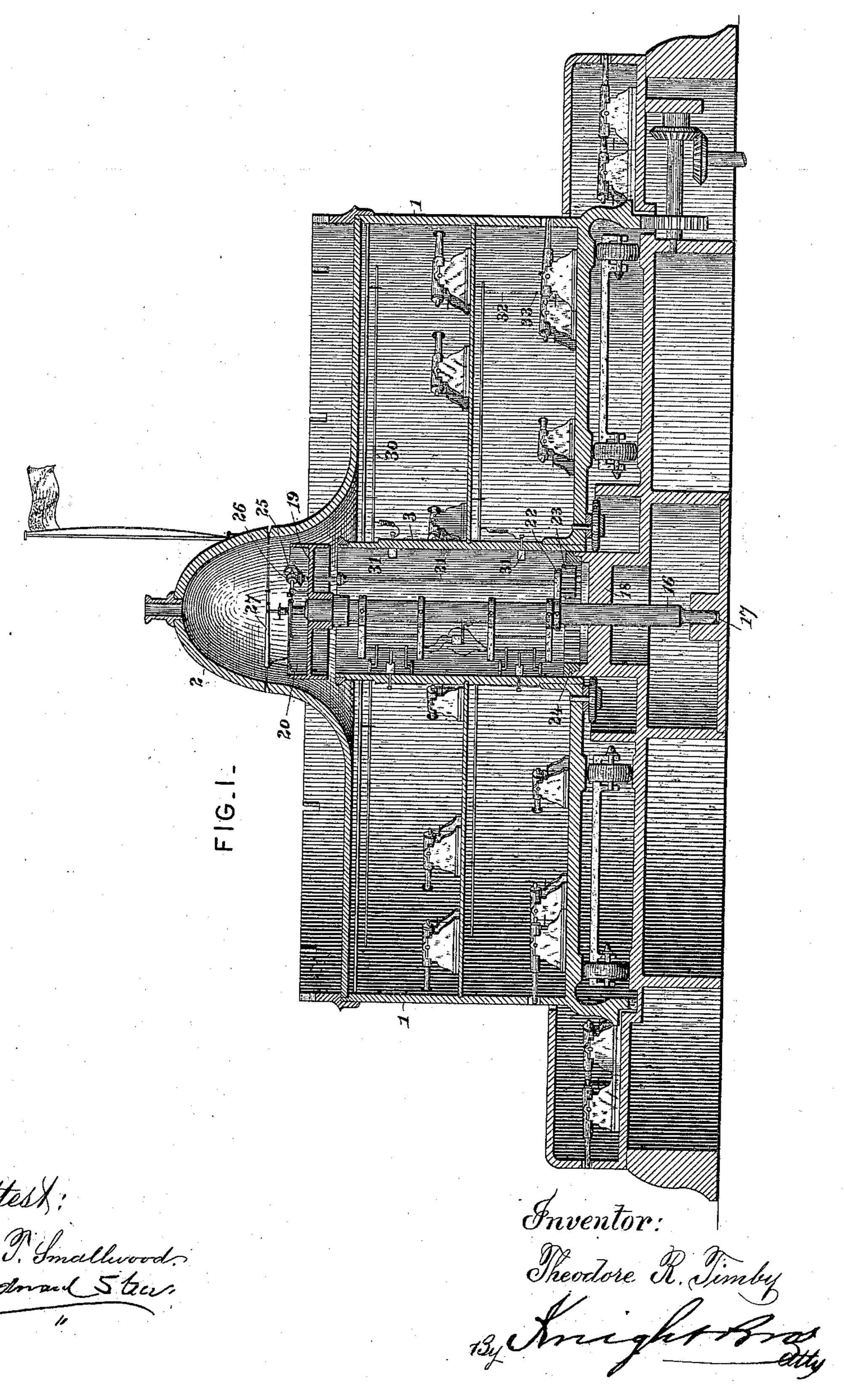
## T. R. TIMBY.

REVOLVING TOWER SYSTEM OF FORTIFICATIONS.

No. 330,638.

Patented Nov. 17, 1885.

