(No Model.)

3 Sheets—Sheet 1.

T. R. TIMBY.

SIGHTING PLATFORM FOR REVOLVING TURRETS.

No. 413,582. Patented Oct. 22, 1889.

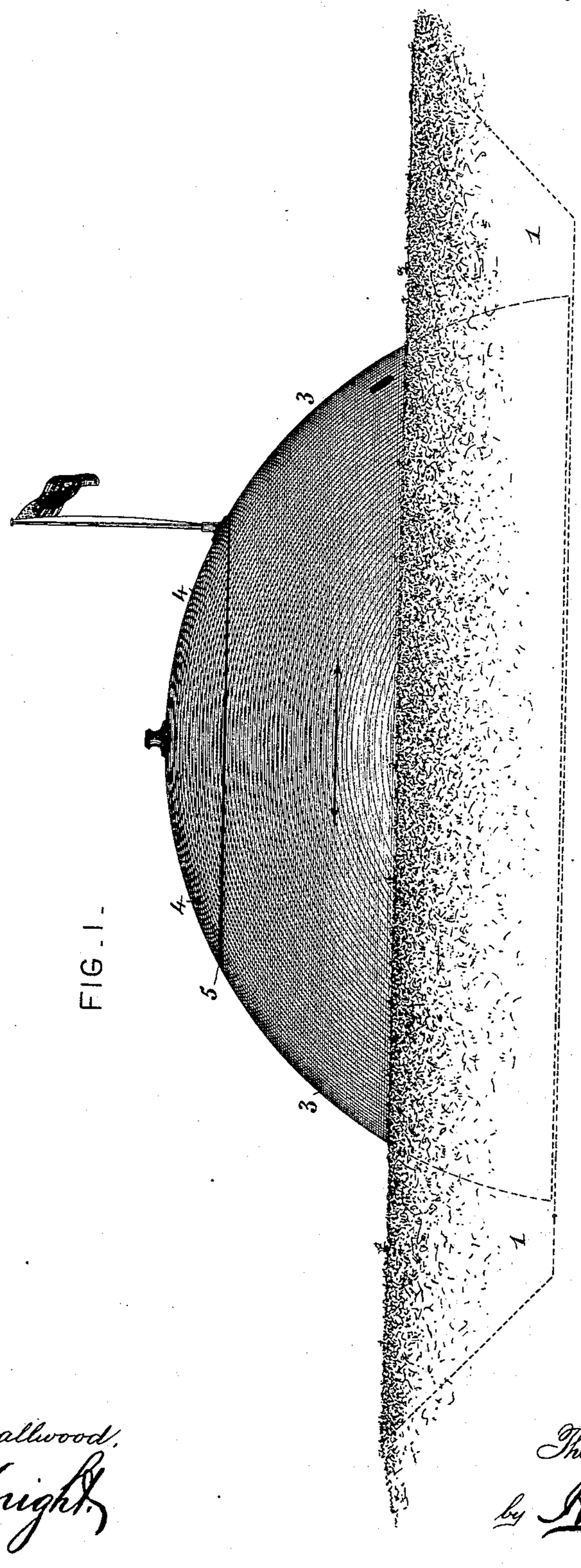

FIG. 1.

Attest:
Geo. T. Smallwood.
H. S. Knight.

Inventor:
Theodore R. Timby,
by Knight Bros
Attys

(No Model.) 3 Sheets—Sheet 2.

