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JUVENILE AMUSEMENT DEVICE

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Fig. 1.

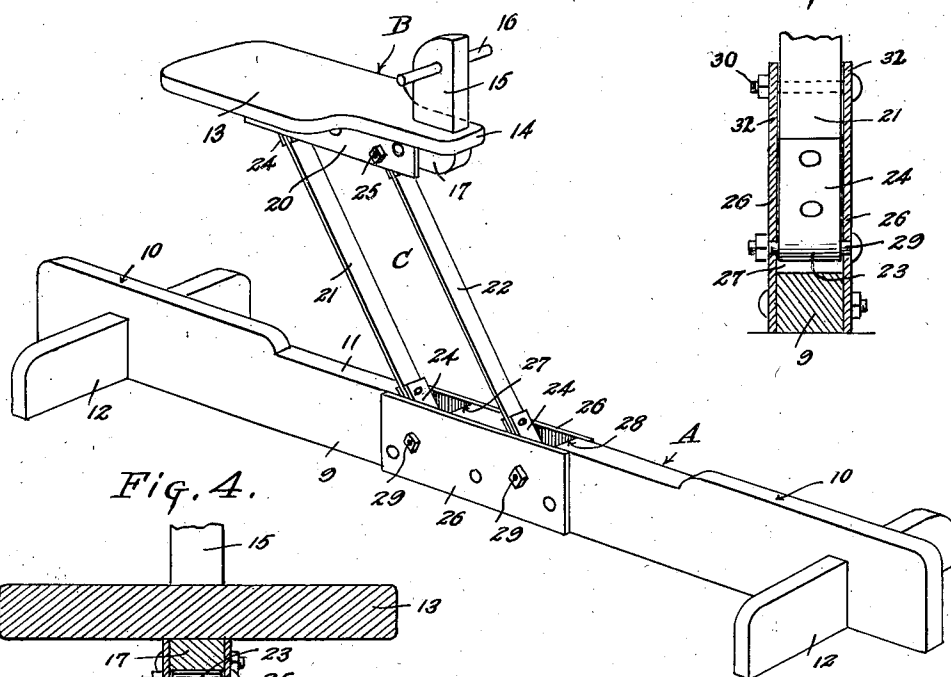


Fig. 3.

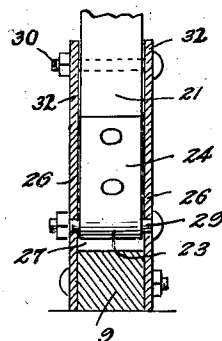


Fig. 4.

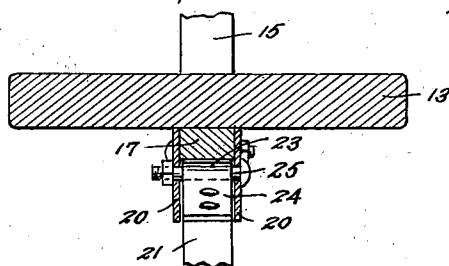
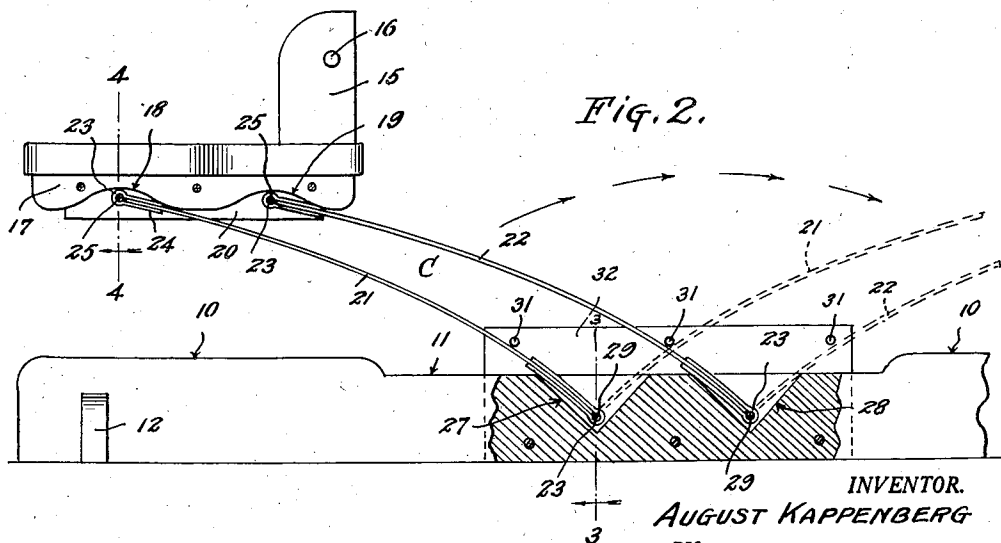


Fig. 2.



