

(No Model.)

3 Sheets—Sheet 1.

T. R. TIMBY.

REVOLVING TOWER SYSTEM OF FORTIFICATIONS.

No. 330,642.

Patented Nov. 17, 1885.

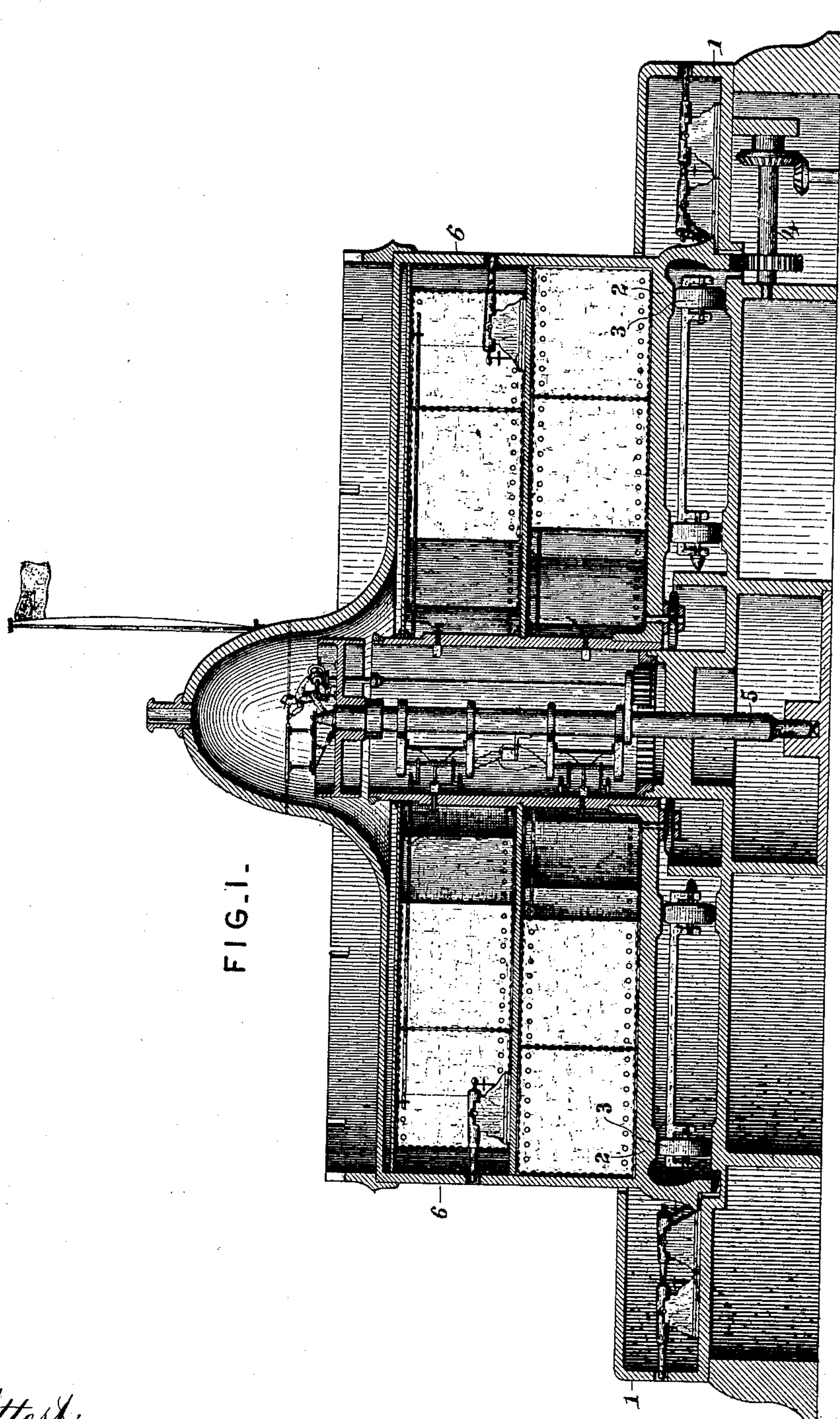


FIG. 1.

