(No Model.) 3 Sheets—Sheet 1.

W. T. BEST.

TARGET TRAP.

No. 407,429. Patented July 23, 1889.

Fig. 1

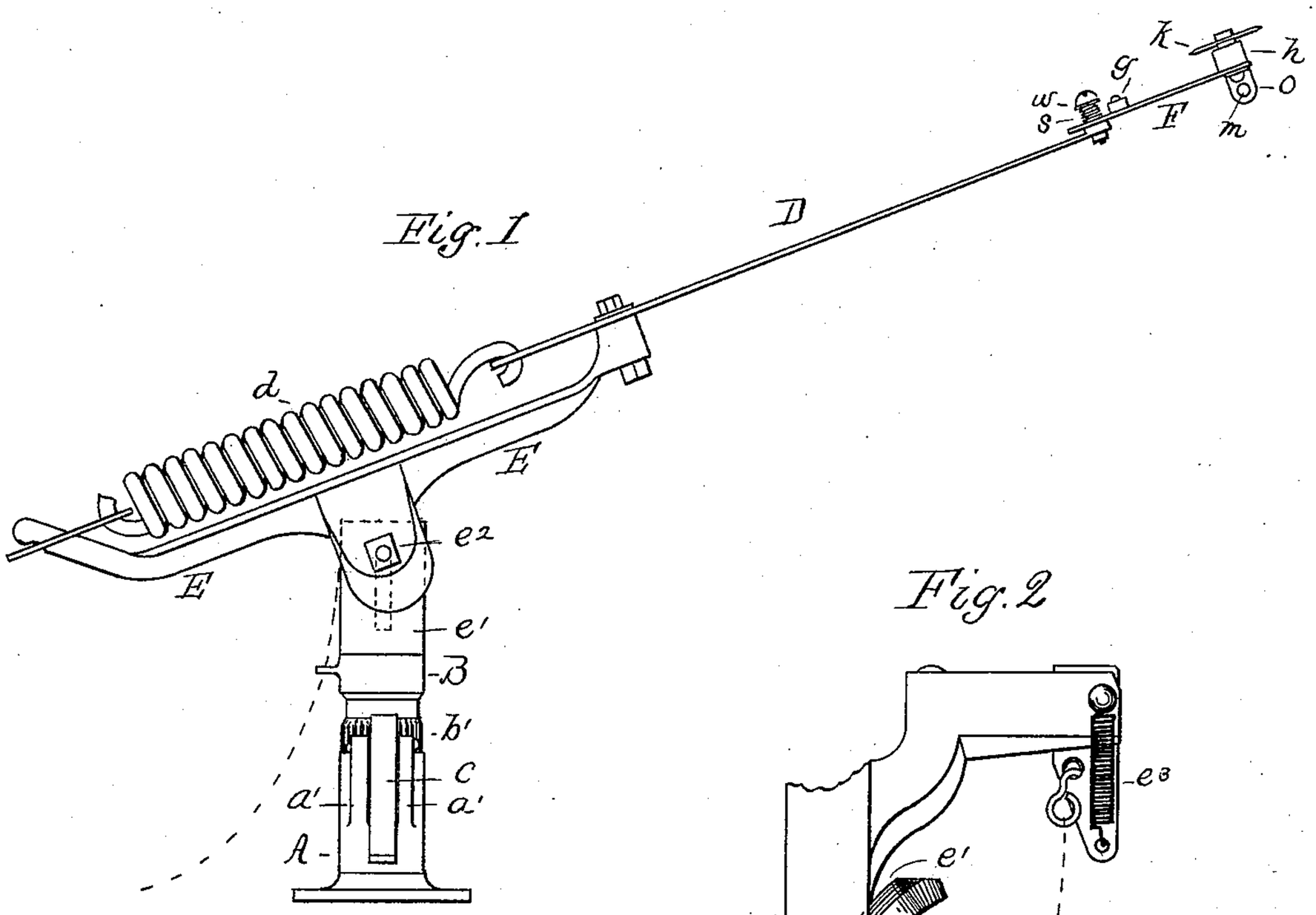
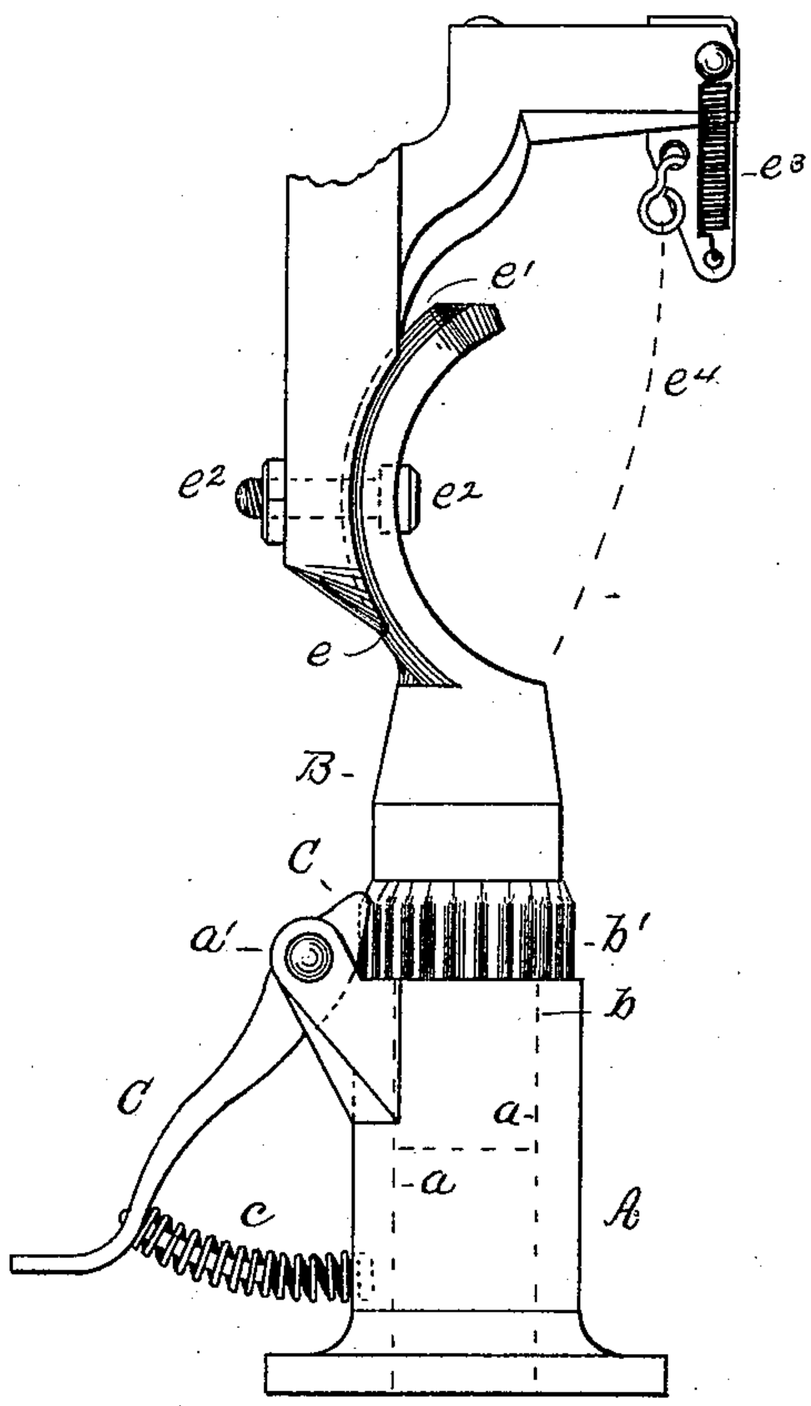


