A. ROUEN.

BOMB CATAPULT.

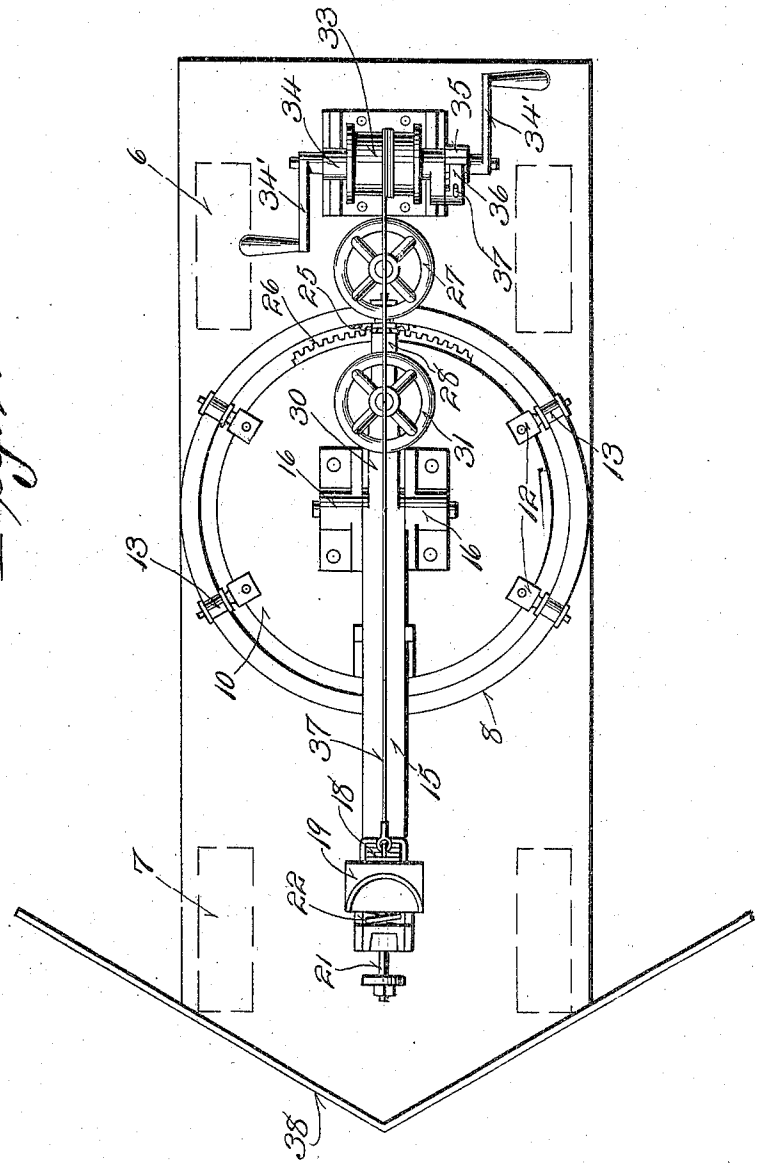
APPLICATION FILED OCT. 24, 1918.

1,295,069.

Patented Feb. 18, 1919.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESS:

J. P. Britt

INVENTOR

Alexander Rouen

BY Young & Young

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

A. ROUEN.

BOMB CATAPULT.

