No. 802,127. PATENTED OCT. 17, 1905.

R. WHITCOMB.

MULTIPLE SEESAW.

APPLICATION FILED MAR. 21, 1905.

3 SHEETS—SHEET 1.

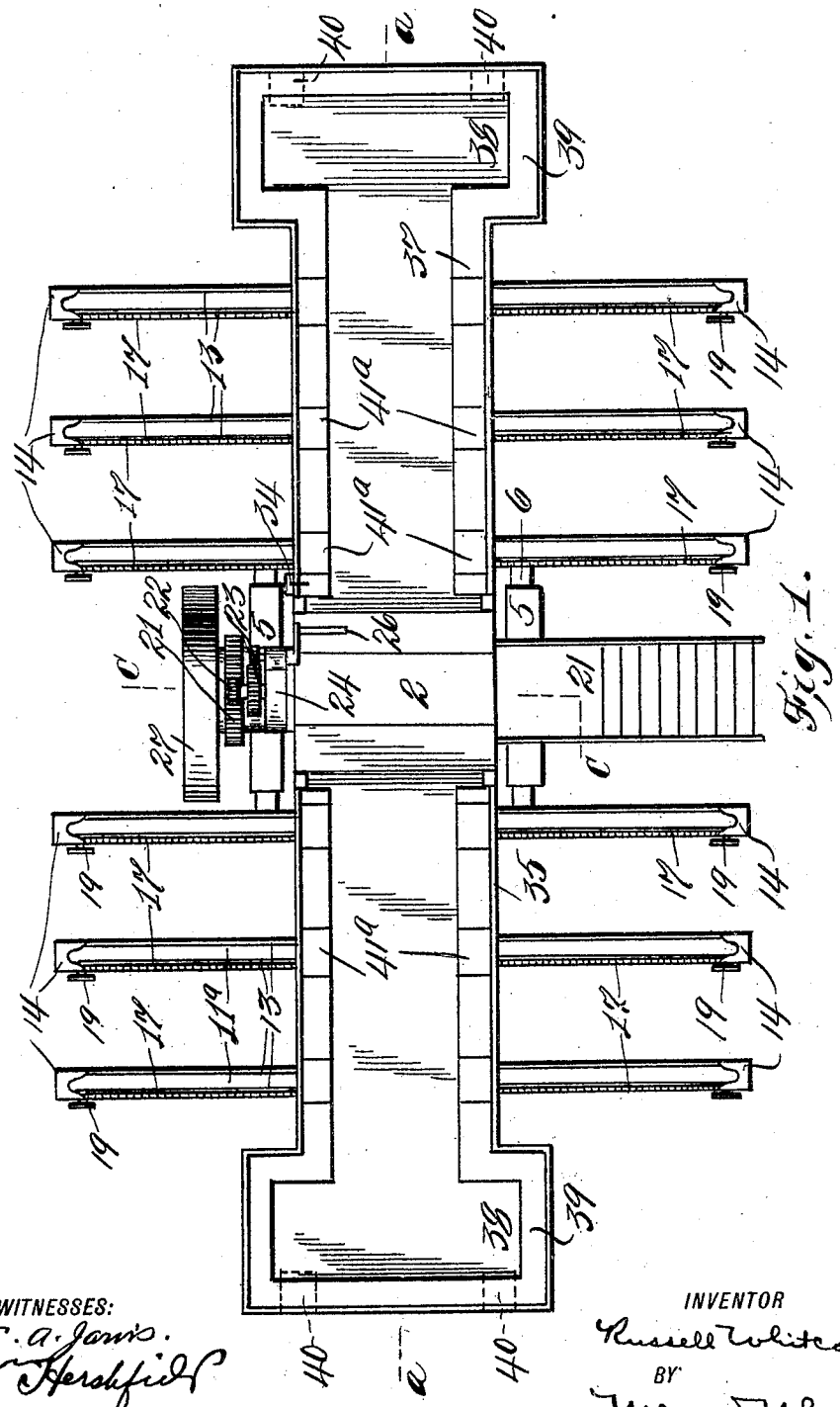

Fig. 1.

