March 20, 1928. 1,662,875

H. A. YOUNG ET AL

SEESAW

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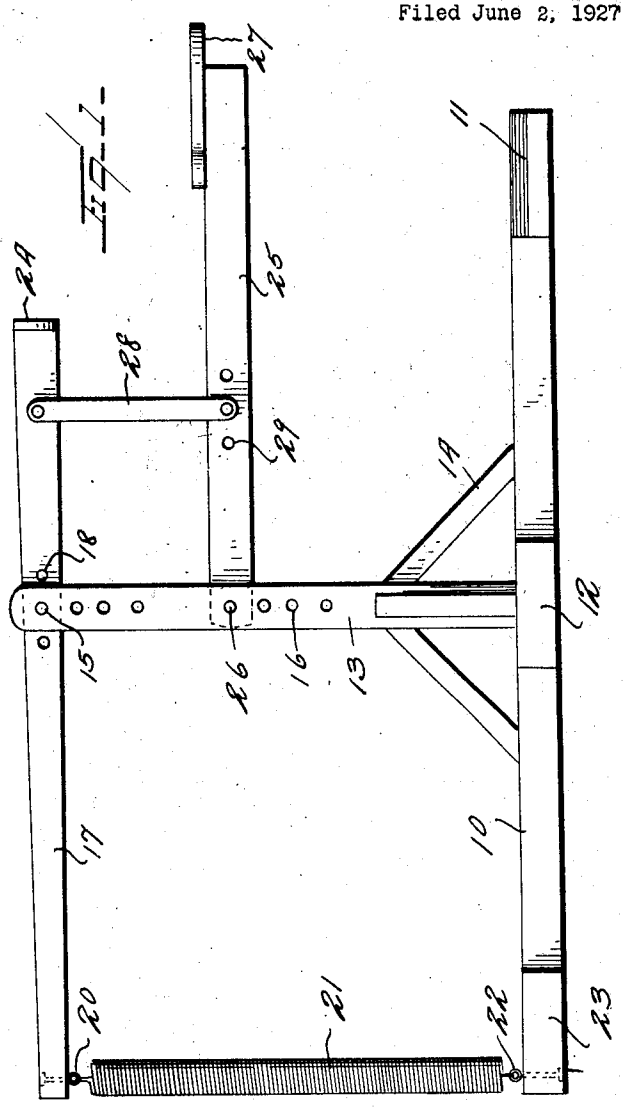


Fig. 1.

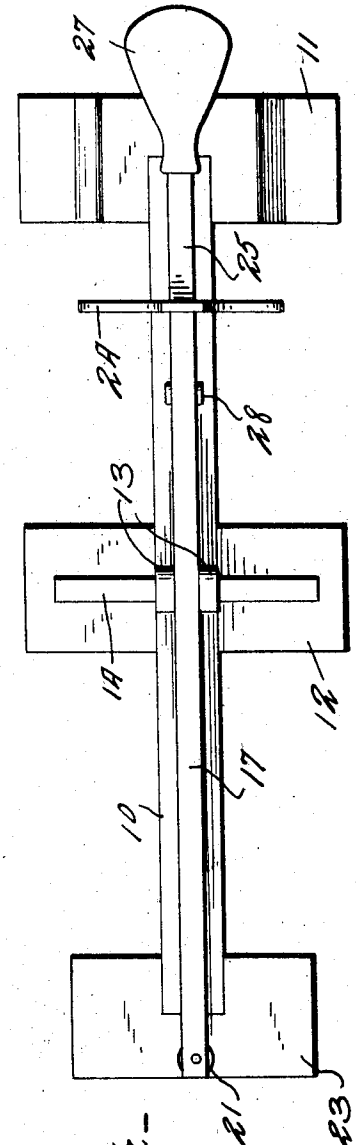


Fig. 2.

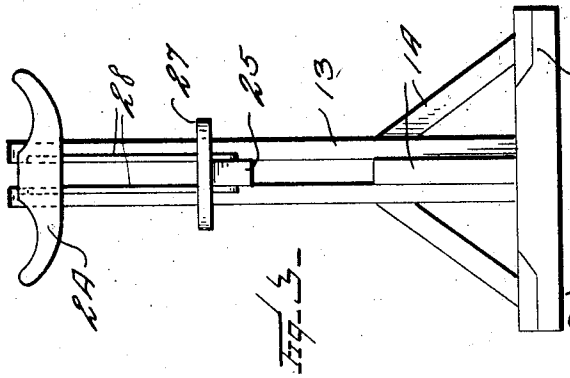


Fig. 4.

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UNITED STATES PATENT OFFICE.

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SEESAW.

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This invention relates to see-saws or "teeter-totters", and the general object of this invention is to provide a single see-saw of this character wherein a compound lever is provided, which at one end is provided with a seat and at the other end connected to a contractile spring so that the weight of the child is counterbalanced by the spring to thus permit the child to see-saw.

