

No. 708,873.

Patented Sept. 9, 1902.

M. J. DONER.  
ROUNDAABOUT.

(Application filed Mar. 24, 1902.)

(No Model.)

2 Sheets—Sheet 1.

Fig. I.

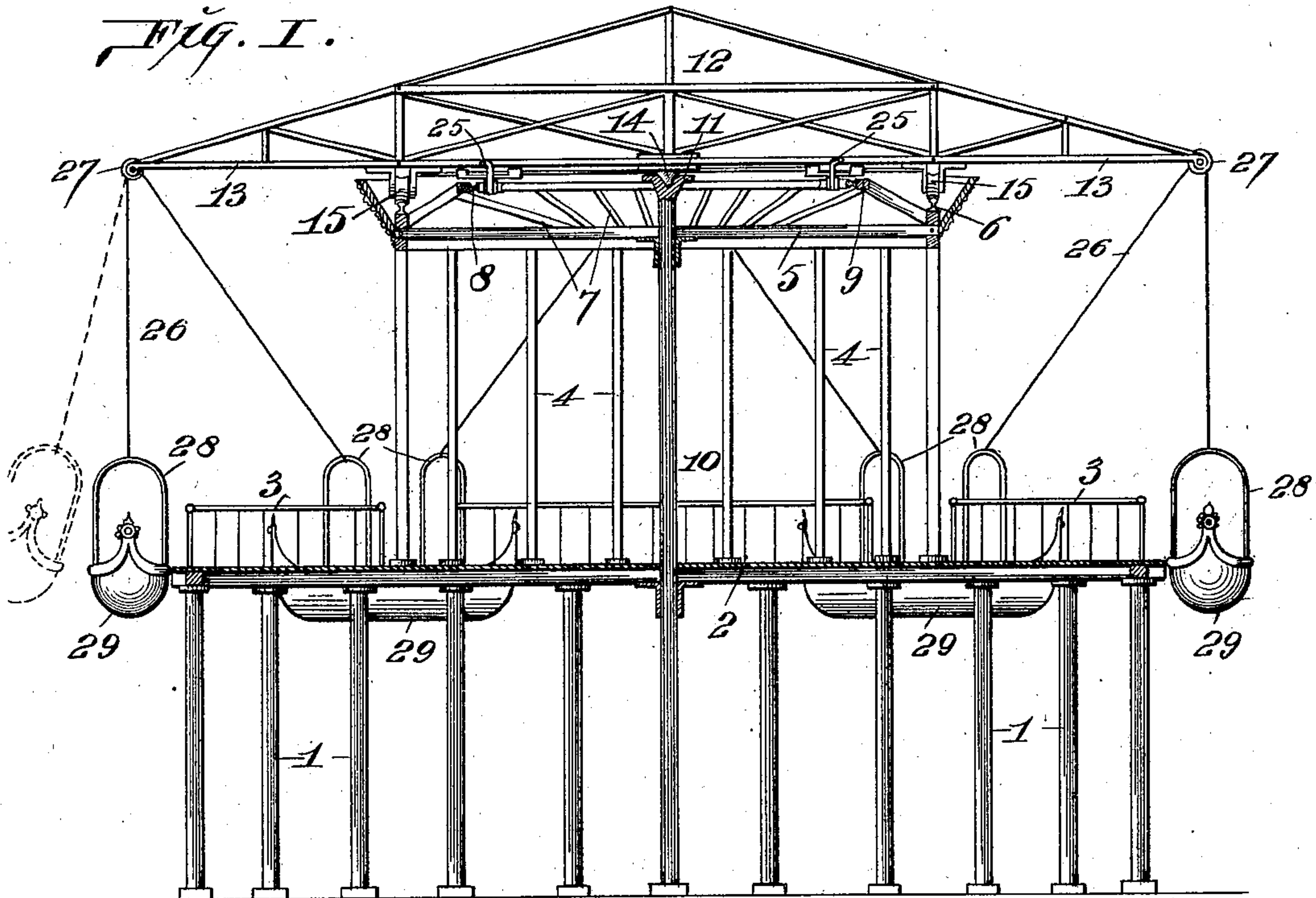
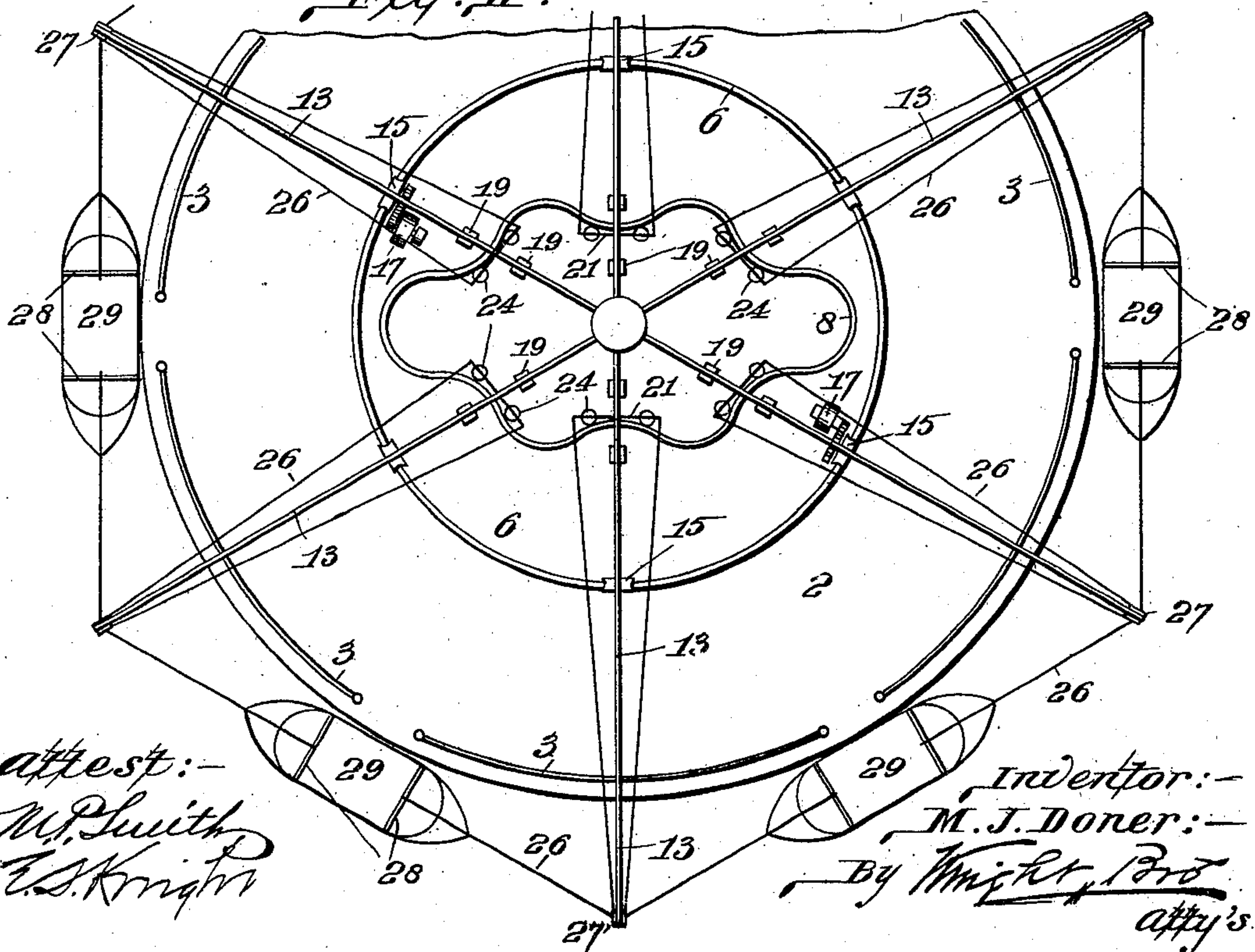


Fig. II.



