W. S. BOWERS.

TARGET TRAP.

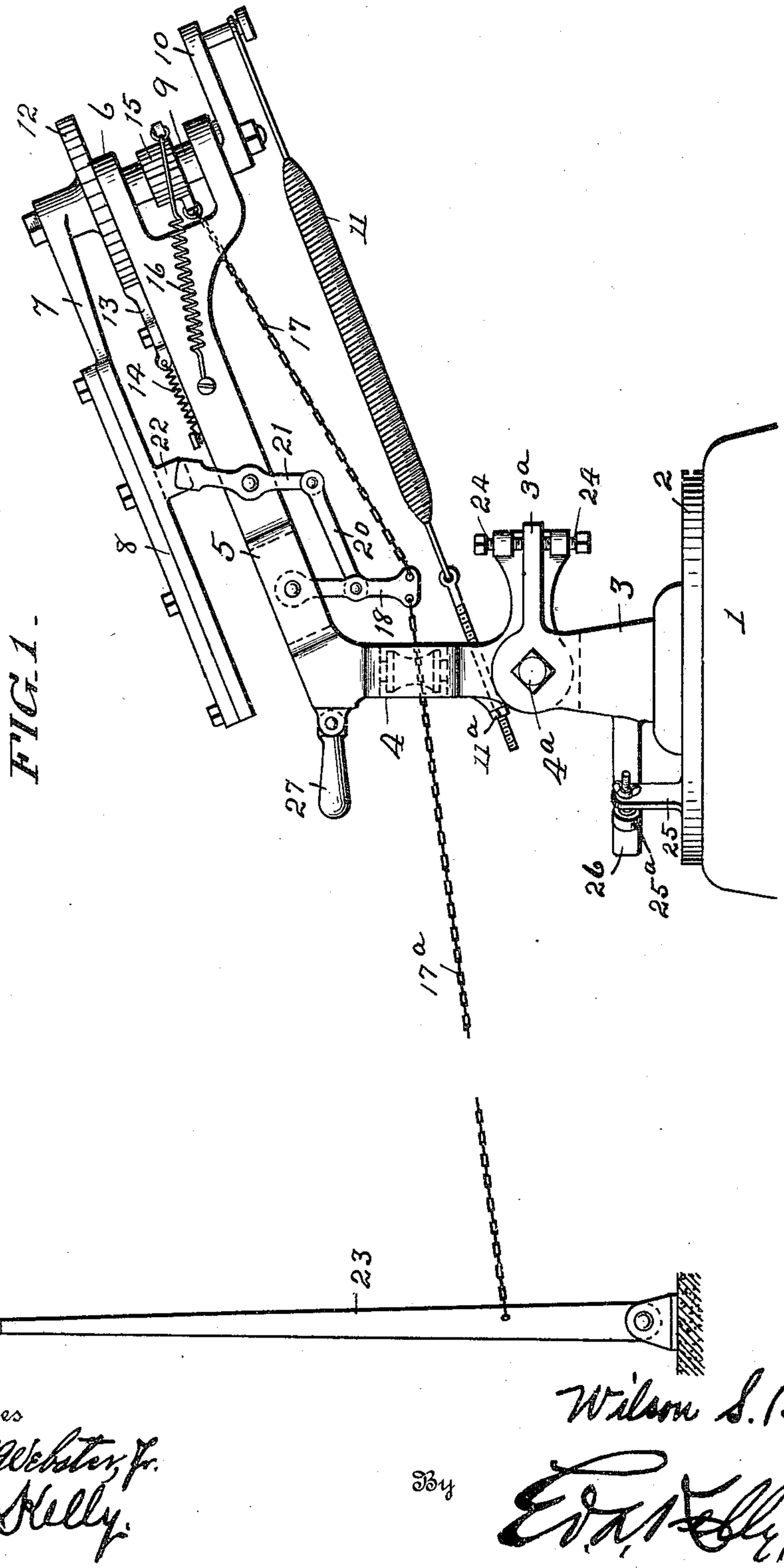
APPLICATION FILED OCT. 4, 1910.

