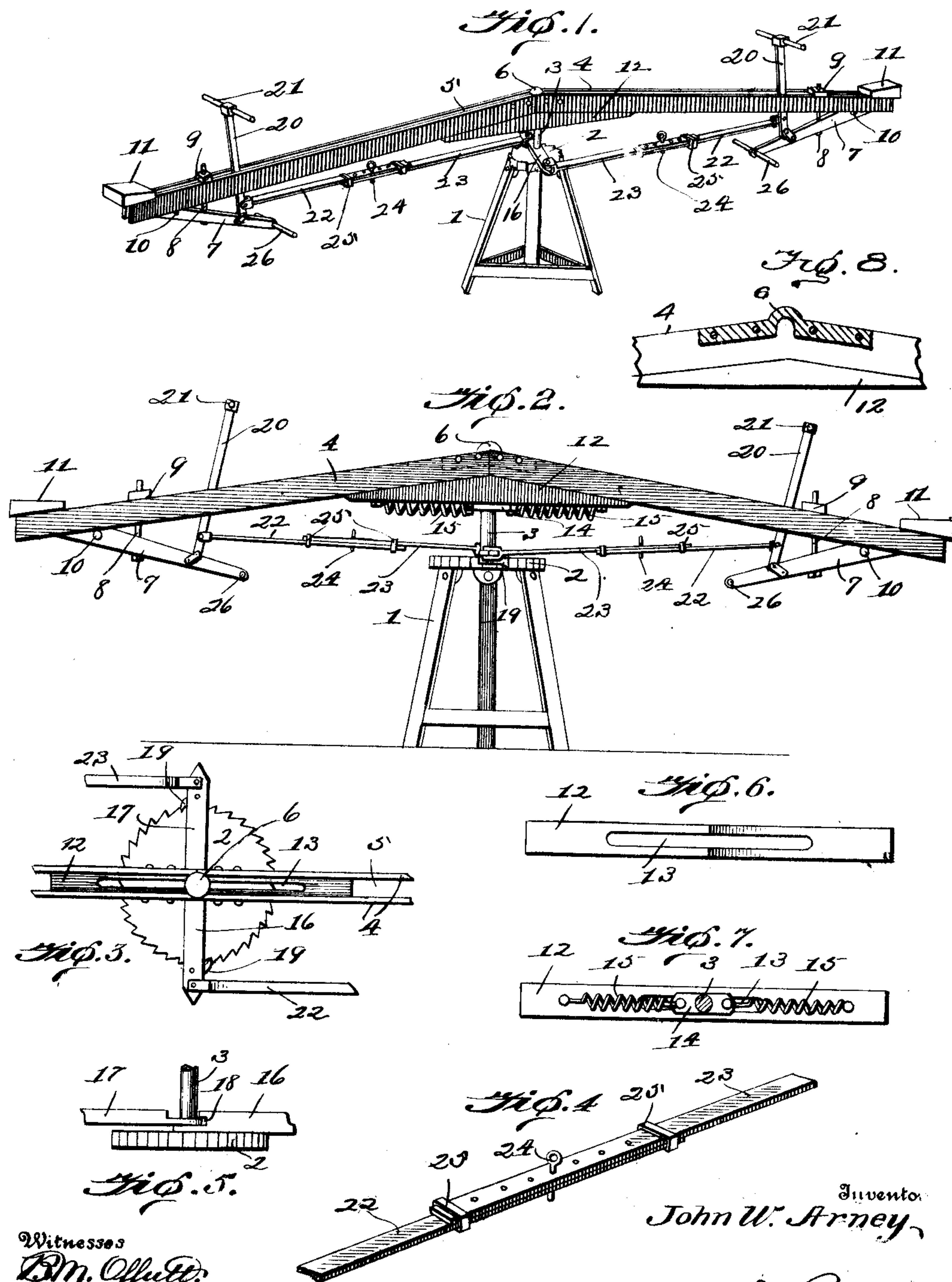


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J. W. ARNEY.
COMBINATION MERRY-GO-ROUND AND TEETER.

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JOHN W. ARNEY, OF MENOMINEE, MICHIGAN.

COMBINATION MERRY-GO-ROUND AND TEETER.

No. 847,997.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed July 15, 1905. Serial No. 269,844.

To all whom it may concern:

Be it known that I, JOHN W. ARNEY, a citizen of the United States, residing at Menominee, in the county of Menominee and State of Michigan, have invented a new and useful Improvement in a Combination Merry-Go-Round and Teeter, of which the following is a specification.

This invention relates to an amusement device in which are combined the rotating action of the merry-go-round and the vertical movement of the seesaw; and the object of the invention is a device of this character adapted for the use of children and in which the riders can produce the rotary motion in combination with the vertical alternate up-and-down movement by means of suitable levers and ratchets.

The invention consists of a suitable base upon which is pivotally mounted a sweep, and upon the base is carried a ratchet, and pivot-arms are provided which are adapted to engage the ratchet, the said arms being actuated by suitable levers and links, and, as the ratchet is fixed, while the sweep, to which the operating-levers are pivoted is free to turn, a rotary motion will be given to the sweep.

The invention consists in the novel features of construction hereinafter fully described, pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my device. Fig. 2 is a side elevation. Fig. 3 is a plan view of the central portion of the device. Fig. 4 is a perspective view of overlapping end portions of connecting-links. Fig. 5 is a side elevation of the ratchet, showing the manner of pivoting the inner ends of the arm. Fig. 6 is a plan view of the truss. Fig. 7 is an inverted plan of the truss shown in Fig. 6. Fig. 8 is a detail sectional view showing the socket in the casting and cap, a plate being removed.

