessity for clearance pits, as heretofore generally required and for the attainment of various conveniences and advantages as hereinafter mentioned or rendered apparent.

The invention consists in a pair of rifle targets, in balanced arrangement, and double and oppositely arranged pairs of intermediately fulcrumed levers, on the extremities of which the targets are each pivotally connected at two points of each of their edges.

The invention may be otherwise stated as consisting in a target apparatus comprising, in coöperative combination, opposite upright supports, opposite pairs of parallel bars, those of each pair being pivotally supported at their middle portions by said uprights, at points one over another and for swinging movements, in parallelism, in vertical planes, and a pair of target-frames which are disposed between, and by their opposite edges pivotally supported at separate points respectively to the forward and rearward end portions of said opposite pairs of parallel bars, whereby said target frames, moved to raised, or lowered positions on their carrying bars, are maintained in vertical planes. And the invention furthermore consists in certain particular forms and construction of parts and the combination or arrangement thereof all substantially as hereinafter fully described and set forth in the claims.

The improved target in its preferred form of construction and arrangement is illustrated in the accompanying drawings in which,—

Figures 1 and 2 are elevations at right angles to each other. Figs. 3 and 4 are respectively sectional and perspective views showing details of construction hereinafter referred to, the plane of the section, Fig. 3, being indicated by line 3—3, Fig. 1. Fig. 5

is a sectional perspective view showing one of the bearings in which the ends of a pair of rock shafts included in the present invention are journaled.

Similar characters of reference indicate corresponding parts in all of the views.

In the drawings,—A A represent opposite upright supports which may have the form of posts set in the ground; and these upright supports have vertical upwardly opening slots *a* in their upper portions and also have vertical slots *b* below the first named slot *a*.

B B represent a pair of parallel, transverse, and horizontal shafts extending between, and pivotally supported for rocking movements on, the uprights A A. As specifically constructed these rock shafts are cross sectionally square excepting at their end portions where they are made round and with necked down formations as indicated at *d*.

The upper rocking bar B may be slid to place by having its necked down end portions entered within the open ends of the slots *a* and then moved to the base of the latter. The lower rocking bar has its end portions similarly engaged in the enlarged upper ends *b*<sup>2</sup> of the slots *b*, said bar being then slid downwardly until its end portions rest in the U shaped bearing pieces *b*<sup>3</sup> as shown more particularly in Fig. 5.

C C represent two oppositely located pairs of parallel bars, each having a central squared aperture *f* for acquiring a non rotative engagement with the squared rocking shaft on which it is to be mounted. One of the bars C of a pair adjacent and inside of one of the uprights is centrally affixed on the upper rocking shaft while the other bar of the same pair is similarly affixed on the lower rocking shaft, both bars being confined in place, in the same plane and in parallel relations by the set screws *g* or other fastening.

D D represent two target frames having provided on opposite edge portions thereof blocks *h* made with trunnions *i* projecting beyond the edges of the frames and pivotally engaging in holes *j* which are provided therefor in the adjacent end portions of the pairs of parallel bars C C. The trunnion blocks *h*, *i* may have their locations at the opposite edges of each target frame, two thereof in axial alinement near or below the horizontal central line of the targets and the other two thereof at or near the bottom of the target.



In the drawings in Fig. 1, by dotted lines at  $x$ ,  $y$ , are represented a shield and embankment on the range directly in front of the target for the protection of the person acting to spot the shots and to signal or report the shots or hits.

The target D articulated on what may be regarded as the forward ends of the oscillatory double pairs of bars C C is shown in the drawings in its fully elevated position while the other target which is similarly articulated on what may be regarded as the rear end of the double pairs of oscillatory bars is shown as in its fully lowered position, both targets being maintained in parallel vertical planes transversely of the line of the rifle range.

The dotted lines in Fig. 1 showing the one target half lowered and the rear target half raised indicate the continued maintenance of the parallel arrangement of the target which is preserved at all times, and whether the targets are in extremes of their raised and lowered positions or in any intermediate positions.