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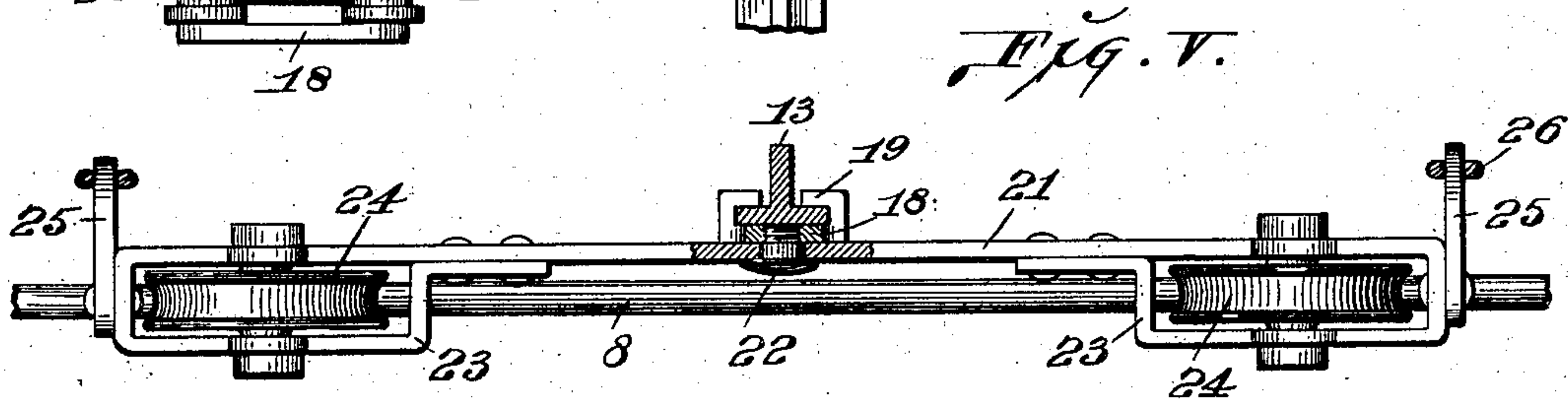
