Dec. 5, 1950 E. E. FRANZ 2,533,005

TEETER-TOTTER AND MERRY-GO-ROUND

Filed Aug. 8, 1945

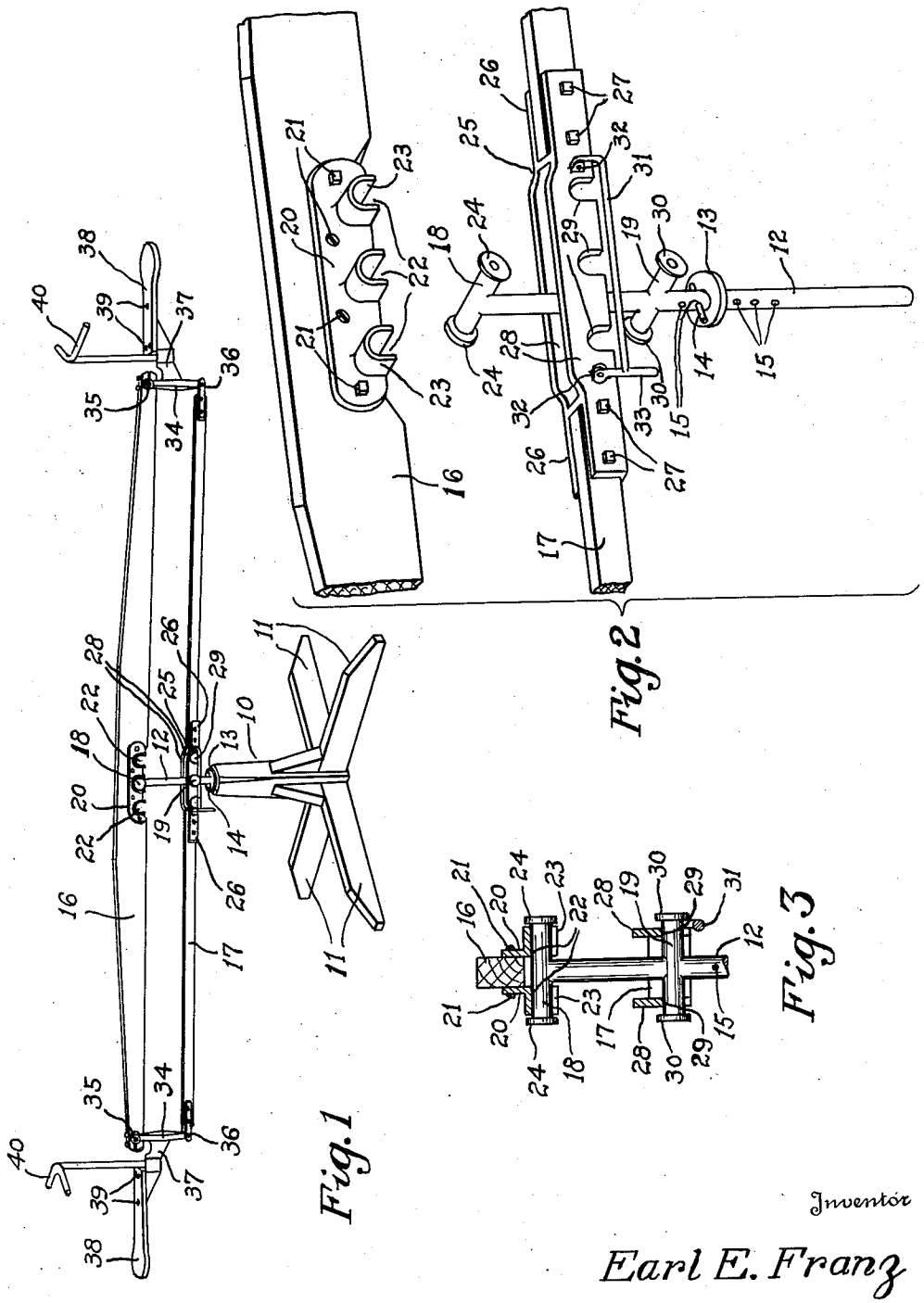


Fig. 1

Fig. 2

Fig. 3

Inventor

Earl E. Franz

By Frease and Bishop

Attorneys

Patented Dec. 5, 1950 2,533,005

UNITED STATES PATENT OFFICE

2,533,005

TEETER-TOTTER AND MERRY-GO-ROUND

Earl E. Franz, Canton, Ohio

Application August 8, 1945, Serial No. 609,513

12 Claims. (Cl. 272—30)

1

The invention relates to a combined reciprocating and rotating teeter totter and merry go round, or a combination of the two.