Attest:  
Geo. P. Smallwood.  
Victor A. Lewis

Inventor:  
Theodore R. Timby  
By Knight Bros. atty



(No Model.)

3 Sheets—Sheet 2.

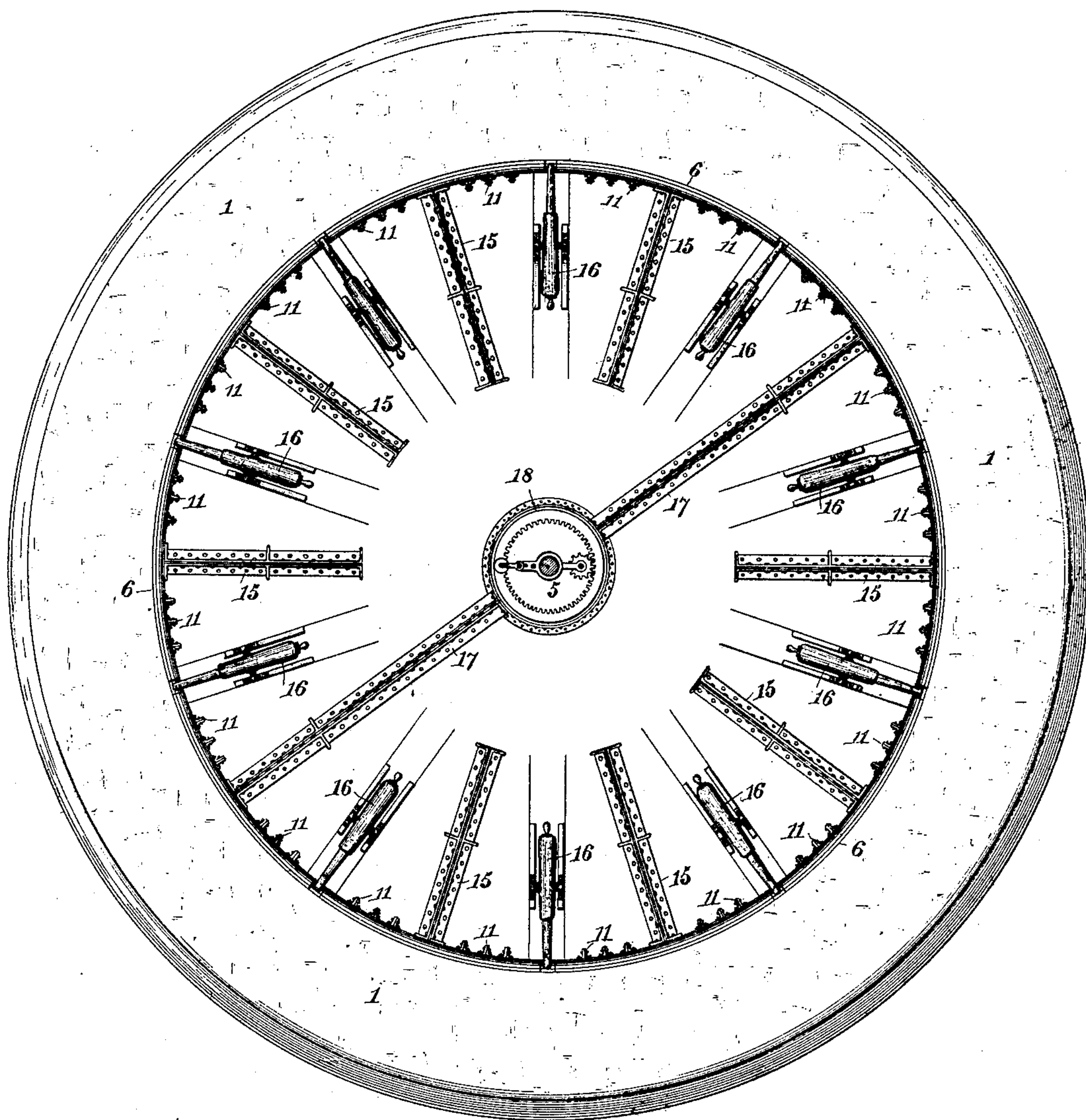
T. R. TIMBY.

