

D. C. COY.
 TARGET APPARATUS.
 APPLICATION FILED OCT. 4, 1918.

1,306,048.

Patented June 10, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

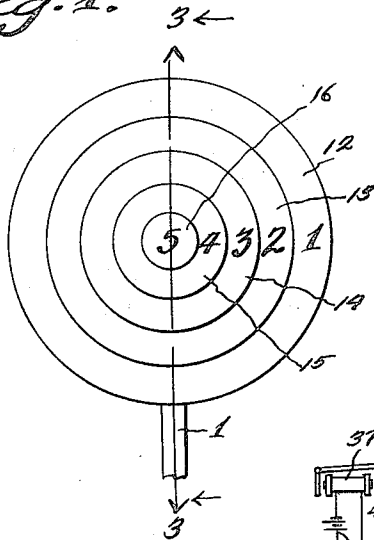


Fig. 2.

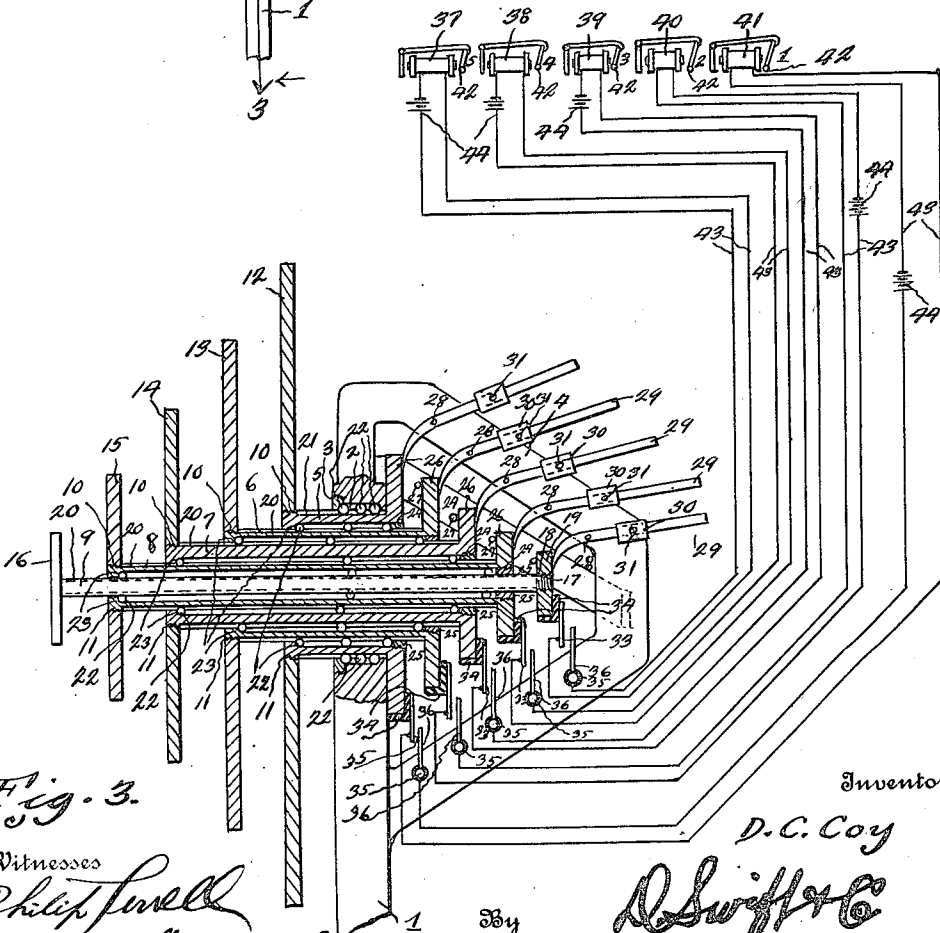
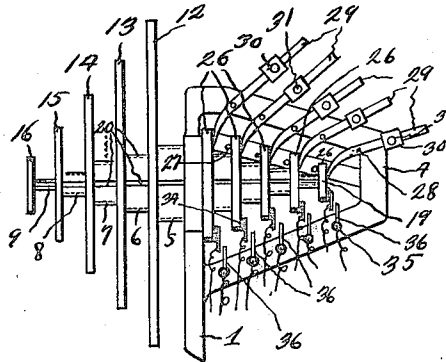


Fig. 3.

