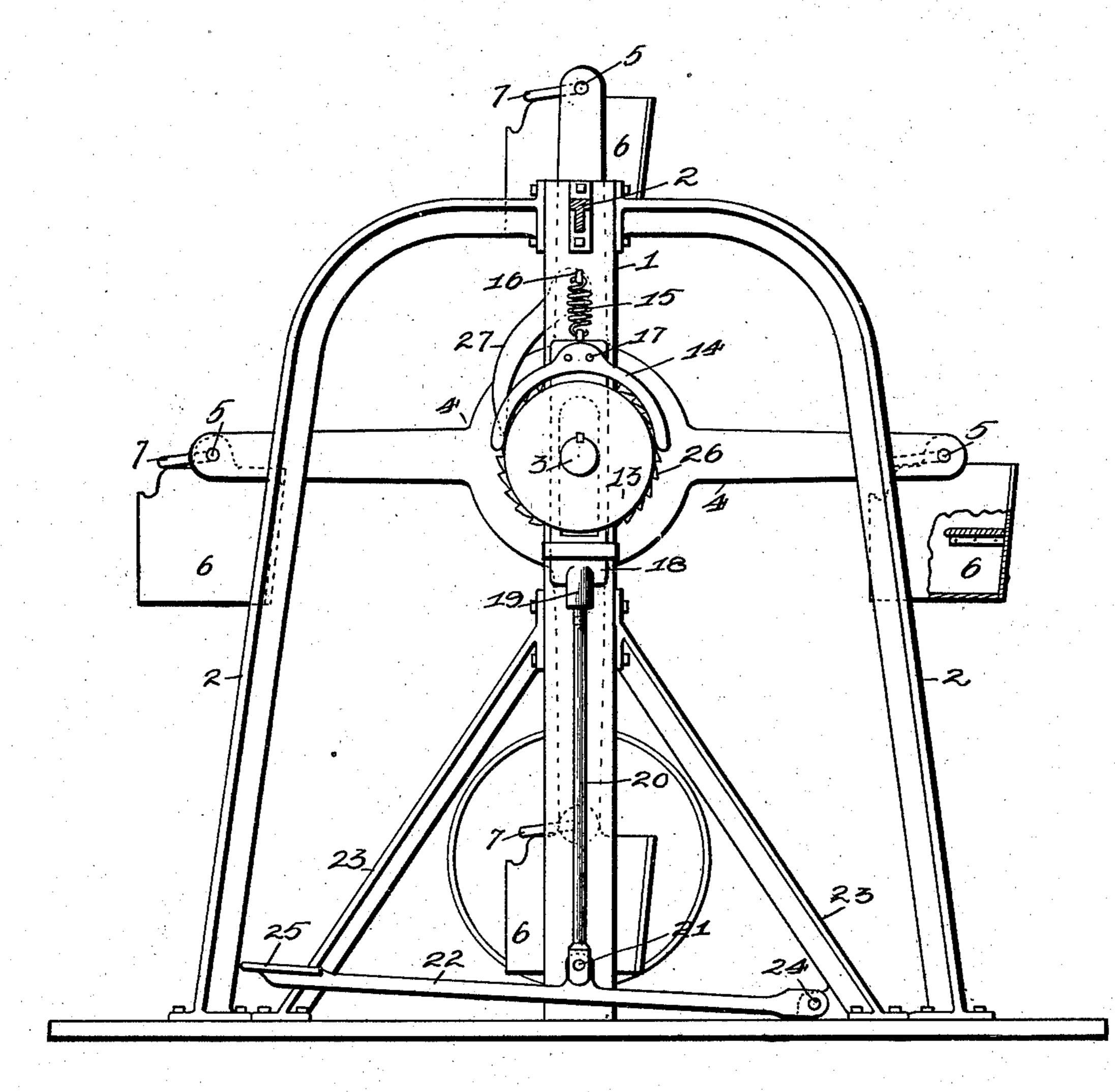
F. T. HARLAN. AMUSEMENT WHEEL. APPLICATION FILED JAN. 15, 1903.

NO MODEL.