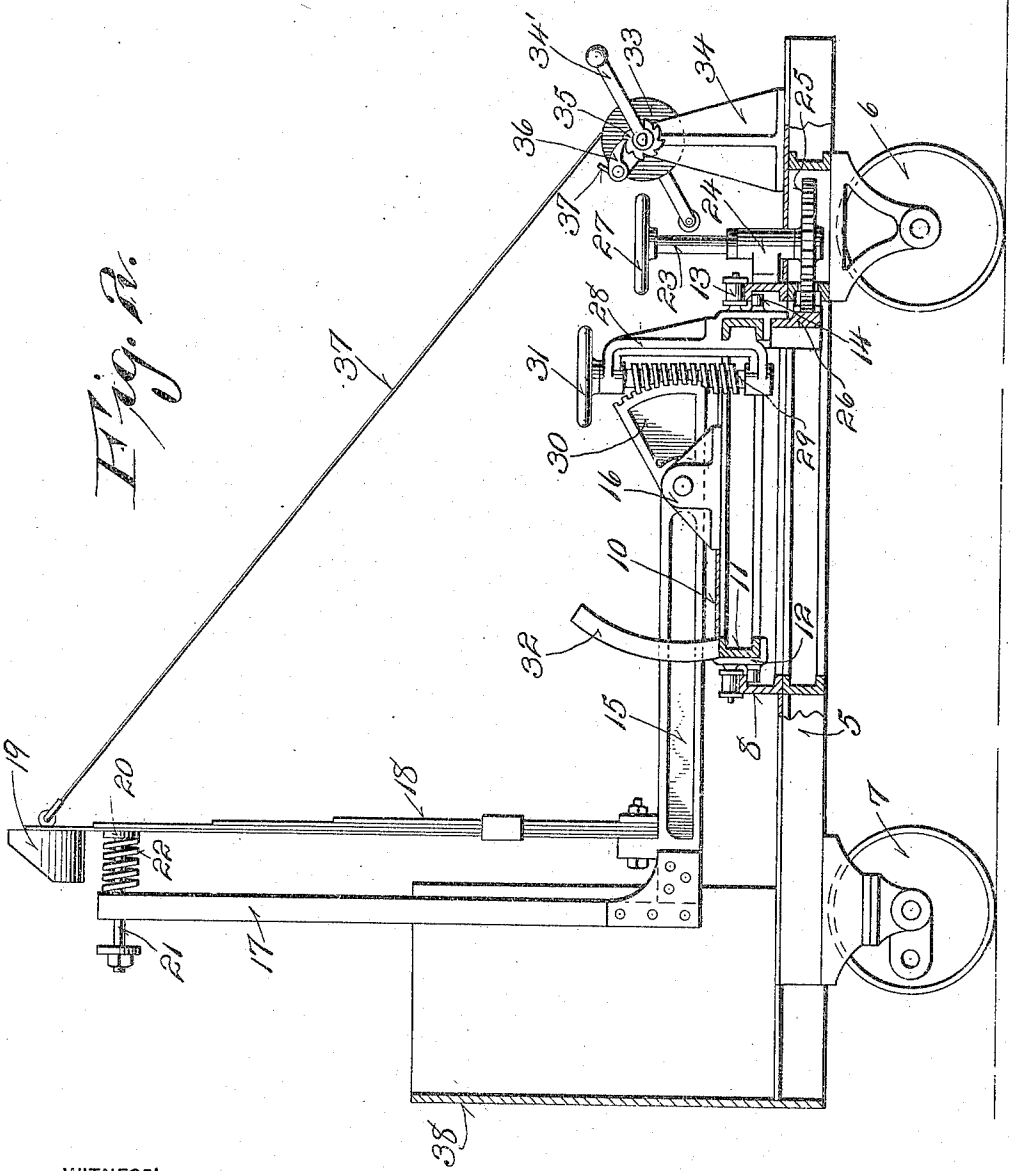
APPLICATION FILED OCT. 24, 1918.

1,295,069.

Patented Feb. 18, 1919.

2 SHEETS—SHEET 2.

Fig. 2.



WITNESS:

F. F. Britt

INVENTOR

Alexander Rouen

BY Young & Young

ATTORNEY

UNITED STATES PATENT OFFICE.

ALEXANDER ROUEN, OF MANITOWOC, WISCONSIN.

BOMB-CATAPULT.

1,295,069. Specification of Letters Patent. **Patented Feb. 18, 1919.**

Application filed October 24, 1918. Serial No. 259,477.

To all whom it may concern:

Be it known that I, ALEXANDER ROUEN, a citizen of the United States, and resident of Manitowoc, in the county of Manitowoc and State of Wisconsin, have invented certain new and useful Improvements in Bomb-Catapults; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to new and useful improvements in catapults.

It is the object of my invention to provide a catapult device which is adapted to throw bombs or other projectiles and which is mounted in such manner that it may be readily transported from place to place and adjusted in aim both with respect to the horizontal and vertical planes.

A further object resides in the provision of resilient means for checking the momentum of the catapult member at the limit of its throwing movement.

With the above and other objects and advantages in view, which will be apparent as the description proceeds, my invention resides in the novel features of construction, combination and arrangement of parts as hereinafter described and defined by the appended claims.

In the accompanying drawings:

Figure 1 is a plan view of a catapult comprising one embodiment of my invention.

Fig. 2 is a side elevation thereof, portions of the frame and turn table being in section.