993,501.

Patented May 30, 1911.

2 SHEETS—SHEET 1.

FIG. 1.



Witnesses

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2 SHEETS—SHEET 2.

FIG. 2.

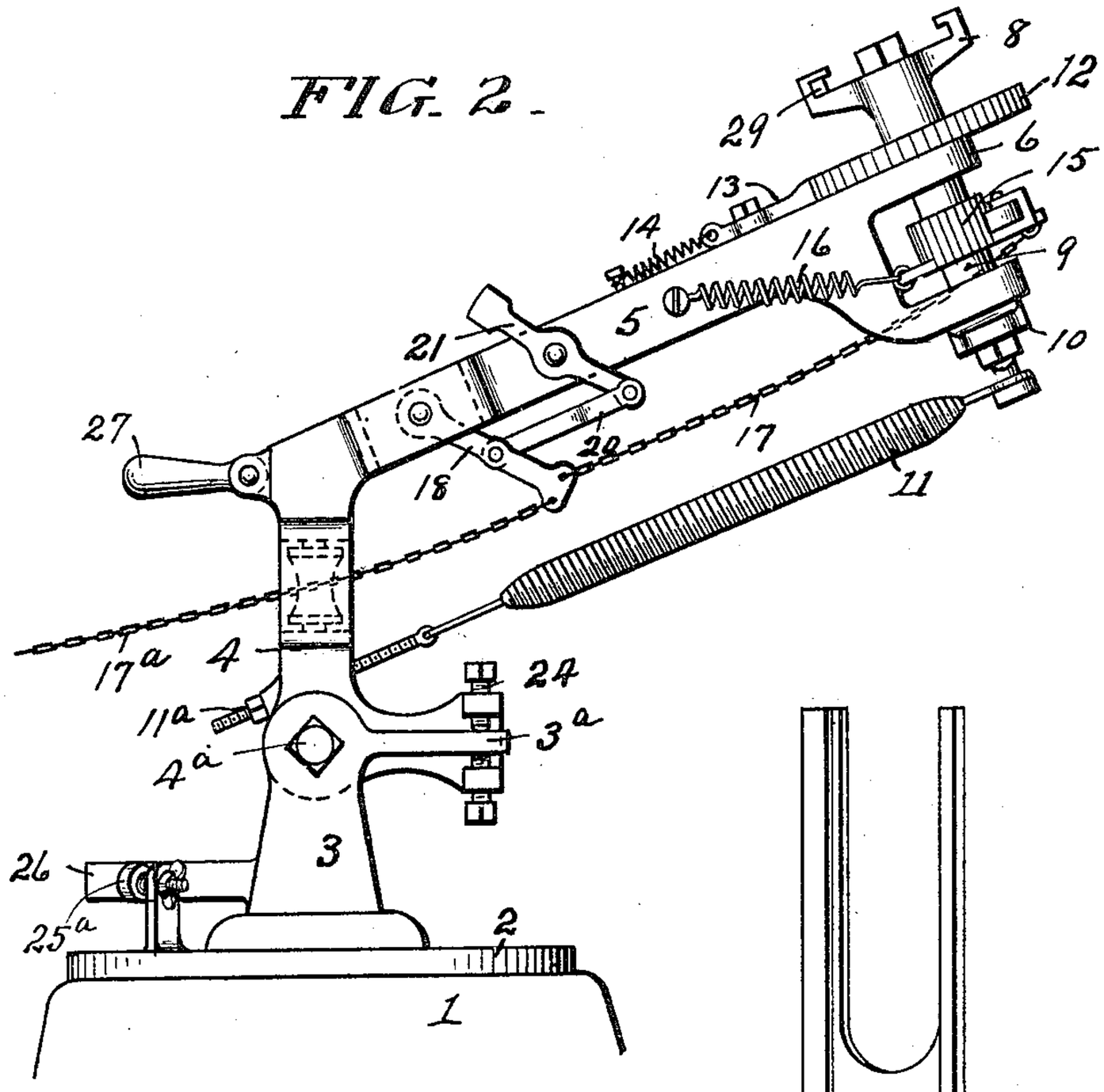
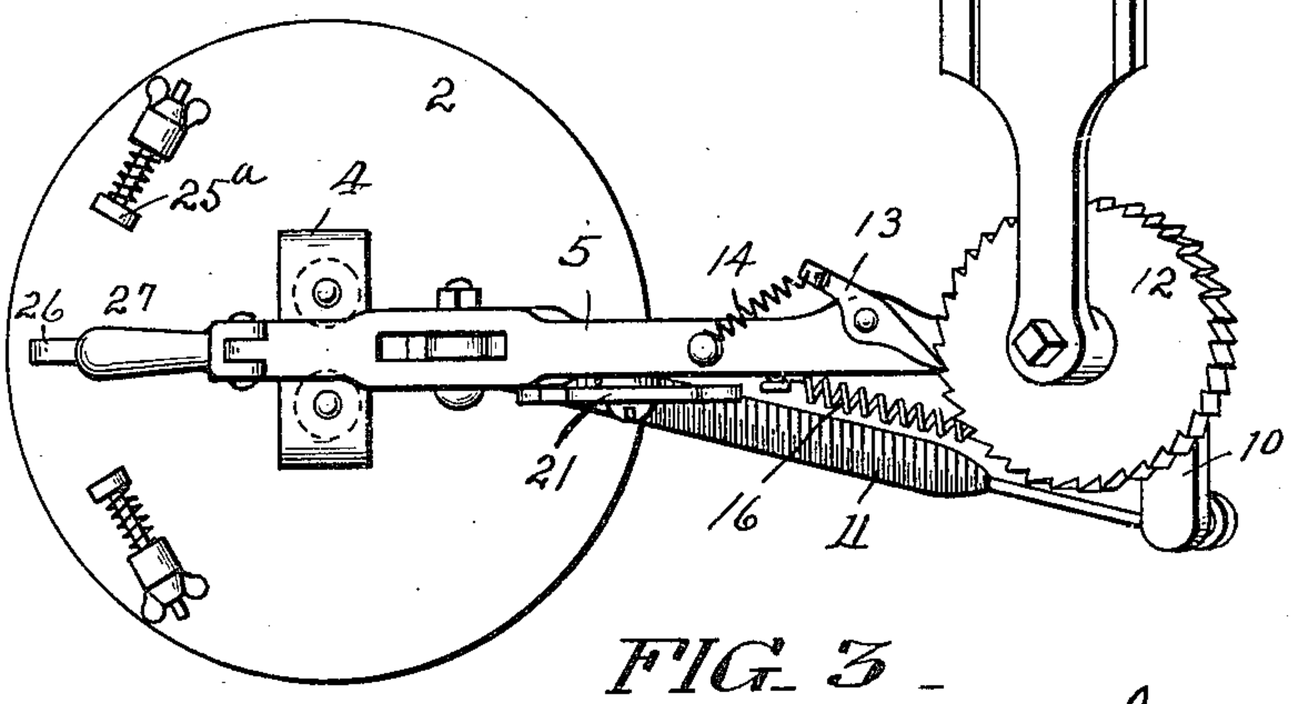


FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILSON S. BOWERS, OF BLANDON, PENNSYLVANIA.

TARGET-TRAP.

993,501. Specification of Letters Patent. Patented May 30, 1911.

Application filed October 4, 1910. Serial No. 585,189.

To all whom it may concern:

Be it known that I, WILSON S. BOWERS, a citizen of the United States, residing at Blandon, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Target-Traps, of which the following is a specification.

This invention relates to improvements in target traps and the object of my device is to produce a trap of simple construction; one that will be positive in action; one that will set itself automatically; one in which a plurality of targets may be thrown with the same ease as a single target and one in which the target is given rotation when thrown.

The invention is intended as an improvement on my device described and illustrated in United States Letters Patent No. 827,413, dated July 31st, 1906.

In the accompanying drawings: Figure 1 is a side elevation of my trap, closed and ready to be sprung; Fig. 2 is a side elevation thereof after it has been opened, and at the end of its throw; Fig. 3 is a plan view of Fig. 2.

The numeral 1 designates any suitable support; 2 is the base plate; 3 the upright, which is pivotally mounted on the base plate and capable of oscillatory movement. This upright carries the entire operating mechanism.

4 is the main arm which is pivoted at 4^a to the upright and it is formed with an angled member 5 whose outer extremity is formed with a jaw 6.

7 is the throwing arm and is provided with the usual receptacle 8 for the targets. The arm 7 is secured to a shaft 9 which passes through the jaw 6 and a crank 10 is formed on its lower end. A spring 11 is secured to this crank at one end while its other end is adjustably secured at 11^a to the vertical portion of the main arm 4.

12 is a ratchet wheel formed integral with the inner end of the throwing arm 7 and a pawl 13, backed by a spring 14 is secured to the upper face of the arm 5 and adapted to engage the teeth of the ratchet 12.

On the shaft 9 between the jaw members 6, I place a ratchet wheel 15 and I provide a spring 16 to keep this ratchet wound. At a point opposite the point where the spring is secured to it, I secure the drawing chain 17. This chain is connected to a lever 18 which is pivoted at its upper end to the arm 5. At its center I secure a bar 20 which connects with a trigger 21, pivoted to the side of the arm 5, and whose free end projects above the upper surface of the arm and engages a stop 22 on the throwing arm 7.

23 is the operating lever, which is connected to the pivoted lever 18 by a chain 17^a.

The upright is formed with a tongue 3^a and the main arm 4 has a projection provided with adjustable set screws 24, for regulating the angle of the arm with relation to the base. The base has a pair of stops 25, each provided with a spring backed buffer 25^a, against which the projecting arm 26 on the upright will contact when the device is swung to either end of its oscillatory movement. 27 designates a handle by means of which this movement of the mechanism may be accomplished.

The target receptacle 8 is provided along one of its sides with a rubber strip 29, so that when the target is thrown, contact therewith will give rotation to the target.

The operation is as follows: Assuming the device to be in position shown in Fig. 1, the spring 16 and also the main spring 11 are in tension; to throw the target, the lever 23 is allowed to come forward, by releasing the hand hold thereon; the spring 16 will draw the ratchet 15 around and the chain 17 will draw the lever 18 forward, and through the arm 20 it will move the trigger 21 forward until the upper end releases the stop 22. Immediately on this release, the main spring 11 will come into play and draw the crank arm 10 back, thus throwing the arm 7 around on its shaft 9 and discharging the target. At the end of the throw, when the force is spent, the parts assume the position shown in Figs. 2 and 3; the receptacle is loaded with targets and the lever 23 is drawn back, which will reverse the movement of the parts just described and draw the throwing arm into position by making it complete the circle; three fourths of which was accomplished by the impulse of the main spring. As stated, the throwing arm describes a complete circle; the first portion by the act of throwing the target and the latter portion when drawn into position for the succeeding operation.

It is evident that targets may be thrown at varied angles laterally as well as to different angles with relation to the ground, and these movements are easily adjustable.

What I claim is:

In a target trap, a base; an oscillating upright; means for regulating and limiting this oscillatory movement comprising a pair of spring backed buffers; a main arm pivoted to the upright; means for adjusting the main arm with relation to the upright; a throwing arm having a target receptacle; a rubber liner on one side of the receptacle to give rotation to the target when thrown; a ratchet wheel formed on said throwing arm; a shaft carrying said throwing arm and passing through the extremity of the main arm; a crank on the lower end of said shaft; a spring connected to said crank for the purpose of turning it; a ratchet on said shaft between the jaw members of the main arm; a spring for moving said ratchet; a trigger device for releasing the throwing arm comprising a trigger 21, a bar 20 and a lever 18; a chain connecting said lever 18 with the ratchet in the jaw of the main arm and a chain connecting said lever 18 with the operating lever 23.

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

WILSON S. BOWERS.

Witnesses:
ELI F. DELP,
G. HENRY HEINLY.