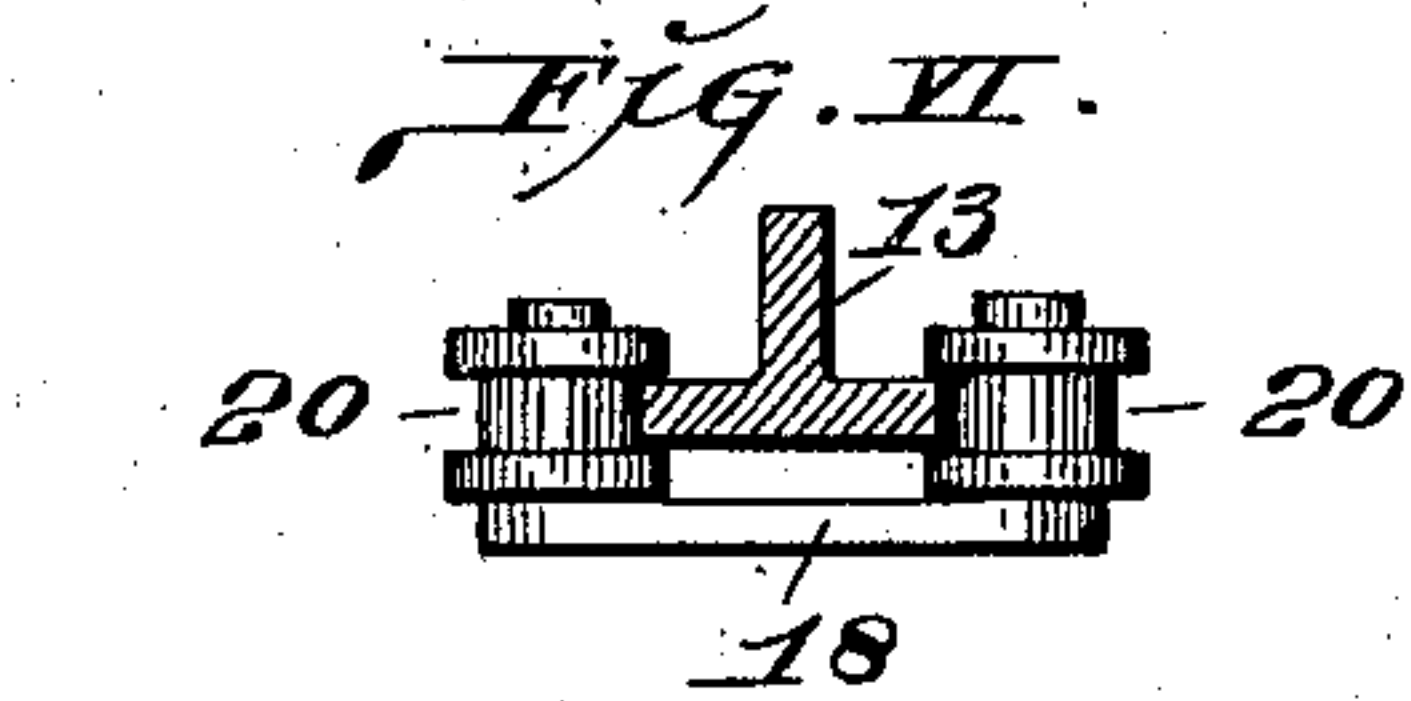
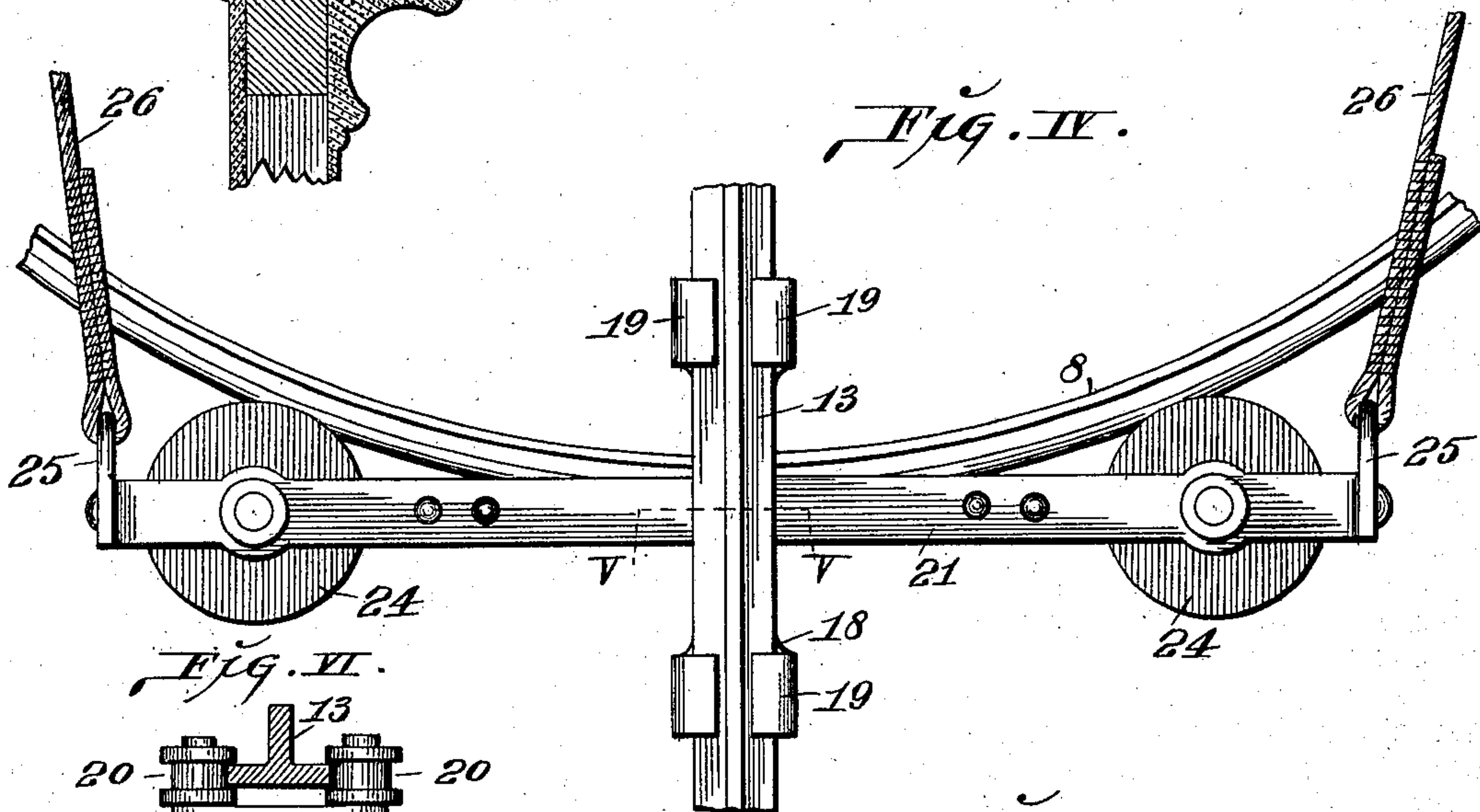
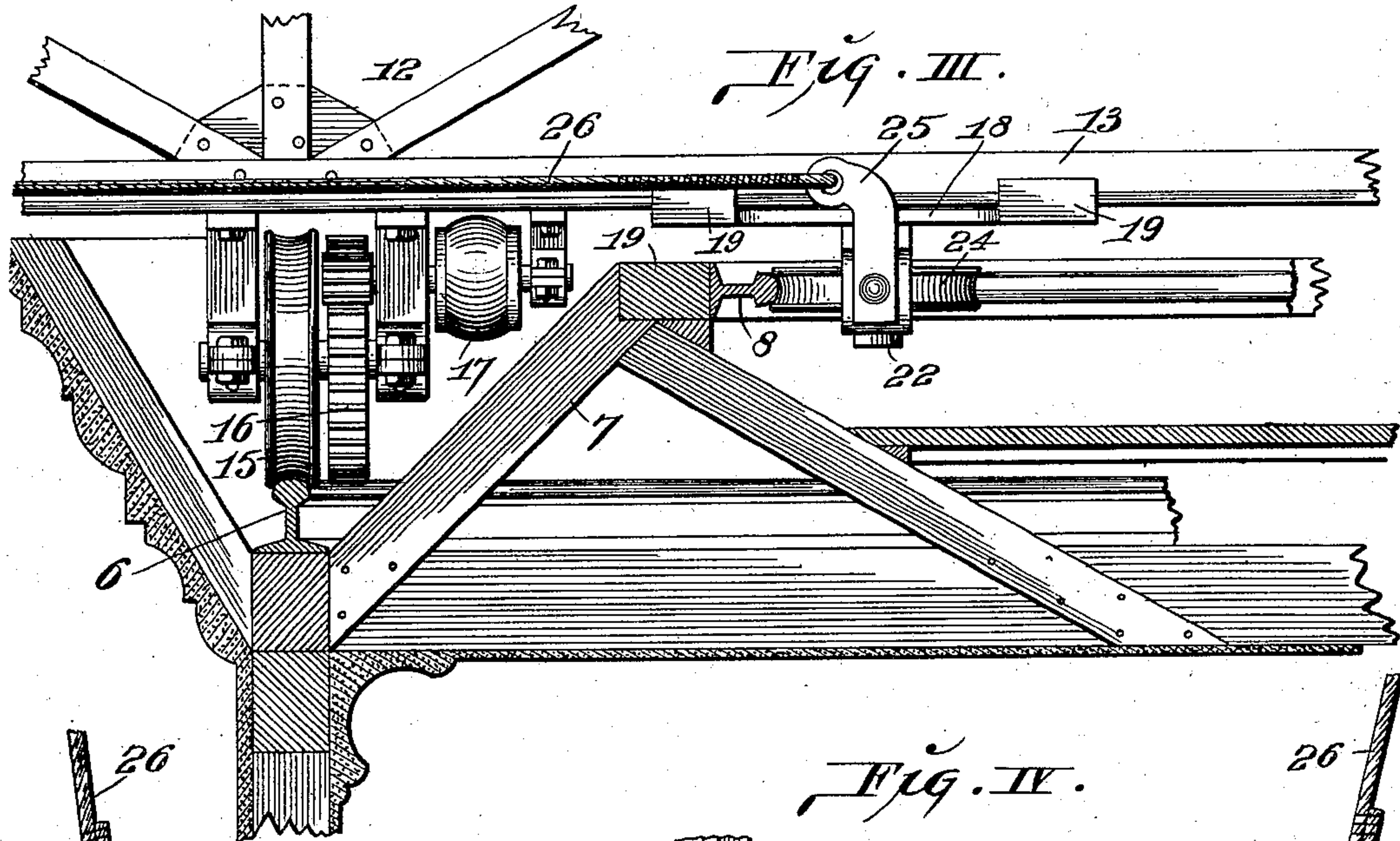
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# UNITED STATES PATENT OFFICE.