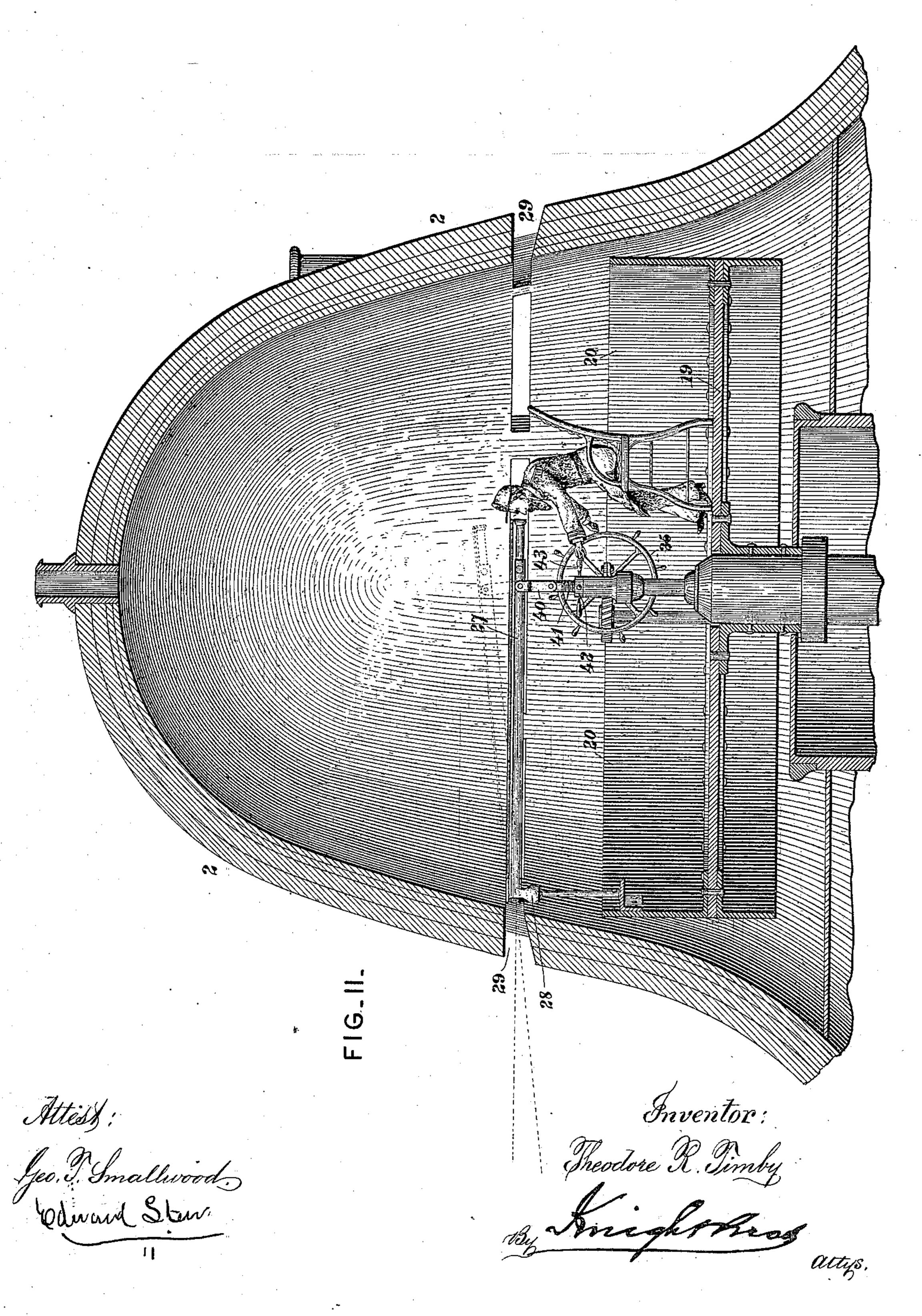


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# United States Patent Office.

THEODORE R. TIMBY, OF NYACK, NEW YORK.

#### REVOLVING-TOWER SYSTEM OF FORTIFICATIONS.

SPECIFICATION forming part of Letters Patent No. 330,638, dated November 17, 1885.

Application filed April 21, 1885. Serial No. 162,939. (No model.)

