

(No Model.)

C. H. NORTH.

ELECTRICAL RELEASING DEVICE FOR TARGET TRAPS.

No. 529,666.

Patented Nov. 20, 1894.

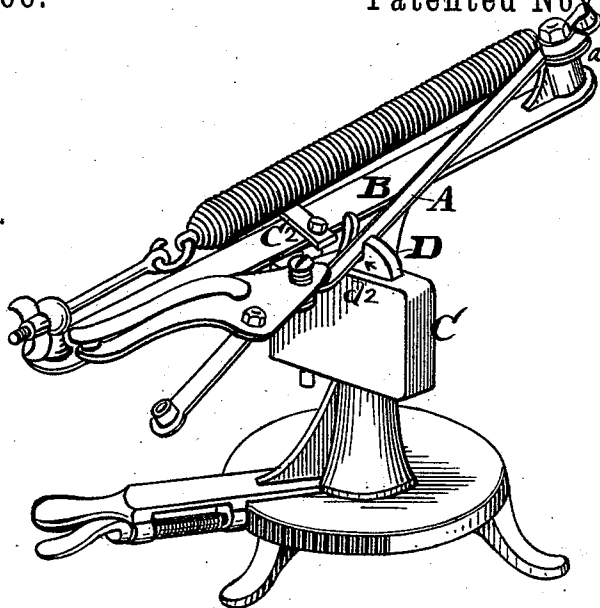


Fig. 1.

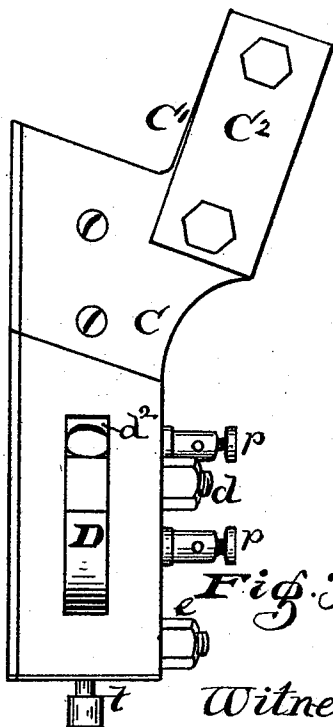


Fig. 3.

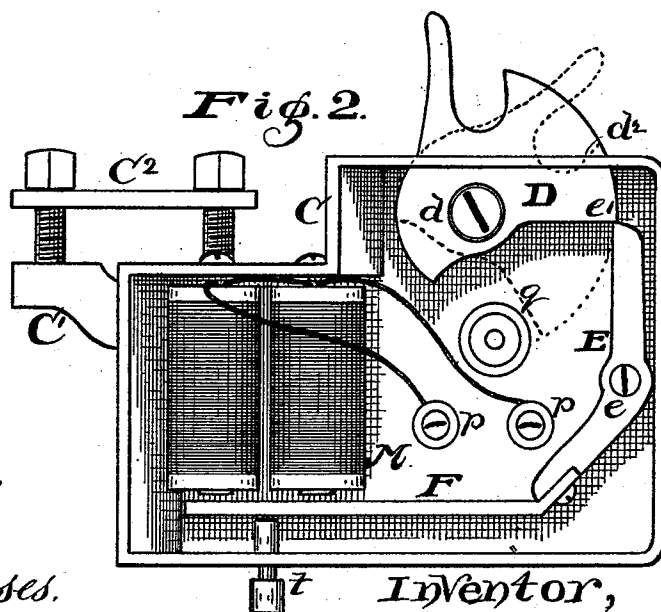


Fig. 2.

Witnesses.
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Inventor,
Charles H. North,
by Geo. W. Tibbitts, Atty.

UNITED STATES PATENT OFFICE.

CHARLES H. NORTH, OF CLEVELAND, OHIO, ASSIGNOR TO PAUL NORTH, OF
SAME PLACE.

ELECTRICAL RELEASING DEVICE FOR TARGET-TRAPS.

SPECIFICATION forming part of Letters Patent No. 529,666, dated November 20, 1894.

Application filed August 16, 1894. Serial No. 520,498. (No model.)

To all whom it may concern.

Be it known that I, CHARLES H. NORTH, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Electrical Releasing Devices for Target-Traps, of which the following is a specification.

This invention relates to an electrical attachment for releasing target traps, and consists of the peculiar construction and combinations of the device for the purpose substantially as hereinafter described and pointed out in the claim.

In the accompanying drawings:—Figure 1 is a perspective view of a target trap having my releasing device attached. Fig. 2 is a side elevation of my electrical releaser, having side plate removed for showing interior construction. Fig. 3 is a top plan view of same showing the means and manner of attaching it to the trap.

A is the throwing arm, pivoted at *a* to the frame B which is pivotally attached to the standard supporting the entire machine. To the frame B, I attach my releasing device.

C is a box having an arm C' at one side and projecting at an angle, by means of which the box is secured, with a clamp plate and screws C², to the aforesaid frame B, which holds the box in position for engaging with the throwing arm A.

D is a segmental hook-plate fixed to turn on a bolt *d* in the upper part of the box, and is arranged to turn closely in a slot *d*² in the top wall of the box. The upwardly projecting part is designed for catching and holding the throwing arm A, as seen at → in Fig. 1.

E is a latch lever fulcrumed in the box at *e* near the end, its upper arm engaging its point with the corner of the segment hook plate D at *e'*. The lower end of said lever E terminates as a bar F which end forms the armature to be acted upon by the electro magnet M, which is located in the opposite end of the box.

p, p are binding posts for making wire connections with an electric current.

q is a post having a rubber or flexible sleeve to form a cushion, against which the hook plate strikes when thrown, to relieve the force of the concussion.

t is a push pin in the bottom of the box designed for releasing the hook-plate without the use of the current at such times as may be desired. The removable side plate of the box is held by one screw which screws into the end of post *q*.

The description of the target trap is omitted, as it forms no part of my invention and is introduced to show the connection and relationship with my new releasing device.

The working of this device is as follows: In Fig. 1 the trap is seen set ready for throwing, the throwing arm held by the hook D, the engagement of which is effected by drawing the arm A around. When the hook-plate is down in position seen in dotted lines in Fig. 2, the arm A striking against the hook turns it upright and latches it in position by the point of lever E, which adjusts itself by gravity.

The releasing movement is performed by the magnet whenever the electric circuit is closed in the usual manner.

Having described my invention, what I claim is—

In combination with the throwing arm A and frame B of a target trap, of the electrical releasing device, consisting of box C provided with arm C' and clamp C²; a hook plate D pivoted in a slot in the top of the box, and adapted to engage and hold the throwing arm A; a lever E, fulcrumed in the side of the box, its upper end engaging with the point *e'* of the hook plate D; the electric magnet M secured in the top of the box, and the armature bar F attached to the lower end of lever E, and adapted to be actuated by the magnet for disengaging the hook-plate and releasing the throwing arm A substantially as described.

CHARLES H. NORTH.

Witnesses:

GEO. W. TIBBITTS,
CHARLES C. DAVIDSON.