Fig. 2



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(No Model.) 3 Sheets—Sheet 2.

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Fig. 3

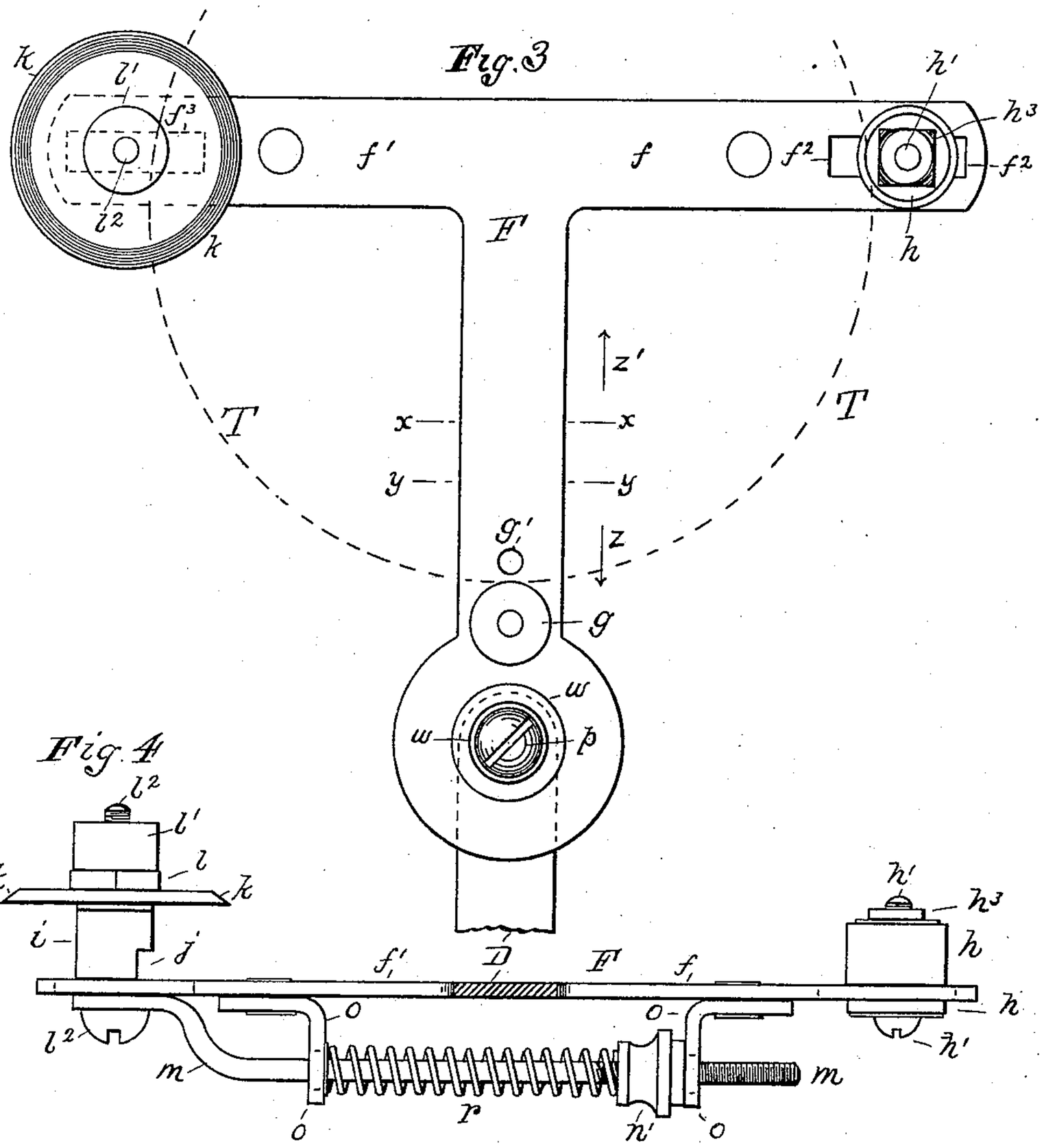

Fig. 4

Fig. 5

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(No Model.) 3 Sheets—Sheet 3.

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TARGET TRAP.