To all whom it may concern:

Be it known that I, THEODORE R. TIMBY, a citizen of the United States, residing at Nyack, in the county of Rockland and State of New York, have invented a new and useful Improvement in Revolving-Tower Systems of Fortifications, of which the following is a specification.

In my system of revolving battery-towers the revolving tower is constructed with a dome 10 within which the officer is seated on a platform, which he turns at his pleasure on a vertical axis, while the tower carrying the guns revolves independently around it. The sighting-platform on which the officer sits controls the electrical firing mechanism, as I have fully described in Letters Patent No. 312,231, granted to me the 10th day of February, 1885, and also a sighting-telescope, which is mounted accurately in the vertical plane of the firing-line, the sight being taken through horizontal loop-holes extending around the dome, and very narrow vertically.

The subject of my present invention is the combination, with such a revolving battery-tower, of a "sight," preferably telescopic, pivoted very near the loop-hole in the dome-wall, through which the sight is taken, and adjustable vertically at the eye or inner end, for the purpose of sighting an object near by or far off on the horizon through a very narrow opening.

In the sight end is supported by a link, 40, from a screw-standard, 41, threaded within a swiveled sleeve, 42, in the axis of the tower and platform, said sleeved being provided at its upper end with hand spokes 43, by which it is turned in either direction to raise or lower the said end of the telescope.

Having thus described my invention, the

In the accompanying drawings, Figure I is a vertical section of a revolving battery-tower with my invention applied. Fig. II is a vertical section, on a larger scale, of the dome and sighting mechanism.

The revolving tower is constructed with external walls, 1. of the necessary strength to resist an enemy's fire, surmounted by a dome, 40 2, within which the officer sits, and with a cylindrical well, 3, concentric with the revolving tower and turning therewith. The internal construction of the tower and its supporting and revolving mechanism, and the elec-45 trical firing apparatus 30 31 32 33, may be as described in my Patent No. 312,231, above referred to. In the center of the tower, within the well 3, is a vertical shaft, 16, running in a step, 17, and a bearing, 18, which form part 50 of the stationary foundation 15 of the tower. The vertical shaft 16 carries at its upper end a platform, 19, surrounded by a curb, 20, and

forming an upper bearing for a second verti-

cal shaft, 21, parallel with the shaft 16, and 1

having its lower bearing in a horizontal arm, 55 22, projecting from the said shaft 16. On the lower end of the shaft 21 is a pinion, 23, gearing with a cogged rim, 24, fixed to the base or foundation within the central well, 3, of the tower, so that by the rotation of the 6c shaft 21 the shaft 16, and with it the platform 19, will be revolved. This rotation of the shaft 21 is effected by the hand-wheel 25 and worm-and-pinion gearing 26, or by any other suitable mechanical connection. The plat- 65 form also carries a sighting-telescope, 27, pivoted at its object end by a hinge or joint, 28, in close proximity to the inner surface of the wall of the dome on a level with the horizontal range of loop-holes 29 therein, so that I 70 am enabled to sight an object close by or far off on the horizon through a very narrow opening, the distance of the object being indicated by the elevation or vertical angle of the telescope. To effect the vertical adjust- 75 ment of the telescope, as indicated by dotted lines in Fig. II, its sight end is supported by threaded within a swiveled sleeve, 42, in the axis of the tower and platform, said sleeve 80 being provided at its upper end with handspokes 43, by which it is turned in either direction to raise or lower the said end of the telescope.

Having thus described my invention, the 85 following is what I claim as new therein and desire to secure by Letters Petent.

desire to secure by Letters Patent:

1. The combination, with a revolving battery-tower, of a sighting-platform revolving concentrically and independently therein, and 90 a sight carried by said platform hinged or pivoted at its outer end in close proximity to the tower wall or dome and capable of elevation and depression at its inner end for the purpose of sighting an object near by or 95 far off through a vertically-narrow opening, as explained.

2. The combination, with a revolving battery-tower, of a platform, 19, mounted concentrically therein and capable of independent 100 movement, rotating mechanism 25 26, telescope 27, pivoted close to the opening in the wall, and elevating mechanism 41 of said telescope, as and for the purpose set forth.

THEODORE R. TIMBY.

Witnesses:
OCTAVIUS KNIGHT,
HARRY E. KNIGHT.