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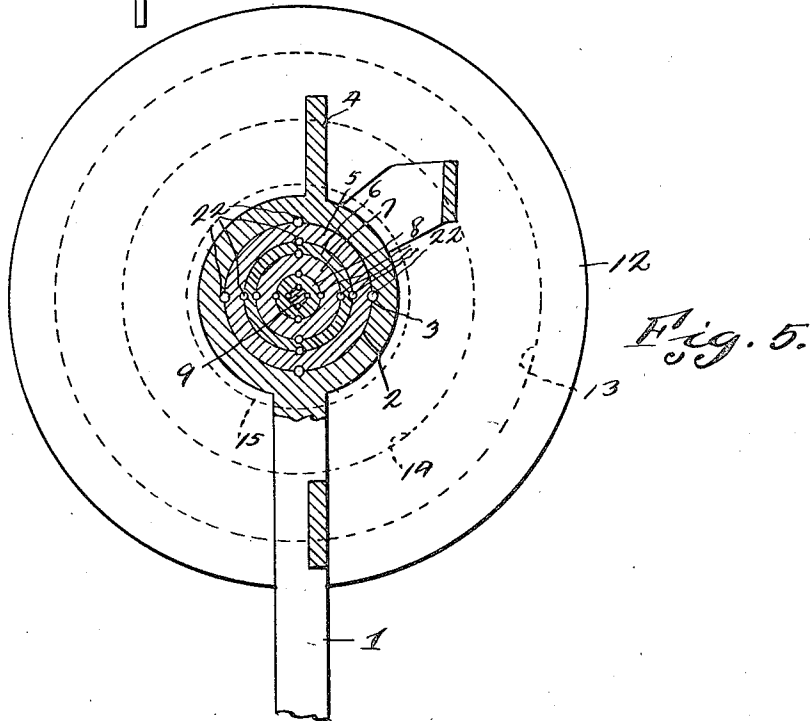
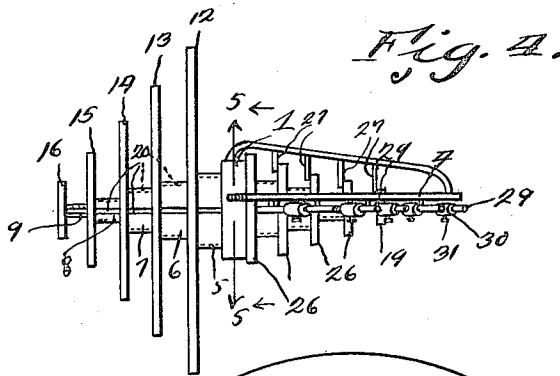
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UNITED STATES PATENT OFFICE.

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TARGET APPARATUS.

1,306,048.

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To all whom it may concern:

Be it known that I, DANIEL C. COY, a citizen of the United States, residing at Riverton, in the county of Salt Lake, State of Utah, have invented a new and useful Target Apparatus; 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.

This invention relates to an improved target apparatus, adapted for use in connection with various rifle ranges, preferably the outdoor type.

As an aim of the invention it is the object to provide an automatic target, electrically operated, to indicate the score, corresponding to each shot upon hitting the target.

The invention further aims to provide a target apparatus involving the plurality of telescopic sections having upon their front ends a plurality of disks, gradually diminishing in diameter to the bull's eye of the target, thereby indicating the various rings of the target, in combination with electrical means actuated by the sections and connected to any suitable indicator, either an annunciator or a clock dial, for indicating the score of each shot, the total of which after ten shots may be taken by an attendant on the range.

A further object of the invention is the provision of gravity means for restoring each section and its disk to its normal position in contact with limiting means for the sections.

A further object of the invention is the provision of a support for the target sections, and also anti-frictional means between the sections, whereby the sections may easily move incident to the impact of the projectile or bullet.

In practical fields the details of construction may necessitate alterations falling within the scope of what is claimed.

The invention comprises further features and combination of parts as hereinafter set forth shown in the drawings and claimed.

In the drawings:—

Figure 1 is a view in elevation of the target apparatus constructed in accordance with the invention.