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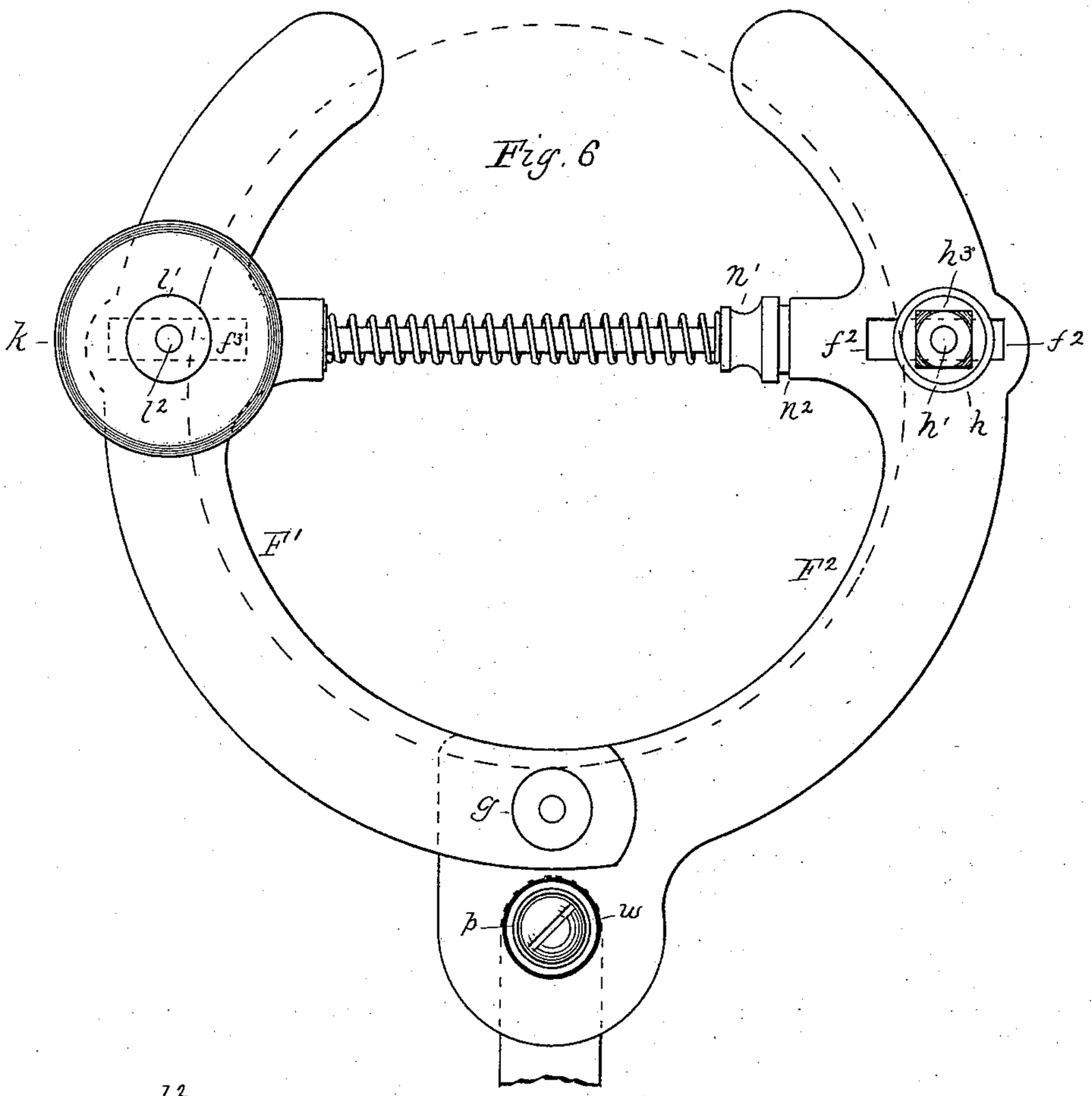