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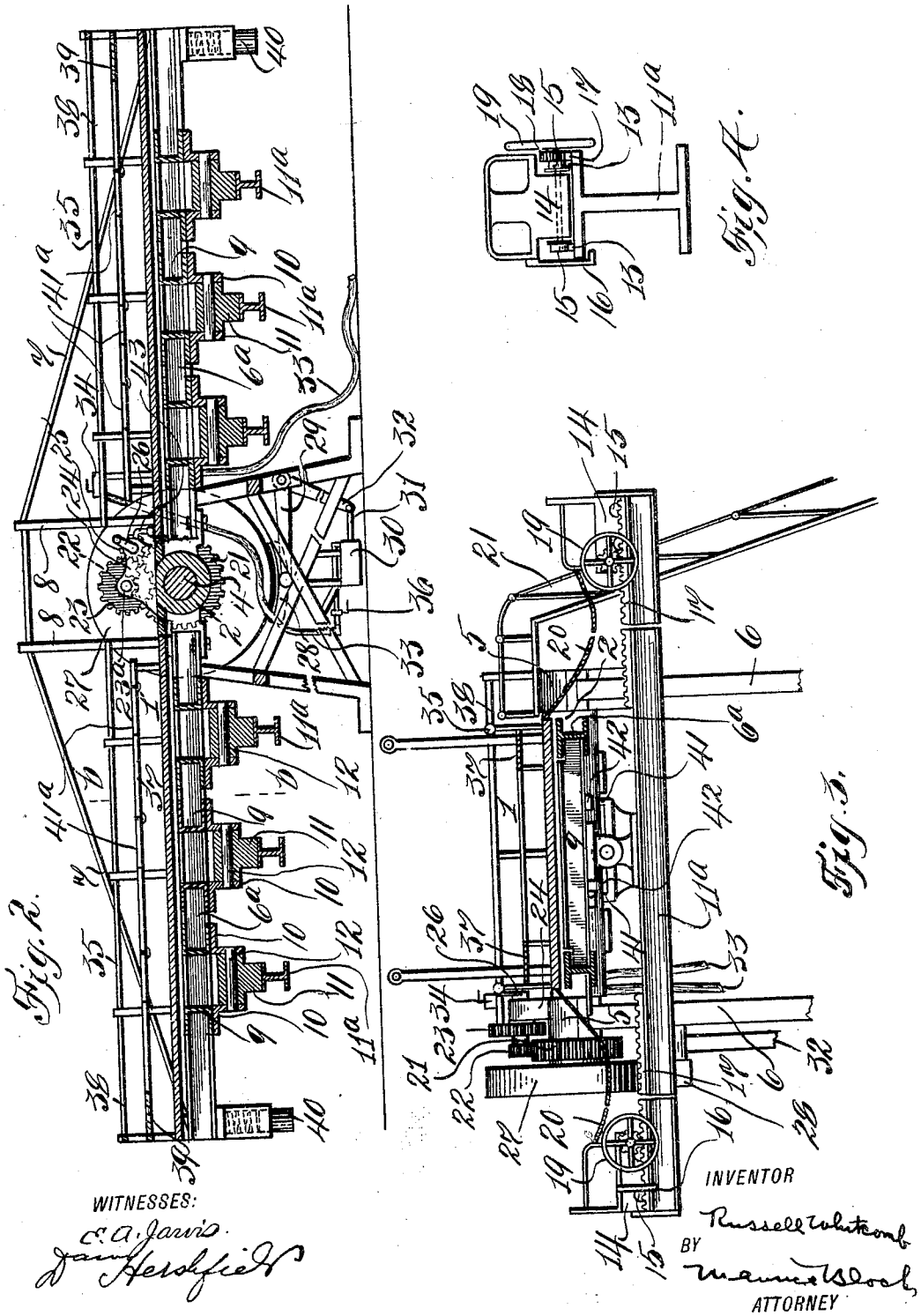

Fig. 2.

Fig. 4.

Fig. 3.