It is an object of the invention to provide an amusement device of this character which is quickly and readily adjustable in height to accommodate children of different sizes.

Another important object of the invention is to provide means for adjusting the walking beam of the device laterally to compensate for children of different weights at opposite ends thereof.

Still another object is to provide a device of this character having a pair of parallel beams with seat equalizing devices pivotally connected to the ends of both beams for rigidly supporting the seats in horizontal position regardless of the position of the beams.

A further object is to provide an amusement device of this character having two parallel beams, means for pivoting one beam directly above the pivotal point of the other beam and means for adjusting both pivot points laterally of the beams.

A still further object of the invention is to provide such a device with means for locking the pivots in adjusted position.

Still another object is the provision of such a device in which the vertical shaft or spindle is provided with spaced cross arms and the beams are provided with a plurality of notches for selectively engaging said cross arms, a pivoted locking device being mounted upon one beam for engaging beneath the corresponding cross arm and locking the beam in adjusted position.

The above objects together with others which will be apparent from the drawing and following description, or which may be later referred to, may be attained by constructing the improved amusement device in the manner illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a combined teeter totter and merry go round embodying the invention;

Fig. 2 an enlarged, fragmentary, exploded perspective view of the means for adjusting the beams of the device laterally relative to the pivots; and

Fig. 3 a tranverse sectional view through the pivots of the beams.

The device is mounted upon a pedestal 10, which may be formed of wood or metal as desired, and may be provided with an enlarged base, such the radially disposed feet 11, adapted to rest upon the ground and cover a sufficient

2

area to prevent the device from accidentally upsetting.

The spindle or shaft 12 is journalled within the pedestal 10, as by means of any suitable bearing as indicated at 13, and is vertically adjustable within the pedestal to accommodate children of different sizes, the adjustment being accomplished by means of a pin 14 adapted to be selectively inserted through any desired one of a plurality of transverse apertures 15 in the spindle or shaft 12.

The teeter totter comprises two parallel beams 16 and 17, pivotally mounted intermediate their ends upon the spindle 12. An important feature of the invention is the means for laterally adjusting the pivotal mounting of the beams 16 and 17 in order to compensate for children of different weights at opposite ends of the beams.

For this purpose upper and lower cross arms 18 and 19 respectively are formed upon the spindle or shaft 12 to provide pivots for the upper and lower beams 16 and 17. If the beams are formed of wood, as shown in the drawing, a metal plate 20 is attached to each side of the central portion of the upper beam 16, as by the screws 21, and provided in its lower edge with a plurality of notches 22, each of which may be surrounded by a half-round flange 23, for selective engagement with the upper cross arm 18 of the spindle.

A flanged head 24 may be formed upon, or attached to, each end of the cross arm 18 to prevent side-wise disengagement of the beam 16 therefrom. The lower beam 17 may be formed of two similar wooden members connected to opposite ends of the central, metal member 25, which may be in the form of a steel casting or forging having bifurcated ends 26 which receive the inner ends of the wooden members, which are secured thereto as by the screws 27.

The central portion of the member 25 comprises a pair of parallel spaced walls 28 each having a plurality of notches 29 in its lower edge for selective engagement with the lower cross arm 19 of the spindle.

Flanged heads 30 are formed upon, or attached to, opposite ends of the cross arms 19 to prevent the lower beam from being displaced side-wise therefrom and a locking member 31 is pivotally mounted upon one side of the member 25, as indicated at 32, and provided with a handle 33 by means of which it may be manipulated, and is adapted to engage beneath the adjacent end of the cross arm 19 and lock the

beams against accidental removal from the cross arms.

By engaging both of the central notches 22 and 29 of the upper and lower beams upon the cross arms 18 and 19 respectively, the beams will be evenly balanced so that children of substantially the same weight may be accommodated upon opposite ends thereof.

By moving the beams to the right, as viewed in the drawing, so that the left hand notches are engaged with the cross arms, a heavier child may be accommodated upon the left hand end of the beams, while adjusting the beam in the opposite direction will compensate for a heavier child upon the right hand end of the beams.

Equalizing links 34 are provided for connecting the opposite ends of the upper and lower beams 16 and 17 together in parallel relation. Each of these links is pivotally connected at its upper end to the adjacent end of the upper beam 16, as indicated at 35, and pivotally connected at its lower end to the adjacent end of the lower beam 17, as indicated at 36.

With this construction, as the beams are tilted back and forth upon their pivots the equalizing links 34 will remain in vertical position and the beams 16 and 17 will remain parallel to each other.