Fig. 6

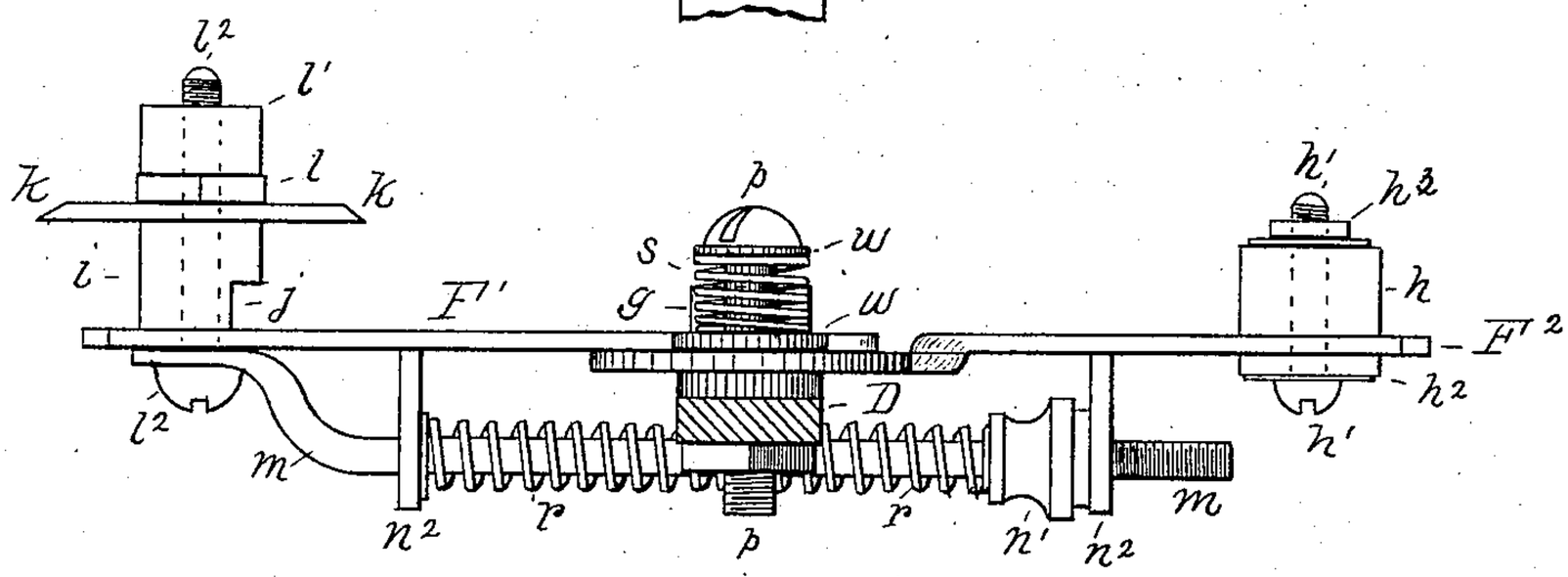

Fig. 7.

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UNITED STATES PATENT OFFICE.

WILLIAM T. BEST, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO MARION L. BEST AND MATTIE M. BEST, BOTH OF SAME PLACE.

TARGET-TRAP.

SPECIFICATION forming part of Letters Patent No. 407,429, dated July 23, 1889.

Application filed January 28, 1889. Serial No. 297,776. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. BEST, a citizen of the United States, residing at Minneapolis, in the county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Target-Traps, of which the following is a specification.

My invention relates to spring-traps for throwing flying targets; and the object of my invention is the improvement of the target-carrier; and the invention consists in the devices and combinations hereinafter fully described, and particularly pointed out in the claims.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the target-trap. Fig. 2 is also an elevation (enlarged) of the trap-standard, showing the adjusting devices. Fig. 3 is a plan view of the target-carrier. Fig. 4 is a sectional view of the same on the line $x\,x$ of Fig. 3, viewed in the direction of the arrow z'; and Fig. 5 is a similar sectional view on the line $y\,y$, viewed in the direction of the arrow z. Fig. 6 is a plan view of a modified form of the target-carrier, and Fig. 7 is an end view of the same from the rear.

Similar reference-letters designate like parts throughout the several views.

In said drawings, A designates the base of the standard, having a central opening or socket. (Shown by the dotted lines a.)

B is the post for supporting the throwing-arm, and has a bearing b and the socket a. The lower portion of the post, immediately above the standard A, is provided with cogs b', extending around its circumference. A dog C, pivoted between ears a' on the standard, engages the cogs b', and a spring c, arranged between the standard and depending arm of the dog, holds the dog in engagement with the cogs and prevents the post from turning. The throwing-arm D being carried by the post, its position, and hence the direction of its throw, can be adjusted by releasing the dog C and turning the post B manually to the point desired. A simple and conveniently-operated arrangement of devices is thus provided for permitting adjustment of the throwing-arm to any point in a circle and preventing it from being jarred out of the desired position in use.

The frame E, carrying the throwing-arm, has a concave bearing-surface e, corresponding to a convex surface e' on the post B, and is held thereon by a bolt e^2, passing through a vertical slot in the post. By these means the outer end of the throwing arm D can be raised or lowered, as desired, and the inclination of the arm's throw also adjusted.