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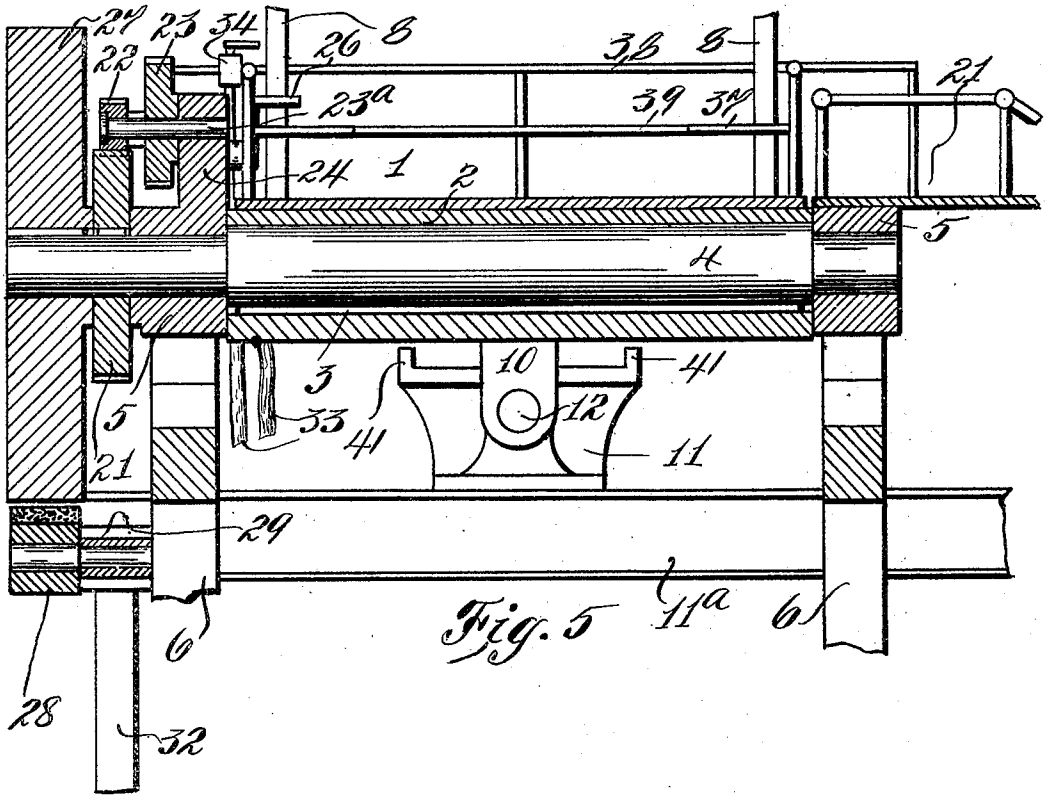

Fig. 5

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UNITED STATES PATENT OFFICE.

RUSSELL WHITCOMB, OF NEW YORK, N. Y.

MULTIPLE SEESAW.

No. 802,127. Specification of Letters Patent. Patented Oct. 17, 1905.

Application filed March 21, 1905. Serial No. 251,217.

To all whom it may concern:

Be it known that I, RUSSELL WHITCOMB, a resident of the city of New York, borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Multiple Seesaws, of which the following is a specification.

This invention relates to an amusement device known as a "seesaw," the object being to produce such a device in which two of the same kind of movements can be simultaneously or independently produced, but in different planes relative to each other. To produce such movements, I mount upon an ordinary seesaw a plurality of transversely-mounted seesaws which are capable of being operated independently of the main seesaw, and I also mount upon the said transversely-mounted seesaws movable carriages or the like, the employment of same not only adding excitement in the use of the device, but aiding in balancing the seesaws, the said carriages being adjustable by the occupants.

To these and other ends, which will hereinafter appear, the invention consists in the novel features of improvement and combination and arrangement of parts, which will be hereinafter described and finally pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 illustrates my improved seesaw in plan view, some of the details being omitted, but shown in the other views. Fig. 2 is an enlarged longitudinal section of a seesaw embodying my improvements, taken on a line *a a* in Fig. 1. Fig. 3 is a cross-section thereof, taken on a line *b b* in Fig. 2. Fig. 4 is an enlarged end view of one of the transverse seesaws, showing the carriage, hand-wheel, and rack; and Fig. 5 is an enlarged cross-section taken on a line *c c* in Fig. 1.