Referring now more particularly to the accompanying drawings, there is provided a main frame 5 supported on the rear wheels 6 and dirigible front wheels 7 whereby the device may be readily transported from place to place. An annular channeled turn table track 8 is mounted on the main frame. Mounted on this track is a turn table including a floor 10 an annular channeled frame portion 11 of lesser diameter than the channel track 8 and carrying outstanding brackets 12 on which are mounted flanged rollers 13 riding on the upper side of the channel track. These brackets also carry rollers 14 engaging within the channel track to prevent upward displacement of the turn table.

A catapult frame is mounted on the turn table and includes a beam 15 pivoted between journal ears 16 upstanding on the turn table, said beam extending forwardly of the turn table and carrying a standard 17 at its forward end. A catapult spring 18 is also secured to the forward end portion of the beam 15 and is built up of a plurality of leaves, the width and strength of the spring being gradually reduced toward its upper end, which projects above the standard 17. The upper end of the spring carries a bomb receptacle 19 and the spring is engageable immediately below the bomb receptacle with a buffer head 20 carried on a shaft 21 slidable in the upper end of the standard, a heavy expansile spring 22 being coiled on the shaft between the standard and buffer head. The standard thus affords a yieldable stop for the throwing movement of the spring, whereby a definite trajectory flight may be afforded for the bomb or other projectile in the receptacle. The aim of the catapult with respect to lateral direction is controlled by a vertical shaft 23 mounted in a bearing 24 on the main frame and carrying in its lower end a gear wheel 25 meshing with an arcuate gear rack 26 secured to and depending at the rear portion of the turn table. A hand wheel 27 is mounted on the upper end of the shaft.

For determining the elevation of the trajectory of the catapult, an upstanding bracket 28 is secured on the rear portion of the turn table, having vertically alined bearings in which is journaled a worm shaft 29 meshing with a worm gear segment 30 carried on the rear end of the catapult frame beam 15. A hand wheel 31 is secured on the upper end of this shaft, and thus upon rotation of the shaft the entire catapult frame may be raised or lowered on the pivot axis of the bearings 16. The beam 15 is guided forwardly of its pivot by arcuate guide standards 32 upstanding on the forward portion of the turn table.

For tensioning the catapult spring, a windlass drum 33 is mounted on bearings 34 upstanding at the rear of the main frame, the shaft of this drum having crank handles 34′ on its ends and being provided with a ratchet wheel 35 engageable by a pawl 36 carried on one of the standards. A cable 37 is wound on the drum and is secured to the upper extremity of the spring. Thus upon winding the windlass drum, the spring will be drawn downwardly and rearwardly, lowering the receptacle so that it may be loaded with a bomb or other projectile, and tensioning the spring whereby upon release of the pawl the spring will move upwardly and forwardly to discharge the projectile.

The pawl is provided with an abutment arm 37 which may be struck to release the same and procure a violent release of the spring.

A preferably angular shield 38 is secured to the front of the main frame for shielding the persons operating the catapult.

What is claimed is:

1. A catapult including a base frame, a turn table mounted on the base frame, a catapult frame mounted on the turn table for vertical pivotal movement, said catapult frame including a beam extended forwardly of the turn table, a standard on the forward end of the beam, a catapult engaging stop on the standard, a catapult member on the catapult frame, and means for retracting the catapult member.

2. A catapult including a base frame, a turn table mounted on the base frame, a catapult frame mounted on the turn table for vertical pivotal movement, said catapult frame including a beam extended forwardly of the turn table, a standard on the forward end of the beam, a catapult engaging stop on the standard, a catapult member including a series of leaf springs secured at its lower end to the forward end portion of the catapult frame, and means connected with the upper end of the catapult member for retracting it.

3. A catapult including a base frame, an annular track member mounted on the frame, a turn table, rollers on said turn table engaging the top and bottom faces of the track member, a beam extending forwardly on the turn table, means for rotating the turn table, a catapult member including a series of leaf springs secured at its lower portion to the beam, a windlass on the main frame rearwardly of the turn table, and a cable wound on the windlass and secured to the upper end of the catapult member.

4. A catapult member including a main frame, a turn table mounted on the main frame, a beam pivoted on the turn table for vertical swinging movement, guide standards on the turn table for said beam, means for procuring pivotal movement of the beam, a catapult member secured to the beam, and means for retracting said catapult member.

In testimony that I claim the foregoing I have hereunto set my hand at Manitowoc, in the county of Manitowoc and State of Wisconsin.

ALEXANDER ROUEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."