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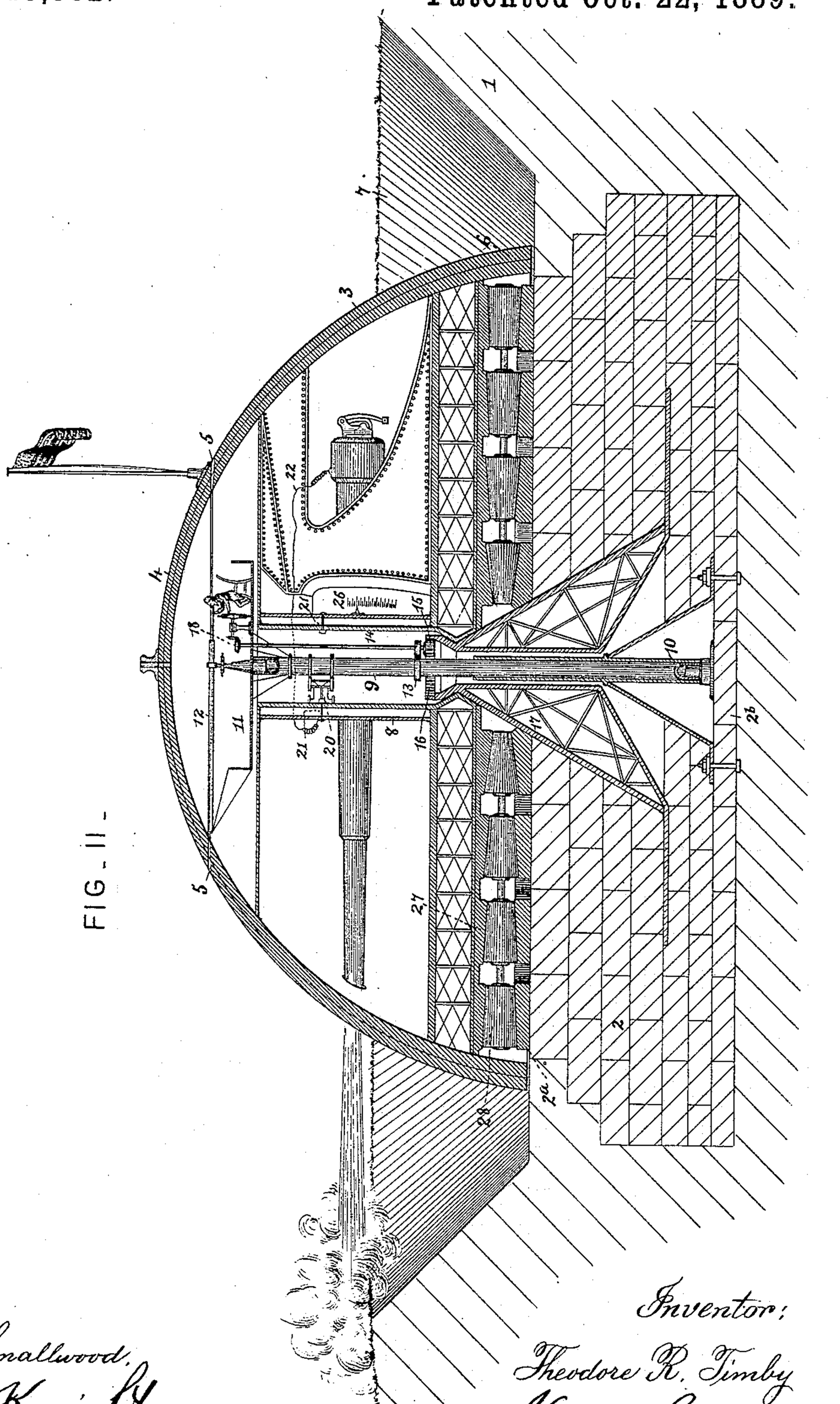

FIG. II.

Attest:
Geo. T. Smallwood.
H. S. Knight.

Inventor:
Theodore R. Timby
by Knight Bros.
Attys.

(No Model.) 3 Sheets—Sheet 3.