Each equalizer link 34 has an outwardly disposed seat supporting portion 37 formed thereon upon which is rigidly fixed a horizontally disposed seat 38 as by the screws 39. With this construction the seats 38 will remain in horizontal position at all times regardless of the position to which the beams 16 and 17 are tilted. As a safety precaution a handle bar 40 may be provided in front of each seat forming a hand hold for the child occupying the seat.

In the operation of the device, the beams 16 and 17 may be alternately tilted in opposite directions upon their pivots, operating as a see-saw or teeter totter, and as each end of the beams is alternately raised and lowered the seats attached thereto will remain horizontal so that the children riding upon the same will not be thrown forward or backward with danger of falling from the same.

If it is desired to operate the device as a merry go round or round about, the beams 16 and 17 may be held in substantially horizontal position and rotated around the pedestal by means of the children upon the seats 38 pushing upon the ground with their feet. If desired, a combined rotary and oscillating movement of the beams may be produced.

I claim:

1. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, a cross arm upon the spindle, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a pivoted gravity operated locking member upon the beam arranged to normally engage beneath said cross arm.

2. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, a cross arm upon the spindle having flanged heads at its ends, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a pivoted gravity operated locking member upon the beam arranged to normally engage beneath said cross arm.

3. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, means for vertically adjusting the spindle in the pedestal, a cross arm upon the spindle, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a pivoted gravity operated locking member upon the beam arranged to normally engage beneath said cross arm.

4. An amusement device of the character described including a pedestal, a cross arm carried by the pedestal, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a pivoted gravity operated locking member upon the beam arranged to normally engage beneath said cross arm.

5. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, spaced upper and lower cross arms upon the spindle, spaced upper and lower beams each having a plurality of notches in the lower edge of its central portion for selective engagement with one of said cross arms, and a pivoted gravity operated locking member upon one beam arranged to normally engage beneath the corresponding cross arm.

6. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, spaced upper and lower cross arms upon the spindle, spaced upper and lower beams pivoted upon the cross arms, the upper beam having a plurality of notches in the lower edge of its central portion for selective engagement with the upper cross arm, a pair of spaced walls in the central portion of the lower beam located on opposite sides of the spindle, said spaced walls having a plurality of notches in their lower edges for selective engagement with the lower cross arm, and a pivoted gravity operated locking member upon the lower beam arranged to normally engage beneath the lower cross arm.

7. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, a cross arm upon the spindle, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm and a gravity operated locking bar having off-set end portions pivoted to the beam at opposite ends of said plurality of notches and arranged to normally engage beneath said cross arm.

8. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, a cross arm upon the spindle having flanged heads at its ends, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a gravity operated locking bar having off-set end portions pivoted to the beam at opposite ends of said plurality of notches and arranged to normally engage beneath said cross arm.

9. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, means for vertically adjusting the spindle in the pedestal, a cross arm upon the spindle, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a gravity operated locking bar having off-set end portions pivoted to the beam at opposite ends of

said plurality of notches and arranged to normally engage beneath said cross arm.

10. An amusement device of the character described including a pedestal, a cross arm carried by the pedestal, a beam having a plurality of notches in the lower edge of its central portion for selective engagement with said cross arm, and a gravity operated locking bar having off-set end portions pivoted to the beam at opposite ends of said plurality of notches and arranged to normally engage beneath said cross arm.

11. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, spaced upper and lower cross arms upon the spindle, spaced upper and lower beams each having a plurality of notches in the lower edge of its central portion for selective engagement with one of said cross arms, and a gravity operated locking bar having off-set end portions pivoted to one beam at opposite ends of said plurality of notches and arranged to normally engage beneath the corresponding cross arm.

12. An amusement device of the character described including a pedestal, a spindle journalled in the pedestal, spaced upper and lower cross arms upon the spindle, spaced upper and lower beams pivoted upon the cross arms, the upper beam having a plurality of notches in the lower edge of its central portion for selective engagement with the upper cross arm, a pair of spaced walls in the central portion of the lower beam located on opposite sides of the spindle, said spaced walls having a plurality of notches in their lower edges for selective engagement with the lower cross arm, and a gravity operated locking bar having off-set end portions pivoted to the lower beam at opposite ends of said plurality of notches and arranged to normally engage beneath the lower cross arm.

EARL E. FRANZ.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
389,961	French	Sept. 25, 1888
1,073,736	Case	Sept. 23, 1913
1,258,578	Kintzel	Mar. 5, 1918
1,344,725	Senseman et al.	June 29, 1920
1,436,426	Ayle	Nov. 21, 1922
1,552,841	Hector	Sept. 8, 1925
1,904,687	Jacob	Apr. 18, 1933
2,033,523	Husted	Mar. 10, 1936

FOREIGN PATENTS

Number	Country	Date
5,763	Great Britain	Mar. 8, 1902