In setting the trap for use, the arm D is turned back and caught by the spring-trigger e^3, and is released therefrom by a pull on the cord e^4, and the arm's throw is made by the tension of the spring d. On the outer end of the arm D is pivoted the target-carrier F by means of a pivot-pin p, provided with a spiral spring s and washers w for holding the carrier in proper frictional contact with the arm. The nut n permits the degree of friction to be regulated.

The saucer-shaped metal or clay target (indicated by dotted circles T) is held on the carrier preparatory to its being thrown in the following manner: On the carrier-frame F, in front of its pivot, is secured a block g, preferably of rubber, serving as a stop for the inner edge of the target. Holes g' in the carrier-frame enable the block g to be set at the proper place for targets of different sizes. A similar block h, also preferably of rubber and cylindrical in form, on one of the lateral arms f of the carrier-frame is held in place by a bolt h', passing through a slot f^2, and having a washer h^2 at the under side of the arm and a nut h^3 screwing down on the block h to hold it in place at any desired point of adjustment along the slot. Over a similar slot f^3 in the other arm f' of the carrier-frame is supported a sliding upright post i, having a notch j in its side for receiving the edge of the target. A rotary disk k is also provided on the top of the post at a suitable elevation for engaging in a corrugation or on a flat surface of such flying targets as can be better held in that way than by engaging their rims, as in case of some clay targets. The disk k may be held in place by a metal nut l and an elastic nut l', screwed on the upper portion of a bolt l^2, which extends through the post i. The base of the post bears on the surface of the arm

f', and is held in vertical position by the bolt l^2, which extends through the slot f^3 and through the flattened end of the rod m, the head of the bolt being at the under side. The rod m extends along the under side of the frame F and is loosely supported in hangers o. Its free end is threaded, and a nut n' is provided on this threaded portion, and a spiral spring r on the rod bears against the nut at one end and against the hanger o at the other, thus enabling the post i to be adjusted to any desired position along the slot f^3, and the pressure of the spring r against the hanger and nut will cause the post to be returned to its normal position from any outward point to which it has been moved.

In fixing a target of a given size in the carrier preparatory to throwing it from the trap the relative positions of the stop g, block h, and post i should be such that a little more than half of the target will pass inward between the block and post, and thus be held and prevented by the spring-pressure from premature displacement.

The adjustability of the several devices enables the target to be held in place with just sufficient grasp to insure its being cast with the full force of the arm's throw, and also to permit the use of frangible targets with little or no breakage in throwing them.

A modified form of carrier is shown in Figs. 6 and 7, the frame being composed of two curved arms F′ F², pivoted to the throwing-arm D. The devices for grasping the target are similar to those just described, the spring-carrying rod m being supported in hangers n^2, formed by pendent ears provided on the inner margins of the arms F′ F². The tension of the spring r in this form serves to turn the arm F′ to a limited extent on its pivot, as well as to the slide-post i along the slot f^3.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination, in a target-carrier, a spring-actuated post having a notch for engaging the rim at one side of a target and adjustable elastic posts for engaging opposite points of the rim, substantially as set forth.

2. In a target-trap, the combination, with the throwing-arm thereof, of a target-carrier pivoted thereto and comprising a T-shaped frame having a spring-actuated clamping device on one arm and adjustable elastic stops on the opposite arm and stem, substantially as set forth.

3. In a target-carrier, a frame having slots at either side of the middle, an elastic block over one of said slots held by an adjusting-bolt, a post over the other slot provided with devices for engaging the rim or surface of a circular target, a spring-actuated rod, a bolt connecting said rod to said post, and a stop on the frame in rear of said post and block, substantially as set forth.

4. In combination, in a target-carrier, an adjustable spring-actuated rotary disk for engaging one side of a target above its rim and adjustable elastic stops for its rim at the opposite points, substantially as set forth.

5. In a target-carrier, a pair of pivoted curved arms, a sliding target-clamp on the one arm having a spring connecting it with the other arm, an adjustable stop on the latter arm, and a stop at the pivotal point, substantially as set forth.

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Witnesses:
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