In constructing my device I employ a tripod base 1, which may be constructed in any desired manner, and upon the upper part of the base is arranged a disk 2, which I have shown provided upon its periphery with ratchet-teeth, but which may be merely roughened, as the device may be operated by friction as well as by means of pawls acting upon affixed ratchet.

Rising from the center of the disk 2 is a fixed pivot-pin 3. This pivot-pin may be of

wrought iron or steel, and journaled upon the same is a sweep 4. This sweep I prefer to construct in sections, each section consisting of two parallel timbers spaced apart so that a slot 5 will be left between them, and the timbers also incline upwardly from their outer ends to the pivot-pin 3, and at the point of connection of the two sections they are secured together by a metal casting which is provided with a cap 6, and a casting-socket is provided in the casting and cap to receive the pin 3, so that the weight of the sweep bears upon the top of the said pin. I also provide adjustable seats 7, which extend downwardly and inwardly through the slot 5 and are held to the sweep by means of a bolt 8, which passes through the standard 7 and vertically through the slot 5 and on which is threaded a nut 9, which bears upon the top of the sweep. A stop-pin 10 is carried by each of the standards 7 and bears upon the under side of the sweep. Upon the upper end of each of the seat-standards 7 is placed a seat 11, and it will be obvious that by this manner of securing the seat that it is adjustable along the sweep, so that the position of the seat with respect to the pivot-pin can be varied.

To further brace the parts, a truss 12 is connected to the under sides of the sweep adjacent the meeting point of the two sections and overlapping the said point, and the truss 12 is longitudinally slotted, as shown at 13, and to permit free play and rotation of the sweep upon and about the pivot 3. To hold the sweep in a horizontal position when not in use, a plate 14 is placed upon the pivot-pin 3 and springs 15 are secured at their inner ends to the said plate and at their outer ends to the under face of the truss 12.

To provide for the rotation of the sweep about the pivot-point 3, arms 16 and 17 are pivoted upon the pin 3 at their inner ends, and, as shown in Fig. 5, the arm 17 overlaps a reduced end portion of the arm 16 and also projects slightly into an undercut 18, formed in the arm 16 adjacent the pivot-pin 3. This prevents the inner end of the arm 17 from riding up upon the sides of the pivot-pin 3. I have shown the arms 16 and 17 as being provided upon their under faces with pawls 19, which engage the teeth of the ratchet 2; but it will be understood, of course, that the ratchet-teeth can be omitted and the device operated by friction.

To operate the arms 16 and 17, levers 20

are pivotally connected at their lower ends to the seat-standards 7 and provided with suitable horizontal handle-bars 21 at their upper ends, the said levers projecting upwardly through the slot 5 and within easy reach of a child sitting upon the adjacent seat 11. Each lever 20 is connected to one of the arms 16 17 by means of links 22 23, which links overlap and are fastened together by a pin 24, the overlapping portions of the links 22 and 23 being provided with a plurality of perforations and also with guide-loops 25. This construction permits of the length of the links being adjusted as is necessary to allow for sliding adjustment of the seats 11 along the sweep 4, and it will be obvious that by allowing for adjustment of the seats the seats can be so positioned with respect to the pivot-pin 3 that a difference in weight of the children using the device can be compensated for.

Adjacent the lower ends of the seat-standard 7 are placed transverse pins 26, extending upon each side of the standard, which pins serve as foot-rests.

In operation the device can be used either as a seesaw or as a combined merry-go-round and seesaw by operating the lever 20, and the operation of these levers remove the arms 16 and 17 in one direction, the pawls 19 sliding upon the ratchet-teeth, and when the lever is pulled in the opposite direction the pawls 19 will hold and the sweep will be given a rotatory movement. This will not only cause the sweep to revolve, but will also give a downward tendency to the end of the sweep from which the lever is being operated, and on account of this arrangement when one operator is in a higher plane than the other and pulls upon his lever the action not only produces a circular movement of the sweep, but also gives a downward movement to his end of the sweep, and in this manner by alternately operating the levers 20 a combined rotatory and wave motion may be obtained, or when only one operator works one of the levers the repeated operation of the said lever will cause a rotation sufficiently rapid so that the centrifugal force will hold the machine steady, or that is in a comparatively horizontal plane, and this alone will compensate for a considerable difference

in weight of the two riders without changing the adjustment of the seats.

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

1. A device of the kind described comprising a central pivoted sweep, longitudinally slotted, a seat-standard extending through said slot and slidably adjustable along said slot, a seat carried by the said standard, a lever pivotally connected at its lower end to the said standard and also projecting upwardly through the said slot, and means connected to said lever for rotating the sweep.

2. The combination with a pivoted sweep, longitudinally slotted, a seat-standard extending in said slot, and slidably adjustable therein, a seat upon the standard, a fixed disk concentric with the pivot-point of the sweep, an arm pivoted upon said disk, a lever pivoted to the seat-standard, adjustable links connecting the lever to the arm and means carried by the arm adapted to engage the disk.

3. A device of the kind described comprising a base, a disk therein, a pivoted pin on the disk, a sweep pivotally resting upon the said pivot-pin, seats adjustably mounted upon the sweep, arms pivotally mounted upon the pivot-pin, means carried by the arms adapted to engage the periphery of the disk and means operatable from the seats for partially rotating said arms in opposite directions.

4. A device of the kind described comprising a base, a pivot-pin, a ratchet, a sweep pivotally mounted upon the pivot-pin adjacent the ratchet, pawls carried by the arms adapted to slide upon the ratchet in one direction and to hold the arms stationary during a pull in the opposite direction, seat-standards slidably adjustable in the slot of the sweep, seats carried by said standards, a lever pivotally connected to each of said standards, and adjustable links connecting said levers to the said arms, respectively, as and for the purpose set forth.

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Witnesses:

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