REVOLVING TOWER SYSTEM OF FORTIFICATIONS.

No. 330,642.

Patented Nov. 17, 1885.

FIG. II.



Attest  
Geo. P. Smallwood.  
Victor A. Lewis

Inventor:  
Theodore R. Timby  
By Knight Bros attys

(No Model.)

3 Sheets—Sheet 3.

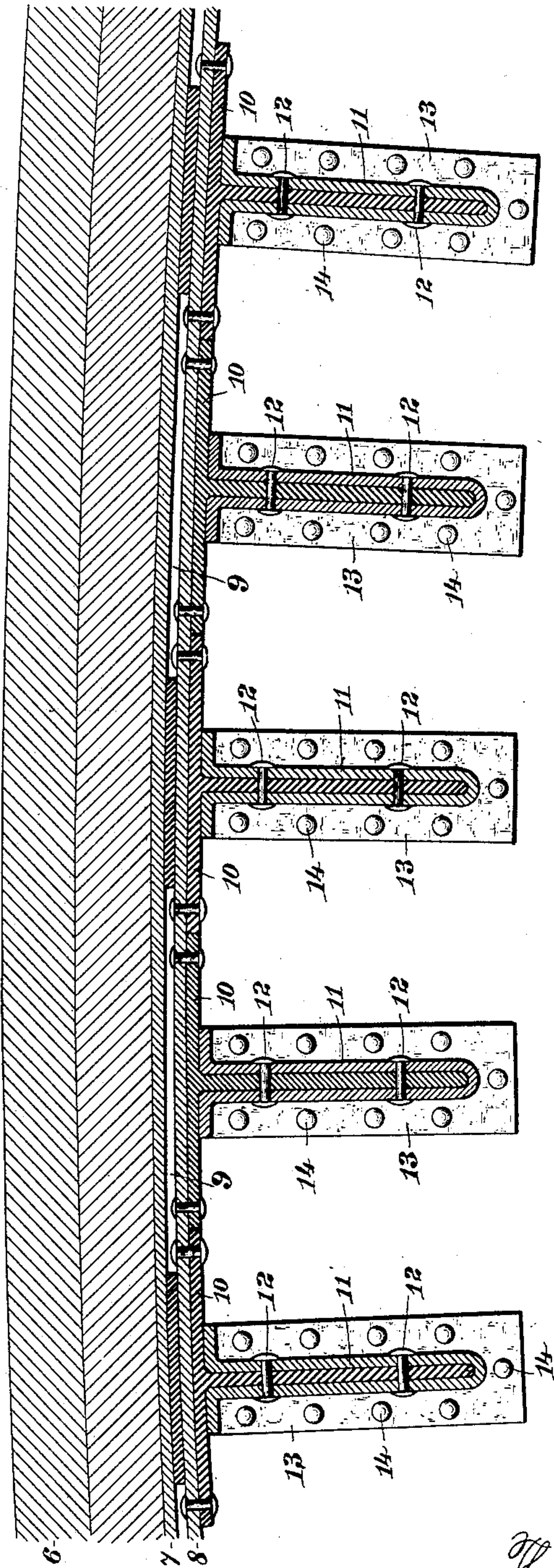
T. R. TIMBY.

REVOLVING TOWER SYSTEM OF FORTIFICATIONS.

No. 330,642.

Patented Nov. 17, 1885.

FIG. III.



Attest:

Geo. T. Smallwood.  
Victor A. Lewis

Inventor:

Theodore R. Timby

By Knight Bros.  
attys.