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JUVENILE AMUSEMENT DEVICE

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6 Claims. (Cl. 272—52)

This invention has general relation to amusement devices for children and has more particular reference to certain improvements in that class of amusement devices which are known to the trade as "spring teeters".

Heretofore, these devices have usually been so constructed that the seat assumes various planes at an angle to the horizontal when the device is in use, the angular plane, in some instances, being so great as to render it extremely difficult for the child to retain its seat, if not actually dislodging the child therefrom. Also, previous devices of this type have been constructed in such a manner that their action has been restricted to a very limited up and down swinging movement of the seat.

The present invention resides in an improved device of this character, the construction of which is such as to insure the disposal of the seat in a substantially horizontal plane throughout the entire range of its movement when the device is in use.

The present invention also provides a device of this nature which is so designed that the seat and the pivotal resilient supporting means therefor are capable of swinging movement throughout a vertical arcuate path, from a position on one side of the pivot to a position on the opposite side thereof, while the upper surface of the seat is maintained in a substantially horizontal plane through its entire movement.

The invention further embodies an improved device of the character set forth which is comparatively simple and not complicated in its construction, which employs but few parts capable of economical production and assembly or disassembly for transportation and storage, and which affords a highly amusing, attractive and safe device.

With the above recited and other objects in view, reference is now made to the following specification and accompanying drawing in which there has been set forth a preferred embodiment of the invention, while the claims cover variations and modifications thereof which fall within their scope.

In the drawing:

Fig. 1 is a perspective view of an amusement device constructed in accordance with the present invention.

Fig. 2 is an enlarged fragmentary side view thereof with parts broken away and shown in section to disclose the underlying structure and illustrating in full and broken lines the extreme positions of the seat supporting means, while

further showing a slightly modified form of the invention.

Fig. 3 is an enlarged detail cross sectional view taken approximately on the line 3—3 of Fig. 2.

Fig. 4 is a similar view taken approximately on the line 4—4 of Fig. 2.

Referring to the drawing by characters of reference, A designates generally the base of the device which is preferably, although not necessarily, constructed from a length of timber 9 of rectangular cross sectional configuration of considerable lesser width than its height, which has the upper edges 10 of its opposite ends disposed above the upper edge 11 of the intermediate portion. The base A further includes transverse pieces 12 in the region of its opposite ends for supporting the member 9 in vertical position and for affording stability to the base, the cross pieces 12 being preferably removably secured in position in the usual manner to permit of the ready assembly and disassembly of the same with the member 9.

The device further includes a seat member which is designated generally by the reference character B and which includes a saddle element 13 having a forwardly extending portion 14 of reduced width which is adapted to be straddled by the child in the usual manner. An upstanding post 15 is secured to and carried by the portion 14 and is provided with a transverse handle bar 16 adapted to be grasped by the child. The seat member also includes a depending centrally disposed longitudinally extending strip 17, the underside of which is provided with longitudinally spaced recessions or notches 18 and 19. The seat structure, so far described, is preferably constructed of wood, and a pair of metal plates 20 are secured by bolts or other equivalent fastening means to the opposite sides of the strip 17, the plates 20 being of a height so that the lower edges thereof protrude below the lower edge of the strip 17.

The device further includes a seat supporting means which is designated generally by the reference character C and which means, in the present instance, consists of a pair of resilient elastic straps or leaves 21 and 22, preferably of spring steel and which straps or leaves are of the same length. The opposite ends of the straps or leaves 21 and 22 are provided with bearing eyes 23 which may be produced in any desired manner but, in the present instance, are shown as formed by separate pieces of metal fashioned intermediate their length to define the bearing eyes 23 and having the legs 24 protruding there-

from, engaging the opposite faces of the terminals of the straps or leaves and secured thereto by riveting, welding or in any other desired equivalent manner.

5 The bearing eyes 23 at the upper ends of the straps or leaves 21 and 22 are of a width to snugly fit between the plates 20 and are pivotally attached thereto by cross bolts or pivots 25 so that the seat member B is connected with the upper
10 end of said straps or leaves 21 and 22 for pivotal movement on the axes provided by the cross bolts or pivots 25. The recesses or notches 18 and 19, together with the side plates 20, define
15 depressions within which the upper ends of the leaves or straps are received and guided in the pivotal movement of the upper ends with reference to the seat member. The opposite sides of each depression or notch 18 and 19 also serve as abutments with which the straps or leaves
20 engage.

The bearing eyes 23 at the lower ends of the straps or leaves 22 are of a width to snugly fit between a pair of metal plates 26 which are secured by bolts or other equivalent fastening
25 means to the opposite sides of the member 9 intermediate the length of said member. The member 9 is provided with V-shaped notches 27 and 28 which open through the upper edge 12 of the intermediate portion to define together with
30 the side plates 26 recesses which accommodate the lower ends of the straps or leaves 21 and 22. Cross bolts or pintles 29 extend through the side plates and the bearing eyes 23 so that the lower ends of said straps or leaves 21 and 22 are pivotally
35 connected with the base A for limited swinging movement from an angular position on one side of the pivotal connection to an angular position on the opposite side thereof.

