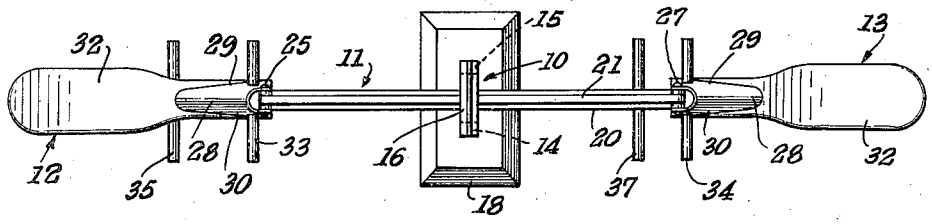
June 1, 1948. R. A. HIGGINS 2,442,543

SEESAW

Filed Oct. 25, 1945

Fig. 1.



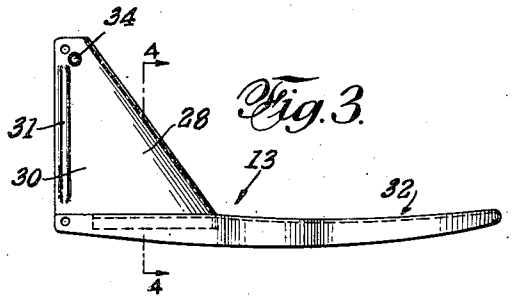


Fig. 3.

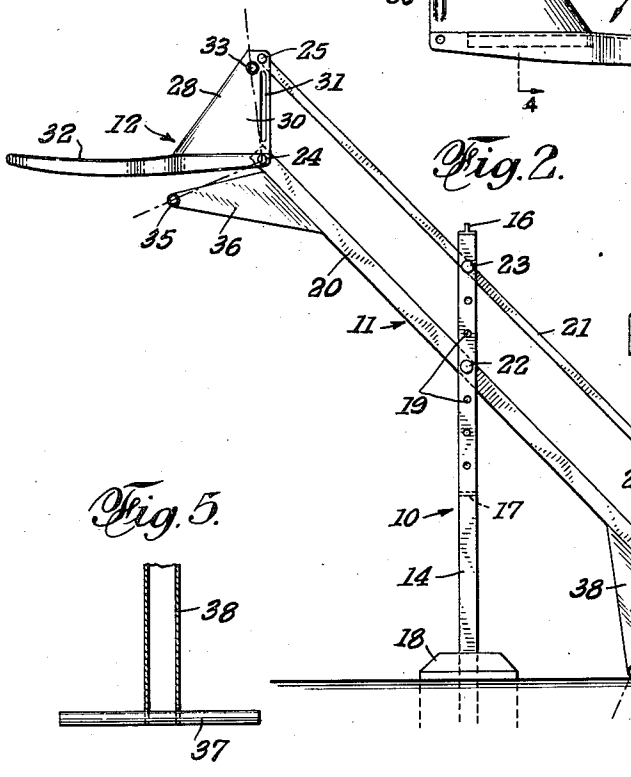


Fig. 2.

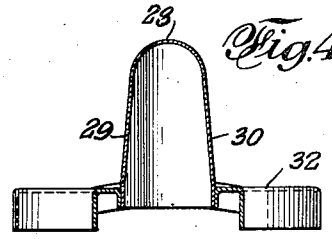


Fig. 4.

Fig. 5.

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SEESAW

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4 Claims. (Cl. 272—54)

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This invention relates to seesaws or teeters and has for its primary object to provide an amusement device of the type referred to which is durable, safe, and simple of construction.

Another object of this invention is to provide a seesaw embodying a handle and a footrest for each seat thereof, the handles and foot rests being so arranged that the person on the seat which has the higher elevation, can exert a greater power or force than can the person on the lower seat, to cause descending of the elevated seat.

Another object of the invention is to provide a seesaw having points of application of power associated with each seat thereof, said points having equal power advantage when the seesaw is level and increased and decreased power advantage for the points of the respective elevated and depressed seats.

Another object of the invention is to provide a seesaw of novel design and structure including novel seat structures of effective, sturdy and simple design.

My invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawings merely show and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawings, like reference characters designate similar parts in the several views.

Fig. 1 is a top plan view of a seesaw embodying the present invention.

Fig. 2 is a side elevational view thereof in the position of maximum height differential of the seats of the seesaw.

Fig. 3 is an enlarged side view of one of the seats.

Fig. 4 is a further enlarged sectional view as taken on the line 4—4 of Fig. 3.

Fig. 5 is an enlarged sectional view as taken on the line 5—5 of Fig. 2.

The seesaw as illustrated may be said to comprise, generally, a support 10, a teetering frame 11 mounted on the support, and seat structures 12 and 13 on either end of the teetering frame 11.

The support 10, as shown, comprises spaced standards 14 and 15, connected at their tops by

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a cross bar 16 and intermediate their height, by a cross bar 17. The standards may be embedded in a concrete or similar base 18 whereby they are rigidly supported. The standards are provided with aligned suitably spaced holes 19 offering selective pivot points for the teetering frame 11.