T. R. TIMBY.

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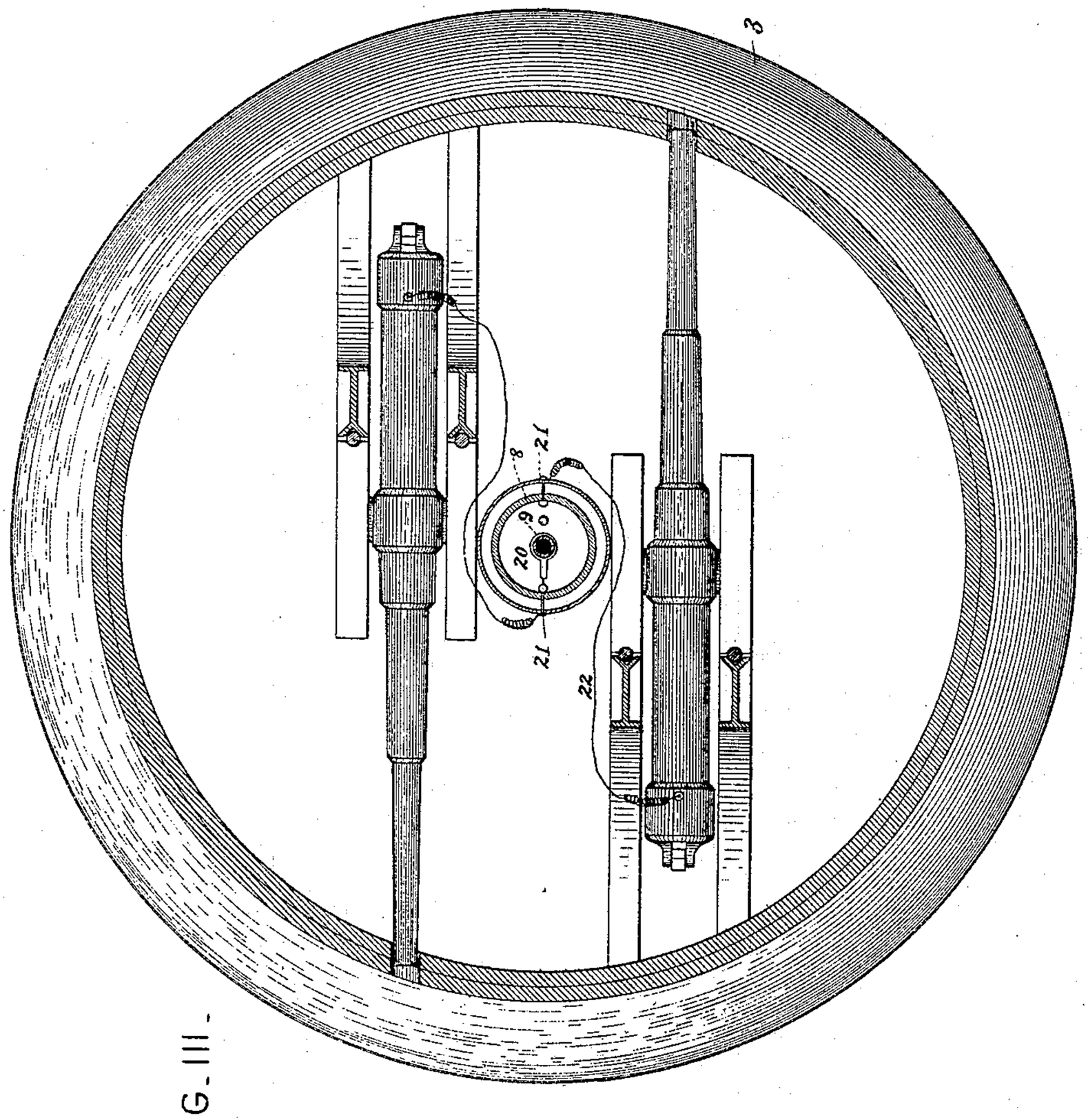

FIG. III.

Attest:
Geo. T. Smallwood.
H. S. Knight.

Inventor:
Theodore R. Timby
by Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

THEODORE R. TIMBY, OF WASHINGTON, DISTRICT OF COLUMBIA.

SIGHTING-PLATFORM FOR REVOLVING TURRETS.

SPECIFICATION forming part of Letters Patent No. 413,582, dated October 22, 1889.

Application filed July 5, 1889. Serial No. 316,580. (No model.)

To all whom it may concern:

Be it known that I, THEODORE R. TIMBY, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Revolving-Tower Fortifications, of which the following is a specification.

My invention relates to revolving-tower fortifications of the general nature and description set forth in patents heretofore granted to me.

The object of the present improvement is to facilitate the accurate sighting of guns and to prevent the disturbance of the sighting mechanism and the sighting-platform on which the gunner sits by the concussion of projectiles upon the exterior of the tower or by the discharge of the guns in the tower itself. To this end I provide a sighting-platform located centrally over the gun-floor, and guns are supported upon a central shaft, as shown and described in my application, Serial No. 313,089, filed the 4th of June, 1889.

My present improvement consists in supporting the sighting-platform and the shaft thereof entirely independent of the revolving tower and its foundations, so as to preclude the transmission of shocks from the tower to the supporting-shaft of the sighting-platform, and thence to the platform itself.