In use and operation, the seat is disposed and supported in one of its two normal positions as
40 illustrated in Fig. 1 where the resilient straps or leaves 21 and 22 will be in a straightened condition bearing against the upper edge of one wall of each of the notches 27 and 28. When the
45 weight of the child is brought to bear on the seat member B it is obvious that the straps or leaves 21 and 22 will be flexed or bowed to substantially the position illustrated in Fig. 2, with the leaves or straps fulcrumed against the upper edges of
50 the side wall of each notch. This places the straps or leaves 21 and 22 under tension but nevertheless, maintains a substantially horizontal position of the upper surface of the saddle 13. By manipulating the device in the well known manner of a
55 "teeter" or "seesaw", the child causes a flexing and reflexing of the resilient straps or leaves 21 and 22 until sufficient momentum is gained to cause the seat member B to swing from its position on one side of the pivotal connection of the straps
60 or leaves 21 and 22 with the base A, to a position on the opposite side thereof where the straps or leaves 21 and 22 will abut with and be fulcrumed against the upper edge of the opposite walls of the V-shaped notches 27 and 28 as shown in dotted
65 lines in Fig. 2. At this point, the momentum is gradually arrested by the resilient or spring action of the leaves or straps 21 and 22 and by again manipulating the device in the manner of a "teeter" or "seesaw", the child may cause the seat
70 to swing back to its original position. During the complete movement of the seat from a position on one side of the pivotal connection of the leaves or straps with the base, to the position on the other side, it will be obvious that, due to the
75 manner in which the seat member is supported,

the upper surface of the saddle 13 will remain horizontal throughout.

Obviously, the size of the device and the strength of the spring straps or leaves 21 and 22 may be varied to accommodate children within various
age and weight limits. If desired, optional fulcrum points for the resilient straps or leaves 21 and 22 may be provided, as shown in the modification illustrated in Figs. 2 and 3 of the drawing, in which instance the optional abutments consist
10 of the upper edges of the notches 27 and 28 and cross bolts 30 which are inserted through aligned pairs of openings 31 in the upwardly extending portion 32 of the side plates 26. In this instance,
15 the cross bolt in the intermediate pair of openings 31 will serve as an abutment or fulcrum for both resilient straps or leaves 21 and 22. It will also be observed that the cross bolts 30 may be inserted in the openings 31 when the resilient
20 straps or leaves 21 and 22 are flexed to the position as illustrated in Fig. 2, in which instance the seat is confined to a spring movement in the manner of an ordinary "spring teeter" toy while, due to the double support, the upper surface of the saddle is maintained in substantially hori-
25 zontal position.

It should also be noted that the side plates 20 and 26 and the recesses or notches 18, 19 and 27 make for a laterally rigid support of the seat from the base so that the movement of the seat
30 is guided and lateral sway is prevented.

What is claimed is:

1. In a juvenile amusement device, a base, a seat, and spaced resilient straps for resiliently and pivotally supporting the seat from the base
35 for movement throughout a vertically arcuate path in a plane longitudinally of the base, and divergent abutments provided respectively on said seat and base against which the opposite ends of the straps respectively abut to limit the pivotal
40 movement of the straps with respect to the base and seat.

2. In a juvenile amusement device, a base, a seat, and spaced resilient straps for resiliently and pivotally supporting the seat from the base
45 for movement throughout a vertically arcuate path in a plane longitudinally of the base, and divergent abutments on the base against which said straps directly abut to limit the pivotal movement in opposite directions.

3. In a juvenile amusement device, a base, a seat and spaced resilient straps pivotally connected respectively at their opposite ends to the base and seat at longitudinally spaced points and V-shaped notches opening through the upper sur-
50 face of the base providing divergent abutments with which the straps engage to limit their pivotal movement in opposite directions.

4. In a juvenile amusement device, a base, a seat and spaced resilient straps pivotally connected at their upper ends to the seat and pivotally connected at their lower ends to the base intermediate the ends of the base and abutments on the base with which said straps respectively abut to limit the pivotal movement thereof in opposite
65 directions.

5. In a juvenile amusement device, a base, a seat, a longitudinally extending strip on the underside of the seat having spaced notches formed with divergent walls forming abutments, side
70 plates on said strip and a pair of spaced resilient straps pivotally connected at their upper ends to the side plates on axes located at the apexes of said notches and pivotally connected at their lower ends to the base and means on the base for limit-
75

ing the pivotal movement of said straps in opposite directions.

- 5 6. In a juvenile amusement device, an elongated base, a seat and a pair of resilient straps pivotally connected respectively at their opposite ends to the seat and medial portion of the base

and operating to support said seat in longitudinal alignment with said base, and means on said base against which said straps abut to limit the pivotal movement thereof and to act as a fulcrum for flexing of the straps.

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