3 SHEETS-SHEET 1.





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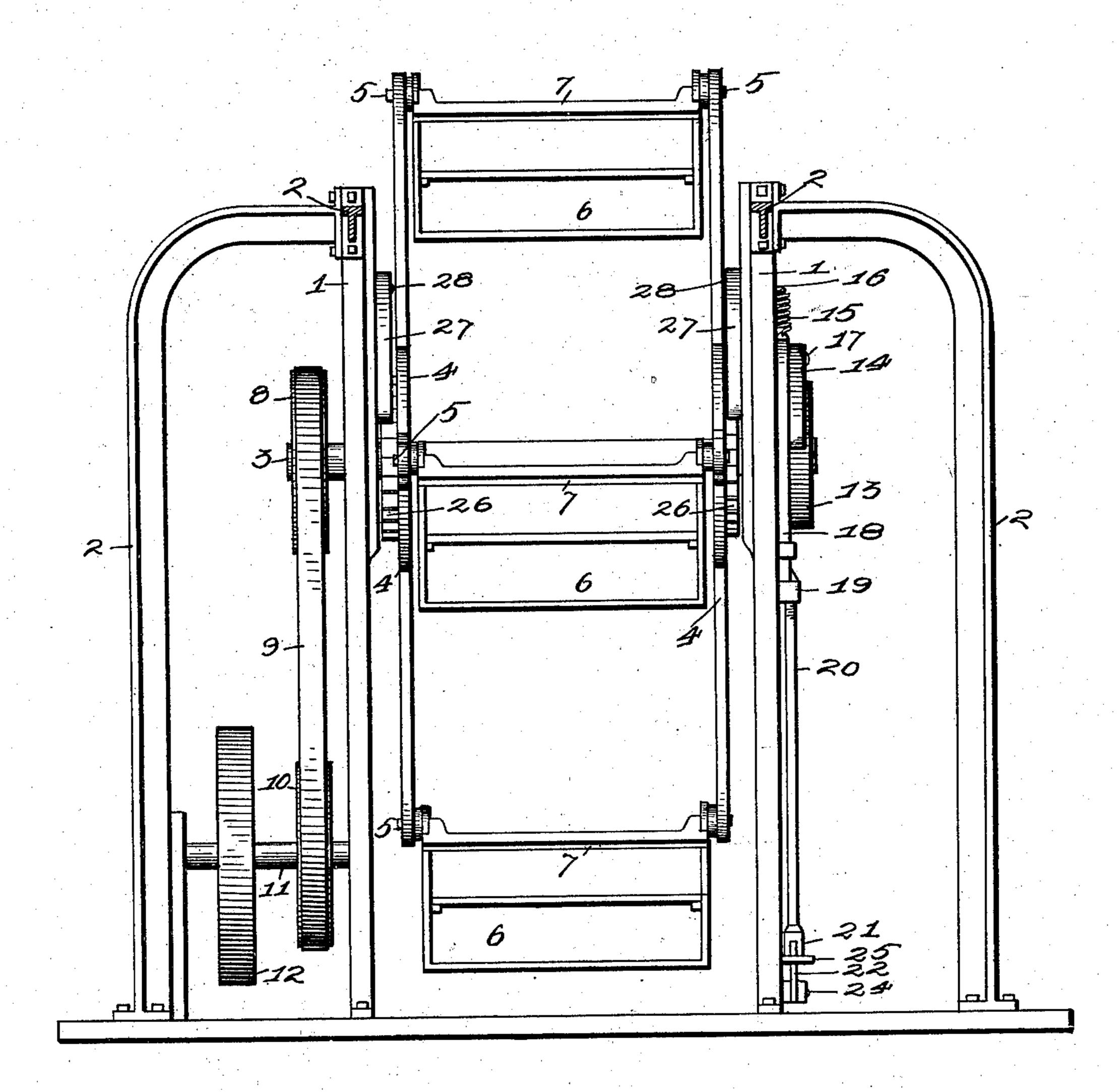
THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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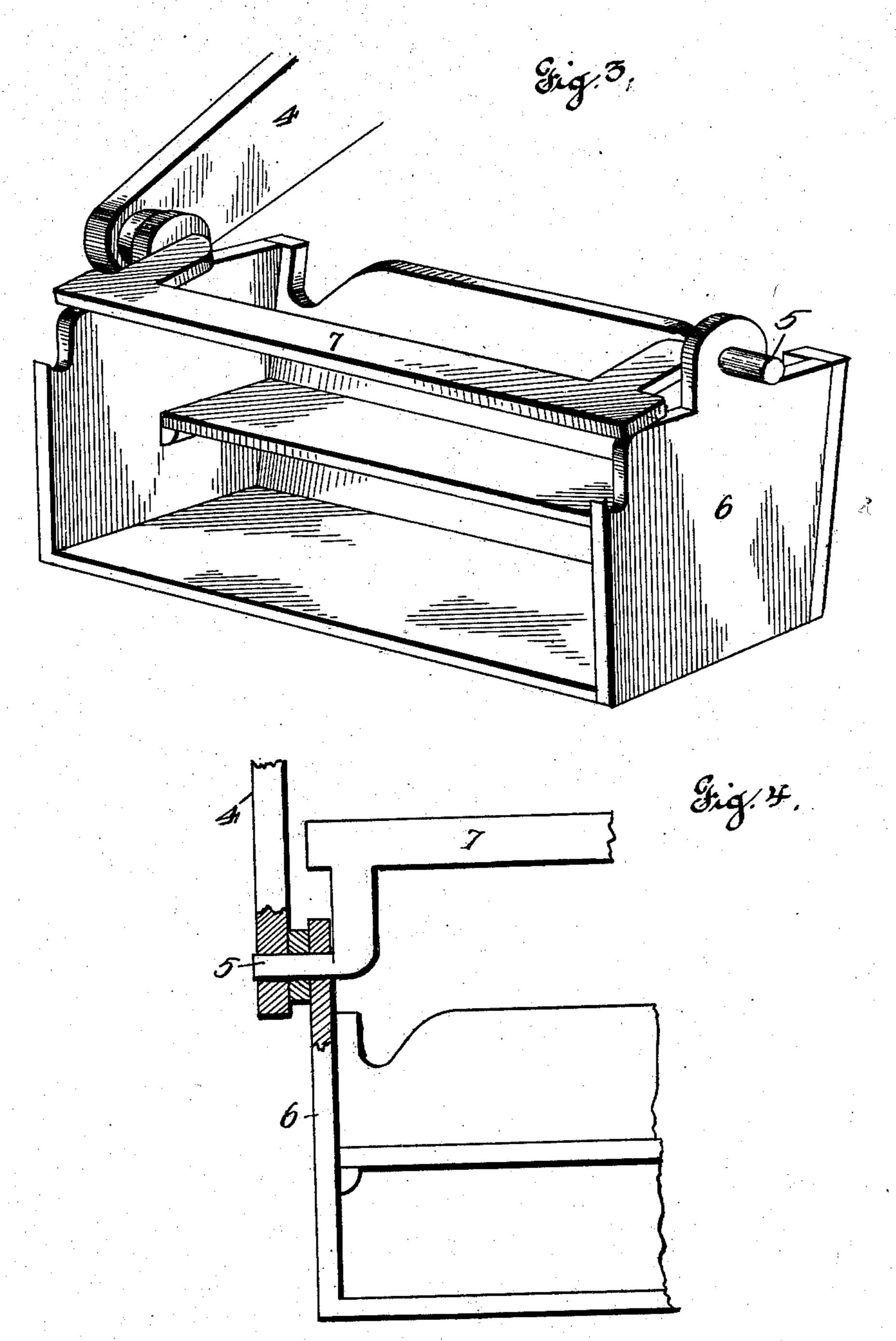