A further object is to so construct the device that a floating motion is given to the seat as well as the jumping effect.

A still further object is to provide means whereby the parts may be adjusted to increase or decrease the leverage and to adjust it for the height of the child and according to the weight of the operator.

Our invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a side elevation of a single see-saw constructed in accordance with our invention;

Figure 2 is a top plan view thereof;

Figure 3 is an end elevation.

Referring to the drawing, 10 designates longitudinal members which constitute stringers, and 11 designates transverse members which constitute a base or footing. Mounted upon the transverse member 12 are the uprights 13 which are held in upright position by means of the diagonal braces 14. These upright members 13 are provided with an upper vertical series of holes 15 and a lower vertical series of holes 16. Disposed between the uprights and coacting with the upper series of holes 16 is a top lever 17 having three longitudinally disposed holes 18 coacting with the holes 15 and through which a pivot pin is adapted to pass.

It will be seen from Figure 1 that the lever 17 is unequally pivoted and the long arm lever is provided with an eye 20 with which a coiled contractile spring 21 is engaged, the lower end of this spring being connected to an eye 22 mounted upon the footing 23. The opposite end of the lever 17 is provided with a transversely extending handle bar 24. Having its end disposed between the uprights 13 is a seat supporting lever 25 which is provided in one end with an aperture adapted to register with any one of the holes 16 and being pivoted upon a pin 26. At its opposite end this lever is provided with a seat 27 which may be with or without a back and of any suitable construction.

Pivotally engaging the lever 17 adjacent the hand hold is a vertical link 28 and the lower end of this link is perforated and the perforations are adapted to register with any one of a number of perforations or apertures 29 through which a pivot pin may be passed.

The operator sits on the seat 27, holding his hands on the hand hold 24. The weight of the operator extends the counterbalancing spring 21 and the seat end of the lever 25 lowers until the operator's feet touch the base or footing 11. The operator then pushes against the base or footing with his feet and the counterbalancing spring pulls him back until the spring is again fully contracted or in its normal position. The operator's weight again lowers him to the floor and the process repeated. The machine bolt used as a pivot for the lever 17 may be passed through any one of the perforations 18 and the lower ends of the connecting rods 28 may be bolted to the bottom lever through any one of the perforations 29. This enables the toy to be adjusted according to the weight of the operator. Both the top and bottom levers may be raised or lowered by adjusting the pivot pins in the apertures 16 or 15 so that the seat may be raised or lowered to suit the height of the operator.

It will be seen that we have provided a compound lever with adjustments for weight by changing the ratio of either lever operating on the other, and that further we have provided means whereby the height of the seat may be changed. The toy is light and compact in construction and may be used indoors or outdoors.

It will be obvious that many changes might be made in the details of construction and arrangement of parts without departing from the spirit of the invention, and that the dimensions may be varied within wide limits to fit the device for children of different ages. The eyes 20 and 22 are screw eyes and, therefore, adjustable so as to control the tension of the spring and to contract or extend the spring 21 in order that proper adjustment may be made for the height of the lever.

We claim:—

1. A single see-saw of the character described including a base, an upright, an upper lever having means whereby it may be fulcrumed at a plurality of points upon the upper end of the upright, one end of the

lever being connected to the base by a coiled contractile spring, a second named lever disposed below the first and pivoted at its inner end to said upright and extending away from the spring, the fulcrum for the second named lever being adjustable vertically upon the upright into a plurality of positions, and a link connecting the first and second named levers.

2. A single see-saw of the character described including a base, a pair of uprights mounted thereon, the uprights being provided with a lower vertical series of apertures and with an upper vertical series of apertures, an upper lever disposed between the uprights and having a longitudinal series of pivot pin apertures, a pivot pin passing through any one of said apertures and any one of the upper series of apertures in the uprights, a coiled contractile spring connecting one end of said lever to said base, a lower lever having one end inserted between the uprights, a pivot pin therefor engageable in any one of the second named series of apertures in the uprights, the second named lever having a longitudinal series of apertures intermediate its ends, and links pivotally connected to the first named lever and pivotally connected to the second named lever at any one of said apertures, the second named lever carrying a seat and the adjacent end of the first named lever carrying a hand hold.

3. A single see-saw of the character described including a base, an upright, an upper lever having means whereby it may be fulcrumed at a plurality of points upon the upper end of the upright, one end of the lever being provided with a screw eye, a screw eye upon the base adjustable vertically therein, a coiled contractile spring engaging said screw-eyes, a second named lever disposed below the first and pivoted at its inner end to said upright and extending away from the spring, the fulcrum for the second named lever being adjustable vertically upon the upright into a plurality of positions, the fulcrum for the first named lever being also vertically adjustable, and a link connecting the first and second named levers and being adjustable upon the second named lever toward or from the fulcrum thereof.

In testimony whereof we hereunto affix our signatures.

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