MARTIN J. DONER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO  
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## ROUNDABOUT.

SPECIFICATION forming part of Letters Patent No. 708,873, dated September 9, 1902.

Application filed March 24, 1902. Serial No. 99,642. (No model.)

*To all whom it may concern:*

Be it known that I, MARTIN J. DONER, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Roundabouts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of revolving pleasure apparatus provided with carriages adapted to receive and convey persons therein in the travel of the apparatus.

The object of my invention is to provide an apparatus of the character named wherein the carriages are so suspended as to be operated in an undulatory manner while the apparatus is in motion.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a view, partly in elevation and partly in vertical section, of my roundabout. Fig. II is a top or plan view of the roundabout. Fig. III is an enlarged view, partly in elevation and partly in vertical section, of a portion of the roundabout. Fig. IV is an enlarged detail top view of a fragment of the serpentine track of the roundabout and one of the rockers and the rollers that travel against said serpentine track. Fig. V is an edge view of the parts shown in Fig. IV, partially in cross-section, taken on line V V, Fig. IV. Fig. VI is a detail sectional view of a modification.

1 designates a series of columns that support a platform 2, having a railing 3. Surmounting the platform 2 is a series of uprights 4, that are stayed at the upper ends by cross-beams 5.

6 is a circular track mounted on the cross-beams 5 at their outer ends.

7 designates framework surmounting the cross-beams 5.

8 is a serpentine track mounted upon frame-timbers 9, arranged in serpentine course. The serpentine track 8 is preferably of elongated form, as seen in Fig. II, so that the parts operating thereagainst will travel at certain periods of their course at a greater

distance from the center of the track than at others, as will hereinafter appear.

10 designates a post centrally positioned within the roundabout and having at its upper end a socket 11.

12 designates a revoluble frame provided with horizontal beams 13, that extend radially from a common center of the frame 12 and are preferably of T shape in cross-section, as seen in Figs. IV and V.

14 is a pivot-bearing, preferably of conical form, as seen in Fig. I, the bearing being seated in the socket-head of the post 10 to operate therein during the rotation of the frame 12.

15 represents track-wheels arranged to travel upon the circular track 6 to support and guide the frame 12. One or more of the track-wheels 15 has driving connection through gearing 16 with a motor 17, (preferably electric,) through the medium of which power is obtained to effect the rotation of the frame 12.