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THE NORRIS PETERS CO., PHOTO-LITHO, WASHINGTON, D. C.

United States Patent Office.

FREDERIC THOMAS HARLAN, OF CHESTERFIELD, ILLINOIS, ASSIGNOR OF ONE-HALF TO GEORGE P. PARKER, OF HAGAMAN, ILLINOIS.

AMUSEMENT-WHEEL.

SPECIFICATION forming part of Letters Patent No. 741,964, dated October 20, 1903.

Application filed January 15, 1903. Serial No. 139,234. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC THOMAS HARLAN, of the city of Chesterfield, Macoupin county, State of Illinois, have invented cer-5 tain new and useful Improvements in Amusement-Wheels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in amusement-wheels, and has for its object to provide an amusement-wheel operating in a vertical plane and equipped with safeguards

against accident.

In the drawings which form a part of this specification, Figure 1 is a side view of an amusement-wheel embodying my invention. Fig. 2 is a front view of the same. Fig. 3 is a perspective view of one of the swinging 20 seats with which my wheel is provided. Fig. 4 is a front view of the same detail, showing parts broken away.

I am aware that amusement-wheels revolving in a vertical plane have frequently been 25 constructed heretofore; but such structures have been complicated in design and expen-

sive to build.

My object is to provide a light and easilyconstructed amusement-wheel and to equip 30 the same with safeguards against accident.

My device consists of the central upright members 1, supported by the braces 2 and carrying the shaft 3, which is provided with the spiders 4, each of which spiders 4 is pro-35 vided at the outer extremity of its arms with pivots 5, by which are suspended the seats 6. The seats 6 are provided with the safety-bar 7, which is adapted to fold over and in front of the passengers to prevent them from being 40 thrown from the seat. As shown in Figs. 3 and 4, the safety-bar terminates in the pivot 5. The shaft 3 is provided at its extremity with the pulley 8, which is actuated by the belt 9, which passes around the pulley 8 and 45 the pulley 10. The pulley 10 is mounted upon the shaft 11, and the shaft 11 is further provided with the driving-wheel 12, which is actuated by any desired external source of power. At the opposite end of the shaft 3 50 to the end at which the pulley 8 is affixed I provide the safety-wheel 13. Above the safety-wheel 13 I have mounted the brake-

shoe 14, which is normally held upward and

away from contact with the safety-wheel 13 by means of the spring 15, the spring 15 be- 55 ing attached to the upright 1 by the lug 16. The brake-shoe 14 is rigidly mounted by pins 17 upon the slotted member 18, which terminates at its lower extremity in the depending lug 19, into which the vertical brake-rod 60 20 is secured. The brake-rod 20 is pivoted at its lower end by means of the pivot 21 to the foot-lever 22. The foot-lever 22 is pivoted at one end to the brace 23 by means of the pivot 24 and is provided at its opposite 65 extremity with the flange 25.

The mode of operation of the brake mechanism is as follows: Pressure is applied by the foot to the flange 25, thus depressing the lever 22 and rod 20 and bringing the brake- 70 shoe 14 into contact with the surface of the safety-wheel 13. On the outer side of each of the spiders 4 I have provided the ratchetwheel 26, the teeth of which ratchet-wheel are adapted to come in contact with the pawl 75 27, which is pivotally mounted upon the inner side of the upright 1 by means of the pivot 28. By means of this ratchet-and-pawl mechanism any backward movement of the spiders and their attached seats is rendered impos- 80 sible.

Having fully described my invention, what I claim as new, and desire to have secured to me by the grant of Letters Patent, is—

1. In a device of the class named, vertically-85 mounted parallel spiders, a seat, a safety-bar pivotally mounted upon the seat, the ends of the safety-bar being adapted to connect the seat to the spiders, substantially as described.

2. In an amusement-wheel, the combina- 90 tion of two parallel spiders adapted to revolve in vertical planes, and seats pivotally mounted between the arms of the spiders near their extremities, each seat being provided with a safety-bar terminating at its extremities in 95 pins, the safety-bar being adapted to fold over and in front of the passengers, and the pins being adapted to serve as pivots for the safety-bar and to connect the seat with the spiders, substantially as described.

In testimony whereof I affix my signature

in presence of two witnesses. FREDERIC THOMAS HARLAN.

Witnesses: THOMAS R. PADGET, DAVID ADAMS.