In order that the invention and my preferred mode of carrying it into effect may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is an external view of my improved fortification. Fig. II is a vertical section of the same. Fig. III is a horizontal section thereof above the gun-floor.

1 represents the ground upon which the tower or fortification is to be erected, the earth-work preferably taking the form of a mole, as illustrated in Figs. I and II.

2 represents the masonry foundation of the tower, surmounted by a bed of metal 2^a, constituting ways or tracks for the supporting-rollers on which the tower rotates.

3 represents the outer casing of the fortification, surmounted by a cap 4, beneath which is a sight-opening 5, extending around the tower at a suitable height for the use of the gunner. The lower edge 6 of the casing extends well down within the moat 7, formed by the surrounding mole 1, and overlaps the bed-plate 2^a, so as to completely and effectually protect the revolving mechanism of the tower. Within the revolving tower is a well-hole 8, concentric with the outer casing, and in the center of this a vertical shaft 9, mounted and supported in a socket 10, which is securely and immovably fixed to the sub-foundation 2^b independently of the supports of the tower itself. The sighting-platform 11 is supported upon and carried by the top or upper portion of the vertical shaft 9, and above it on top of the shaft, or upon a support concentric therewith, is mounted a suitable sighting-telescope 12, the outer or object end of which is presented to the sighting-aperture 5, but in such position as to be effectually protected by the outer casing of the fortification and entirely clear of contact therewith. The elevation of the telescope is regulated at the point of its support upon the central shaft so as not to interfere with the proper presentation of the object-glass to the lookout-opening 5. The shaft 9 and sighting-platform 11 and telescope 12, with their accessories, are normally stationary, but are rotated to change and determine the line of sight as required. To effect this rotation, a vertical shaft 14 is provided, mounted in a suitable bracket 13 near its lower end and in the platform 11 above, so as to be carried by the shaft 9. On the lower end of the shaft 14 is a pinion 15, gearing with a cogged rim 16 upon the stationary frame 17, which centers the revolving tower. On the upper end of the shaft 14 is mounted a hand-wheel or gearing 18, by which the shaft 14, with the pinion 15, may be revolved, thus imparting rotation to the shaft 9, with the parts carried thereby, by the action of the pinion 15 upon the cogged rim 16.

As in my application Serial No. 313,089, previously referred to, I employ a circuit-closer 20, fixed upon the shaft 9 and rotated therewith, said circuit-closer acting in conjunction with a corresponding contact-point 21, connected with the wire circuit 22, connected with a suitable battery 26, or other source of electricity, and controlling the firing mechanism on the guns 25. The base or floor 27 of the revolving tower rests on anti-friction rolls 28,

supported by the bed-plate 2^a, which is constructed with suitable tracks for said rolls. The rotation of the tower may be effected by any suitable means.

In describing the sighting-platform and its shaft as supported entirely independent of the revolving tower and its foundations I mean not only that the vertical support is independent, but that the platform-supports also derive the required lateral or horizontal stay or support without contact with the revolving tower. My present improvement is thus distinguished from that shown in my patent, No. 246,987, dated September 13, 1881, in which the platform is supported laterally by stays within a cylindrical standard concentric and in contact with the central well of the revolving tower, so that concussions against the tower-well are fully transmitted to the platform-support.

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

1. A revolving-tower fortification having a sighting-platform mounted upon an independent foundation, with lateral supporting-stays out of contact with the tower-well, so as to prevent the transmission of shocks from the revolving tower or fortification to the said sighting-platform, substantially as herein described.

2. The combination of the sighting-platform 11, vertical shaft 9, supporting said platform, supporting-socket 10, and a revolving-tower fortification surrounding the supporting-shaft 9 without direct contact therewith or with its lateral supporting-stays, as and for the purposes set forth.

3. In a revolving-tower fortification, the combination of the sighting-platform 11, rotating shaft 9, supporting said platform, a suitable bearing 10, affording lateral support to the rotating shaft 9 without direct contact with the revolving tower, and a shaft 14, pinion 15, and cogged rim 16 upon the fixed frame 17, for effecting the rotation of the shaft 9 and sighting-platform 11, as explained.

THEODORE R. TIMBY.

Witnesses:
OCTAVIUS KNIGHT,
HERVEY S. KNIGHT.