The target frame may advantageously be in the form of open rectangular frames receiving target coverings which may be of canvas, or paper, or combinations thereof, or other flexible or suitable material stretched over the frames and secured thereon by tacks, adhesive material or otherwise.

The entire apparatus or nearly all thereof may be constituted of wood, although in practice it is deemed preferable to constitute the rocking shafts B B and upright supports A A of metal.

If after protracted use the target frames become badly shot up, they may be readily replaced by new target frames engaged as described by their trunnions in sockets at the extremities of the bars C C; and if the bars become badly shattered they may be replaced in their supporting engagement on the rocking shaft,—the before described slot formations in the uprights permitting convenient disconnection of all of the parts and reconnection thereof in replacement.

To remove a target frame and put in a new one, in many cases it will only be required to loosen the set screws  $g g$  and slide the bars C C to greater separation so that the bar sockets  $j$  are drawn away from engagement with the target frame trunnions,—reversing the operations for the mounting of the new target. Or it is possible, as might be required for very wide targets, to disengage the bars C C from the rocking shafts, the possibility of which has been heretofore rendered apparent under which circumstances entire freedom is afforded to take out the one target and substitute therefor another with capabilities for the movements and control thereof described.

The one target is counterbalanced by the

other and while the one is up in sight to be shot at, the other is lowered to a safe position to be spotted, or to have a fresh target covering stretched thereon.

I claim:—

1. In an apparatus of the character described, in combination, opposite upright supports, opposite pairs of parallel bars, those of each pair being pivotally supported at their middle portions by said uprights, at points one over another and for swinging movements, in parallelism, in vertical planes, and a pair of target-frames which are disposed between, and by their opposite edges pivotally supported at separate points respectively to the forward and rearward end portions of said opposite pairs of parallel bars, whereby said target frames, moved to raised, lowered, or intermediate positions, on their carrying bars, are maintained invariably in vertical planes.

2. The combination with opposite upright supports having vertically upwardly opening slots in their upper portions and also having vertical slots below said first named slots, of a pair of parallel transverse shafts having necked down portions engaging and normally seated in the lower ends of said slots, opposite pairs of parallel bars each having a central aperture for engagement with said rock shafts, means for confining said bars on said rock shafts, and a pair of target frames edgewise pivotally supported at separate points respectively to the forward and rearward end portions of said opposite pairs of parallel bars.

3. The combination with opposite upright supports having vertical upwardly opening slots in their upper portions and also having vertical slots below said first named slots, of a pair of parallel transverse shafts having neck down portions engaging and normally seated in the lower ends of said slots, opposite pairs of parallel bars each having a central aperture for engagement with said rock shafts, means for confining said bars on said rock shafts, and a pair of target frames having provided on opposite edge portions blocks made with trunnions projecting beyond the edges of the frames, and pivotally engaging in holes, which are provided therefor, in end portions of said parallel bars.

4. In an apparatus of the type set forth, in combination a pair of upright supporting posts, two pairs of coextensive bars, means for supporting each bar pivotally at its center, the bars of each pair being arranged one above the other with their pivots on a line coincident with the axis of the adjacent post and two target frames supported at relatively opposite ends of the bars, each frame having pivotal supports from the mutually adjacent bar end portions by which said frame is carried.

5. In an apparatus of the type set forth, supporting means, bars pivoted in pairs at each side thereof, the pivots of all of said bars being located at fixed points on said supporting means, the bars of each pair having pivotal movement in a common vertical plane, target frames, and connections for the target frames with the pairs of bars, constructed to permit of the planes of said frames being par-

allel at all points along the pivotal travel of the bars.

Signed by me at Ely Place, Dublin, in presence of two subscribing witnesses.

CHARLES REID.

Witnesses:

DUE. POWER STEELE,  
JOHN GEORGE DUNN.