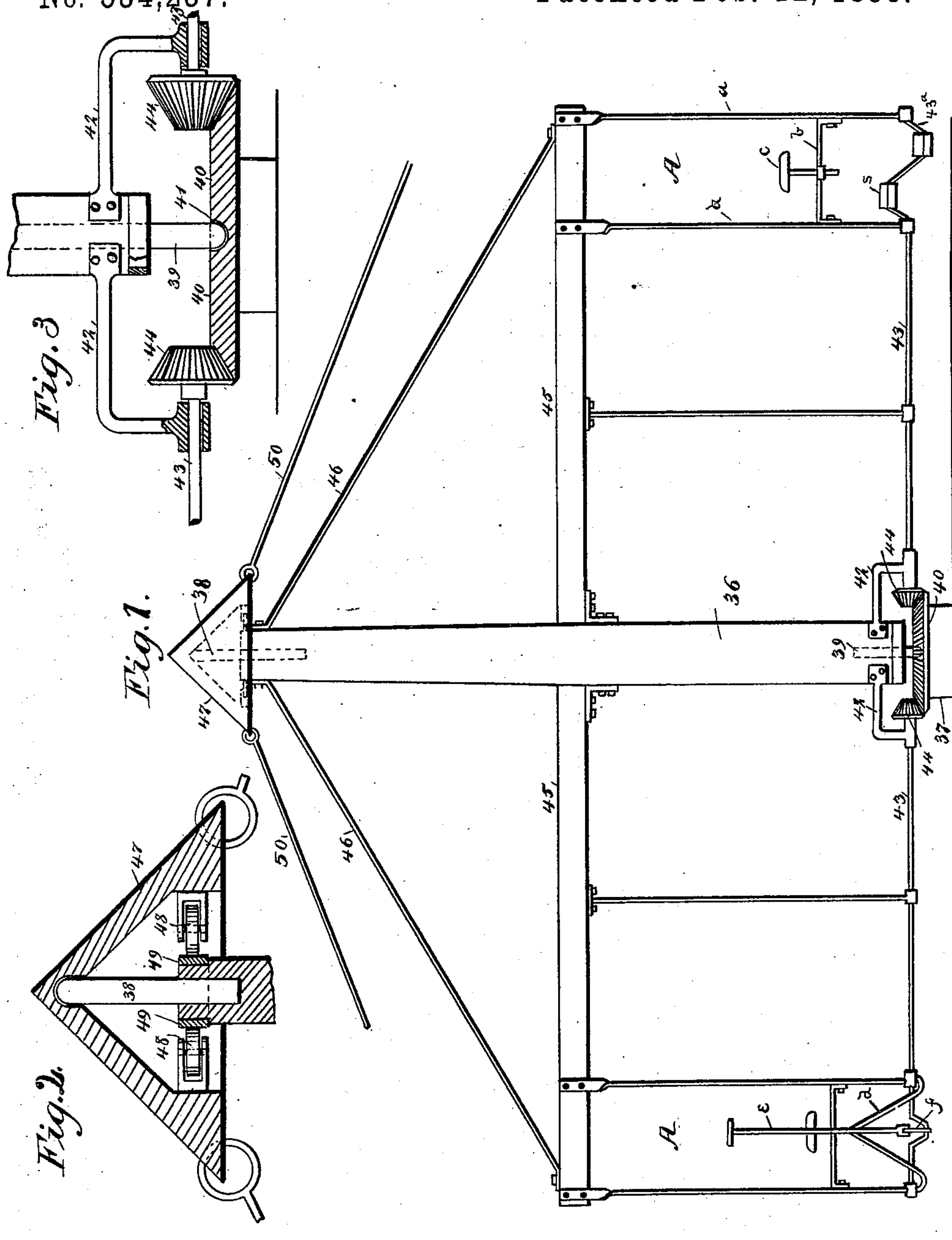


(No Model.)

M. T. WESTON.  
CAROUSEL.

No. 534,237.

Patented Feb. 12, 1895.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

MILTON T. WESTON, OF KENTON, OHIO, ASSIGNOR OF ONE-HALF TO  
METELLUS THOMSON, OF SAME PLACE.

## CAROUSEL.

SPECIFICATION forming part of Letters Patent No. 534,237, dated February 12, 1895.

Application filed March 29, 1893. Serial No. 468,132. (No model.)