Fig. 2 is a view in side elevation of the same.

Fig. 3 is a sectional view on line 3—3 of Fig. 1.

Fig. 4 is a plan view of the target apparatus.

Fig. 5 is a sectional view on line 5—5 of Fig. 4.

Referring more especially to the drawings, 1 designates an upright member, which is provided with an opening 2, the cylindrical wall of which is provided with a channel 3, and projecting rearwardly from the upright is a triangular shaped support 4. Arranged in the opening 2 is a plurality of telescopic slidable tubular sections 5, 6, 7, 8 and 9, the tubular section 5 telescopically fits the opening 2. The sections 5 to 8 inclusive have their exteriors near their forward ends provided with threads 10, to engage the threads of the openings 11 of the several disks 12, 13, 14, and 15. Formed integrally with the section 9 on its forward end is a disk 16, which is smaller in diameter than the disks 12 to 15 inclusive (which constitute or indicate the various rings of the target), and this disk 16 indicates or is designed as the bull's eye of the target. The rear end of the section 9 is exteriorly threaded as shown at 17, so as to thread into the opening 18 of a disk 19. The interiors of the various tubular sections 5 to 8 inclusive are larger in diameter than the exteriors of the sections 6 to 9 inclusive, whereby said sections are spaced from each other. The exteriors of the sections 6 to 9 inclusive are provided with longitudinally arranged elongated grooves or channels 20. The section 5 is also provided with longitudinally extending elongated channels 21. These channels or grooves 20 and 21 are arranged at diametrically opposite points on the sections and are designed to be engaged by the anti-frictional ball bearings 22. The forward ends of the interiors of the sections 5 to 8 inclusive have limiting shoulders 23 for the ball bearings. The rear ends of the interiors of the sections 5 to 8 inclusive have threads 24, to be engaged by the threaded rings 25, through which rings the sections 6 to 9 telescopically pass. Formed integral with the rear ends of the sections 5 to 8 inclusive are circular disks 26, and the disk 26 of the section 5 engages the rear face of the support 1 to limit the section 5 in its forward movement. Suitable stops or limiting device 27 are provided, to limit the sections 6 to 9 in their forward movements. Pivoted at 28 to the rearwardly extending support 4 are levers 29 having suitable weights or other gravity members 30 adjustably mounted on

their long arms by the set screws 31. The short arms of the levers 29 are curved as shown and are designed to engage the rear faces of the disks 26 to hold them in contact with the limiting stops 27, so as to hold the sections 5 to 9 inclusive in their forward normal positions, and the disks 12 to 16 inclusive equally spaced. The lower parts of the disks 19 and 26 are provided with contact members 33, which are insulated from the disks by means of the insulation 34. The lower part of the support 4 has secured as at 35 contact members 36. A series of annunciators 37, 38, 39, 40 and 41 is provided, and their drop members 42 have their front faces provided with score numbers 5 to 1 inclusive, corresponding to the score numbers of the member or disks 12 to 16 inclusive, that is corresponding to the score numbers on the face of the target, so that when either one of the disks 12 to 16 is struck by a bullet or projectile say for instance the bull's eye disk 16 the annunciator 37 will be actuated giving the score number 5. Either one or the other annunciators may be similarly actuated when its respective disk of the target is struck. For instance, each one of the annunciators is in circuit with a pair of movable and stationary contacts 33 and 36 by the wires 43 and battery 44. When one of the tubular sections is moved incident to the impact of the bullet, its rear disk 26 also moves

and brings its contact 33 in contact with the stationary contact 36, actuating the respective annunciator, as may be obvious from a careful perusal of the drawings.

The invention having been set forth what is claimed as new and useful is:

1. In a target apparatus, the combination with a support, of a plurality of gravity actuated members on said support, a series of target elements mounted on the support and held in normal positions by said gravity actuating members, and means actuated by said target members for closing electric circuits, and indicators in circuit with said means.

2. In a target apparatus, the combination with a support, of gravity holding members on said support, a plurality of target elements having telescopic parts to be engaged by the holding means to hold the target elements in their normal spaced relations, indicators having electric circuits and means actuated by said parts and being in said circuits for operating the indicators.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL C. COY.

Witnesses:

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