Like numerals of reference indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 represents the main seesaw of my device, the same being secured to a casting 2, which in turn is fastened by a key 3 to a shaft 4, Fig. 5, which shaft is rotatably mounted in bearings 5 5, which are carried by a suitable support 6. In this instance the frame of the main seesaw 1 is composed of beams 6^a 6^a, which are secured at one end thereof to the casting 2, the outer ends thereof being supported by braces 7 7, which are carried over the uprights 8 8, carried by the main seesaw, and which are substantially supported by the casting 2. Between the beams 6^a 6^a are cross-beams 9 9. Upon the beams 9 9 I mount bearings 10 10, which carry the saddle 11, which has attached thereto the transverse beams 11^a 11^a, which form the transverse seesaws, the saddle 11 being rotatably supported by the bearings 10 by means of the shaft 12. Upon the beams 11^a 11^a I place a track 13 13, upon which is movably mounted a seat, chair, or the like 14, provided with wheels 15 and also provided with a bracket 16, which passes under the beam 11^a and acts to keep the carriage from leaving the track. (See Fig. 4.) A rack 17 is placed upon the beam 11^a and has meshing therewith a gear 18, which is operated by the hand-wheel 19. The operator when in the seat can by manipulating this hand-wheel move himself nearer to or away from the main seesaw. A rope or cable 20 is also provided, so that the occupant of the seat can cause the seesaw to swing in the usual manner. The main seesaw is approached by means of a stairway 21, although an elevator or other means may be used to bring people from the ground without departing from the spirit of my invention.

In order that the seesaw may be operated, I mount upon the shaft 4 a gear 21, which has meshed therewith a pinion 22, said pinion being attached to a gear 23, both being rotatably mounted upon a spindle 23^a, which is rigidly fastened to an upstanding bracket 24, attached to one of the bearings 5. A pinion 25 meshes with the gear 23 and is rotatably supported by the bracket 24, said pinion 25 being provided with an operating-handle 26.

As a means for stopping the movement of the seesaw I attach to the shaft 4 a disk 27, and a brake-shoe 28, which is carried by the bell-crank lever 29, is adapted to impinge upon the said disk when desiring to stop the seesaw. As a means for applying the brake-shoe a cylinder 30 is provided, which has its piston 31 attached to the arm 32 of the bell-crank lever, and a hose 33 is adapted to convey steam, compressed air, or hydraulic power to the cylinder by way of the valve-box 34, which is mounted upon the platform-railing 35 of the main seesaw. Another valve 36 is also provided, whereby the brake can be applied from the ground.

Upon the main seesaw I mount seats 37, and the ends of the main seesaw are enlarged, as at 38, and are also provided with seats 39.

It will be seen that the apparatus herein

shown, considering its intended large capacity and size, is very simple in construction; but of course the device may be as elaborate as desired, the intention being to show and describe only enough to illustrate an embodiment of my invention.

The seesaw may be placed near the ground, and in such case cushion-stops 40 are provided upon the ends of the main seesaw to ease the shock in the event of the seesaw striking, or it may be placed upon a tower at any desired height.

The saddles 11, which carry the transverse beams 11^a 11^a, are provided with projections 41, which are adapted to strike the cushions 42, of rubber or any resilient material, which are carried by the cross-beams 9 9, and thereby limit the movement of the said transverse beams 11^a 11^a. The brake-cylinder 30 may be mounted, as shown, upon the framework or support 6, but may be placed in any convenient position.

Within the seats 37 and opposite to the transverse beams 11^a 11^a are removable portions or sections 41^a, which may be taken out when any one wishes to enter the carriage or chair 14, there being room enough for the person to pass under the railing 35. Said sections 41^a may, however, be hinged and swung upwardly, if preferred.

The device is operated as follows: People ascending the stairway 21 can be distributed upon the main seesaw so as to get an even balance, and in order that the seesaw will not move until a desired time a dog 43, Fig. 2, engages the pinion 25, the dog preventing the rotation of the gearing until removed. By means of the cable 20 the movable chairs or carriages 14 can be drawn to the main seesaw, and a person may enter, whereupon he may, by means of the hand-wheel 19 and gear 18, move himself to a desirable position, it being evident that at least two persons should occupy the said carriages 14—one upon each side of the center. Presuming the seesaw to be evenly balanced, an attendant by turning the handle 26 can cause the seesaw to oscillate in one direction as far as desirable and, by reversing, can cause the seesaw to move in the opposite direction. The device, being evenly balanced, can be easily moved, especially as it will oscillate slowly, and any desirable compounding of gears may be used. In case of accident recourse may be had to the brake.