The teetering frame 11 comprises balancing beams 20 and 21, spaced to mount on pivots 22 and 23, respectively, in selected holes 19 in the support 10. In the present instance, the beam 20 is relatively stronger structurally than the beam 21 so that it serves as the main beam of the structure whereas the beam 21 serves as a stretcher. The seat structures 12 and 13 are pivotally connected to the beams 20 and 21 at the respective pivots 24 and 25, and 26 and 27, so that said beams are maintained in parallel relation under all positions of the teetering frame 11. The spacings between the pivots 22, 23, the pivots 24, 25, and the pivots 26, 27 are similar so that the beams 20 and 21 are parallel.

The seat structures 12 and 13 are each formed with a faired support 28 having a generally U-shaped section and of substantially triangular configuration, whereby each support is open at the bottom and at the side toward the teetering frame. The other side of each faired support is closed by the rounded base of the U-shaped section. The opposed walls 29 and 30 of each support is stiffened by embossed ribs 31. Each seat structure is also provided with a horizontal seat 32 extending outward of the respective supports 29 and provided with a recess in which said supports fit. The related support and seat of each seat structure are suitably secured together by spot welding or the like.

From the foregoing structure it will be seen that the seats 32 will maintain their horizontal position under all positions of the teetering frame 11 and that a person is comfortably accommodated on each seat 32 with his or her legs straddling the support 28.

The seesaw is provided with a handle bar and a foot bar for each seat structure. The handle bar 33 for the seat structure 12 is located adjacent the pivot 25 and extends transversely through the support 28 of said structure. The handle bar 34 for the seat structure 13 is similarly located adjacent the pivot 27 of said support structure. The foot bar 35, associated with the seat structure 12, is carried by a downwardly and outwardly projecting bracket 36 from the beam 20. The foot bar 37 for the seat structure 13 is similarly carried by a bracket 38. The brackets 36 and 38 are

oppositely directed so that the distance between the foot bars 35 and 37 is greater than the distance between the pivots 24 and 26.

It will be noted that dot-dash lines have been drawn to connect the handle 33, the pivot 24 and the foot bar 35 on one side of the seesaw, and that similar lines have been drawn to connect the handle 34, the pivot 26 and the foot bar 37 on the other side of the seesaw. Assuming the teetering frame to be horizontal, it will be evident that the angles formed by said lines would be equal and opposite on both sides of the seesaw. Accordingly, persons on both seats of the seesaw can apply comparable force or power to the seesaw to cause it to teeter. Upon one seat becoming elevated and the other depressed, the mentioned angles will change. The angle at the elevated seat will become progressively more acute and the angle at the depressed seat progressively more obtuse until a straight angle is obtained. Continued depression of the depressed seat will cause its angle to become reversed or opposite so that said latter angle is no longer opposite to that of the elevated seat but in the same direction. Fig. 2 shows this latter condition. It is evident that the person on the elevated seat can exert a powerful push on the foot bar seeking to straighten the angle formed by said foot bar and its related handle bar and pivot. However, the person on the depressed seat cannot exert a counteracting comparable force. It follows, that the person on the depressed seat is at a disadvantage to apply a sufficient force on the seesaw to keep the person on the elevated seat raised.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications that may fall within the scope of the appended claims.

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

1. In a seesaw, a teetering frame including vertically spaced beams, a pivotal support therefor, a seat structure at each end of said beams having a saddle pivotally connected to said beams and provided with a horizontal extension forming a seat, the lower beam having a downwardly extending member at each end directed outwardly therefrom and under said seat, and a foot rest carried by said members at the ends thereof and supported by said members free of said beams.

2. In a seesaw, a teetering frame including vertically spaced beams, pivotal supporting means

therefor, seats pivotally connected at opposite ends of the beams, handles connected with the upper beam adjacent the ends thereof, the lower beam having downwardly extending members adjacent the ends thereof, and foot rests carried by said members, whereby, at the elevated end of the seesaw, a line passing through the foot rest and the lower pivot and a line passing through the handle and said lower pivot include an angle that is of much less magnitude than the included angle between corresponding lines through the foot rest and lower pivot and the handle and lower pivot of the depressed end of the seesaw.

3. In a seesaw, a teetering frame comprising vertically spaced parallel beams, a substantially central pivot therefor, a seat structure pivotally connected to each end of both beams and each comprising an upstanding saddle pivotally connected to said beams and provided with an extension forming a seat at each end of the frame, a handle on each of said seat structures adjacent and parallel to the pivotal connection thereof with the upper beam, a rigid member fixed to each end of the lower of said beams, said members each being downwardly and longitudinally outwardly directed so that the ends thereof extend beyond the ends of said lower beam, and a foot rest carried transversely by each of said members at the outer ends thereof.

4. In a seesaw, a teetering frame including vertically spaced beams, a pivotal support therefor, a seat structure at each end of said beams having a saddle pivotally connected to said beams and provided with a horizontal extension forming a seat, the lower beam having a downwardly extending member at each end directed longitudinally outwardly beyond the ends of said lower beam, and a foot rest carried by the outwardly directed end of each member, whereby with the frame in level position, the foot rests are disposed beneath the seats, and whereby with the frame angularly disposed the elevated foot rest assumes a position relatively nearer to the seat associated therewith and the depressed foot rest assumes a position relatively further from the seat associated therewith.

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