18 designates slides loosely fitted to the beams 13, so as to move longitudinally relative to the beams, the said slides being provided either with overturned tongues 19, as seen in Figs. III, IV, and V, or bearing anti-friction-rollers 20, that ride against the edges of the flanges of the beams 13 in the travel of the slides.

21 represents rockers that are pivotally connected to the slides 18 by suitable means, such as screws 22. (See Figs. III and V.) Each rocker 21 is provided at its ends with bearing-frames 23, (see Fig. V,) and mounted in said bearing-frames are rollers 24, that are adapted to travel against the serpentine track 8 in the rotation of the revoluble frame 12 and horizontal beams 13 to occasion a horizontal motion of said rocker 21 as the rollers 24 traverse the serpentine track and in turn pass the inwardly and outwardly extending curvatures of the track in the rotation of the revoluble frame.

25 represents arms carried by the rockers 21 at their extremities.

26 designates ropes connected to the rocker-carried arms 25 and extending outwardly therefrom over pulleys 27 and thence down-



wardly and having their opposite ends connected to the bails 28 of baskets or carriages 29, that are suspended by said ropes, each basket or carriage being provided with two of the bails 28 for the connection of two of the ropes 26. Each rope extends from its connection to one end of a rocker 21, thence alongside of the beam 13, adjacent thereto and to which the rocker is secured through the medium of the slide 18, by which it is carried. The rope then passes over a pulley 27 at the outer end of said arm and downwardly to the nearest bail of one of the baskets 29. The other bail of the basket just referred to receives the connection of another of the ropes 26, that passes therefrom over a pulley carried by the next adjacent beam 13 and therefrom to one end of the next adjacent rocker 21, to which it is connected. By this arrangement it will be seen that each basket is suspended from two ropes, and therefore is subject to the movement of said ropes occasioned by the two rockers 21, to which the ropes are connected, and that therefore as the rockers have an oscillatory motion imparted to them in the travel of the rollers against the serpentine track 8 the two ropes connected to a basket are moved differently, with the result that one end of the basket will move downwardly while the other is being lifted. By this means an undulatory motion is imparted to the basket during the conveyance of the basket in a circle upon the rotation of the frame 12, from which the basket-suspending ropes are hung. Each of the baskets 29 throughout the roundabout are suspended and connected to the rockers 21 in similar manner, and therefore all partake of the same movement as that set forth with relation to the one particularly described. As the baskets 29 are conveyed in a circling direction, centrifugal force causes them to swing outwardly, as indicated by dotted lines at the left of Fig. I.

45 I claim as my invention—

1. In a roundabout, the combination of a

revoluble frame, a serpentine track, rockers carried by said frame and having traveling engagement with said serpentine track, suspension-ropes connected in pairs to said rockers and extending downwardly from said frame, and carriages each adapted to receive the connection of two of said ropes attached to separate rockers, substantially as described. 50

2. In a roundabout, the combination of a revoluble frame, a serpentine track, rockers having pivotal connection to said frame, rollers carried by said rockers and adapted to travel against said serpentine track, suspension-ropes connected to said rockers and extending downwardly from said frame, and carriages each adapted to receive the connection of two of said ropes attached to separate rockers, substantially as described. 55 60 65

3. In a roundabout, the combination of a revoluble frame, a serpentine track, slides movably supported by said frame, rockers pivoted to said slides, suspension-ropes connected to said rockers and extending downwardly from said frame, and carriages each adapted to receive the connection of two of said ropes attached to separate rockers, substantially as described. 70

4. In a roundabout, the combination of a revoluble frame having radially-arranged beams, a serpentine track, slides movably fitted to said beams, rockers pivoted to said slides, rollers mounted in said rockers and adapted to travel against said serpentine track, suspension-ropes connected to said rockers and extending downwardly from said frame, and a series of carriages each adapted to receive the connection of two of said ropes attached to separate rockers, substantially as described. 75 80 85

In testimony whereof I have hereunto set my hand this 19th day of March, 1902.

MARTIN J. DONER.

In presence of—

E. S. KNIGHT,  
M. P. SMITH.