It will be obvious that the details of construction shown and described may be varied in many particulars without departing from the spirit of my invention, the drawings showing what I consider a simple embodiment thereof.

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

1. A primary seesaw having mounted thereupon secondary seesaws, said secondary seesaws being disposed transversely of the primary seesaw.

2. A primary seesaw having mounted thereupon secondary seesaws, said secondary seesaws being disposed transversely of the primary seesaw, and movable seats upon said secondary seesaws.

3. A primary seesaw having mounted thereupon secondary seesaws, movable seats upon said secondary seesaws, and a rack carried by said secondary seesaws having meshed therewith a pinion, said pinion being operated from said seats, whereby said seats may be adjusted to various positions.

4. A primary seesaw having pivotally mounted thereupon secondary seesaws, the latter being disposed transversely of the primary seesaw.

5. A primary seesaw having mounted thereupon transverse secondary seesaws, movable seats upon said secondary seesaws, and means for moving said seats.

6. A primary seesaw having mounted thereupon transverse secondary seesaws, movable seats upon said secondary seesaws, and a rack carried by said secondary seesaws, having meshed therewith a pinion, said pinion being operable from said seats whereby the same may be adjusted to various positions.

7. A primary seesaw, transversely-mounted seesaws carried by said primary seesaw, seats movably mounted upon said transverse seesaws, means for moving said seats, means for limiting the oscillation of said transverse seesaws, means controlled from the platform of said primary seesaw adapted to impart movement to said primary seesaw, and a brake device adapted to bring said primary seesaw to a state of rest.

8. A primary seesaw, transversely-mounted seesaws carried by said primary seesaw, seats movably mounted upon said transverse seesaws, means for moving said seats, means for limiting the oscillation of said transverse seesaws, means for imparting movement to said primary seesaw, and a brake device controlled from the platform of said primary seesaw adapted to bring the same to a state of rest.

9. A primary seesaw, transversely-mounted seesaws carried by said primary seesaw, seats movably mounted upon said transverse seesaws, means for moving said seats, means for limiting the oscillation of said transverse seesaws, means controlled from the platform of said primary seesaw adapted to impart movement to said primary seesaw, and a fluid-operated brake device controlled from the platform of said primary seesaw adapted to bring the same to a state of rest.

10. A primary seesaw, transversely-mounted secondary seesaws carried by the primary seesaw, and disposed at substantially a right angle thereto, means for limiting the movement of said transversely-mounted seesaws,

and a manually-operable means for imparting movement to said primary seesaw, together with seats adjustably mounted upon said secondary seesaws.

11. A primary seesaw, transversely-mounted secondary seesaws carried by the primary seesaw, and disposed at substantially a right angle thereto, means for limiting the movement of said transversely-mounted seesaws, and a manually-operable means controlled from the platform of said primary seesaw adapted to impart movement to said primary seesaw, together with seats adjustably mounted upon said secondary seesaws.

12. A primary seesaw, transversely-mounted secondary seesaws carried by the primary seesaw, and disposed at substantially a right angle thereto, means for limiting the movement of said transversely-mounted seesaws, manually-operable means controlled from the platform of said primary seesaw adapted to impart movement to said primary seesaw, and a braking device adapted to bring said primary seesaw to a state of rest.

13. A primary seesaw, transversely-mounted seesaws carried by the primary seesaw, means for limiting the movement of said transversely-mounted seesaws, manually-operable means controlled from the platform of said primary seesaw adapted to impart movement to said primary seesaw, and a fluid-operated braking means adapted to bring said primary seesaw to a state of rest.

14. A primary seesaw, cushion-stops upon the ends thereof, transversely-mounted seesaws carried by said primary seesaw, seats movably mounted upon said transverse seesaws, means for moving said seats, means for limiting the oscillation of said transverse seesaws, means for imparting movement to said primary seesaw, and a braking device adapted to bring the primary seesaw to a state of rest.

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