# UNITED STATES PATENT OFFICE.

THEODORE R. TIMBY, OF NYACK, NEW YORK.

## REVOLVING-TOWER SYSTEM OF FORTIFICATIONS.

SPECIFICATION forming part of Letters Patent No. 330,642, dated November 17, 1885.

Application filed March 9, 1885. Renewed October 5, 1885. Serial No. 179,081. (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 certain new and useful Improvements in Revolving - Tower Systems of Fortifications, of which the following is a specification.

My invention relates to improvements in revolving battery-towers; and it consists in an improved mode of constructing the said towers to give them greater strength and lessen the liability of the walls being penetrated under an enemy's fire, so as to interfere with the proper rotation and working of the tower and its guns.

To this end the interior of the tower-walls is re-enforced and supported by vertical ribs of any desired depth or length and distance apart, riveted or bolted to the tower-walls and to the floor and ceilings. I also employ vertical partitions riveted or bolted to the tower-walls, floors, and ceilings for strengthening and stiffening the structure. I also provide on the interior of the tower-walls lining or facing plates, to which the strengthening ribs and partitions are secured, with spaces between the wall and lining-plates to afford ventilation.

In the accompanying drawings, Figure I is a vertical section of a revolving battery-tower illustrating the invention. Fig. II is a horizontal section of the same. Fig. III is a horizontal section of a part of the wall on a larger scale.

The base 1, revolving bed 2, supporting-rollers 3, rotating mechanism 4, firing mechanism 5, and tower-walls 6 may be of any suitable construction—such, for example, as I have shown in earlier applications for Letters Patent. Within the walls 6 are facing or lining plates 7 8, with spaces 9 between them extending vertically and communicating through perforations with the interior of the tower, so as to afford ventilation. Strong ribs 10, of T iron or steel, are bolted or riveted on the inner face of the wall, extending radially inward to any width and vertically from bottom to top, serving as a truss to strengthen the wall against an external blow. The inwardly-extending webs of these T-plates are embraced by U-shaped plates 11, fastened thereto by bolts or rivets 12 and having flanges 13 at bottom and top, and securely fastened to the floor and ceiling by bolts or rivets 14.

The strengthening-ribs thus formed (shown at 11 in Fig. II and in detail in Fig. III) may be of any number and at any distance apart, according to judgment.

15 represent flanged partitions securely riveted to the wall, floor, and ceiling, and extending radially inward between the guns 16, for stiffening and strengthening the tower. I may extend these flanged partitions inward to the central well, 18, in which the firing mechanism 5 works; or I may employ any desirable number of partial partitions 15 with one, two, or more complete partitions, 17, as illustrated in Fig. II.

The construction here shown and described of ribs and partitions is adapted to afford the greatest strength with the least weight of metal, and such ribs and partitions are of great utility in my revolving-tower system of fortifications for strengthening and stiffening the said tower and preventing the distortion thereof in action and under the impact of an enemy's fire.

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

1. The combination, with the tower-wall, of the T-shaped ribs 10, secured to the face of said wall, and the superimposed U-shaped plates 11, fastened to the ribs 10 and having flanges by which they are secured to the floor and ceiling, whereby the tower-walls are better enabled to withstand shock and strain, as explained.

2. In a revolving battery-tower, the combination of the external walls, 6, the central well, 18, the radial partitions 17, securely fastened to the outer wall, the internal well, and the floor and ceiling to stiffen and strengthen the entire structure, and the interposed radial partitions 15, extending part way inward from the outer wall and securely fastened to the outer wall, the floor, and the ceiling, and serving as buttresses to strengthen the wall against external shocks.

3. The combination of the outer wall, 6, the central well, 18, the radial partitions 15 17, and the facing-plates 7 and 8, forming ventilating-spaces within the wall, substantially as shown and described, for carrying off smoke from the spaces between the said radial partitions.

Witnesses: THEODORE R. TIMBY.  
OCTAVIUS KNIGHT,  
HARRY E. KNIGHT.