*To all whom it may concern:*

Be it known that I, MILTON T. WESTON, of Kenton, in the county of Hardin and State of Ohio, have invented a new and useful Improvement in Carousels, of which the following is a full, clear, and exact description.

My invention relates to an improvement in merry-go-rounds or carousels, and it has for its object to construct a merry-go-round in such a manner that a number of carriages may be made to revolve around a central point, through the exertions of the occupants of the carriages.

A further object of the invention is to provide a merry-go-round or carousel which will be exceedingly simple, durable and economic in its construction, and which will be perfectly balanced while in operation and the operative mechanism will be comparatively free from friction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a carousel constructed in accordance with my invention. Fig. 2 is a detail sectional view of the upper portion of the mast and its cap; and Fig. 3 is a detail sectional view of the driving mechanism.

In carrying out the invention the post or mast is preferably firmly planted in the ground, and the said mast is in two sections 36 and 37, the lower section being that which is planted in the ground while the upper section is provided with a pin 38 at the top and a pin 39 at the bottom. The upper section of the mast is adapted to turn upon the lower section and therefore the upper section need not be as great in diameter as the lower one. A beveled gear 40, is secured upon the upper end of the lower mast section, and this beveled gear, which may be attached in any approved manner, is preferably provided with a socket 41, shown in Fig. 3, which receives the lower

pin 39, and the lower end of that pin is preferably rounded off.

Brackets 42, are projected outwardly and downwardly from the lower portion of the upper mast section, the lower ends of the brackets being formed with bearings to journal the inner ends of the driving shafts 43. Each driving shaft 43, is provided at its inner end with a beveled pinion 44, the pinions meshing with the beveled gear 40, secured upon the lower mast section, as is likewise best shown in Fig. 3.

Arms 45, are secured directly to the upper mast section at or near its center in any manner known to the trade, and the carriages A, are suspended from the outer ends of the arms. These carriages may be of any suitable or approved construction. Ordinarily, however, they are made as shown in the drawings, in which they consist of two side bars *a* secured to the arms 45. These side bars are connected near their centers by cross bars *b*, which are provided with sockets adapted to receive and hold a seat *c*, which may be of a saddle-like character. In the lower ends of the side bars *a* of the carriages, are journaled the outer ends of the driving shafts 43, and between the said side bars the shafts are provided with one or more crank arms 43<sup>a</sup>. The shaft 43 of the carriage at the right of Fig. 1 is provided with two crank arms upon which treadles *s* are placed so that the rider seated in the carriage can operate the shaft by placing his feet upon the treadles and exerting pressure thereon. The shaft 43 of the carriage at the left of Fig. 1 is provided with a single crank arm and on a bracket *d* projecting upward and outward from the carriage, is fulcrumed the hand lever *e*, which has its lower end connected with the crank arm by the link *f*, so that the occupant of the carriage by reciprocating the said lever will operate the shaft and thereby cause the arms to turn around the mast. While each carriage is shown propelled in a different manner, yet they may all be supplied with the same propelling mechanism if desired. The upper mast section is also provided with stay rods or cables 46, extending from the upper portion of the upper mast section to the outer



end of the carriage arms 45. A conical cap 47, is adapted to turn upon the upper pin 38; and the interior of the conical cap near its lower end is provided with a series of friction rollers 48, shown best in Fig. 2, which travel upon a circular track 49, located at the upper end of the upper mast section, as is likewise shown in Fig. 2.

The upper mast section is stayed and held in an upright position through the medium of guy ropes, cables or chains 50, secured to the cap and to any point in the ground outside of the path of the carriages. There is comparatively little tension upon the guy ropes or cables 50 since the weight is all perpendicularly applied and is borne by the cap, it bearing perpendicularly upon the mast sections.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a carousel, the combination of the lower stationary mast section, a bevel gear wheel

on the upper end of the section and provided with a socket, the upper revolving mast section provided with pins projecting from its ends, the bottom pin resting in the socket of the gear-wheel, a cap on the upper pin, friction rollers mounted in the cap and engaging the upper end of the revolving mast section, brackets projecting from the lower end of the revolving mast section, radial arms secured to the said mast section, carriages suspended from the outer ends of the said arms, crank shafts mounted in the lower part of the carriages and in the brackets of the revolving mast section, bevel pinions on the inner ends of the shafts and meshing with the bevel gear wheel, and guy ropes or cables secured to the cap and to a fixed support, substantially as herein shown and described.

MILTON T. WESTON.

Witnesses:

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