March 1, 1938. F. BRAUNSCHWEIG 2,109,897

TEETER TOTTER

Original Filed Aug. 27, 1932

Fig. 1

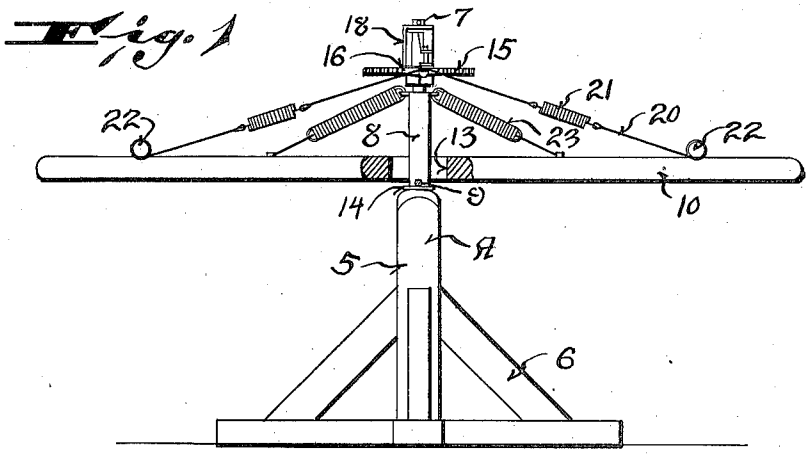


Fig. 2

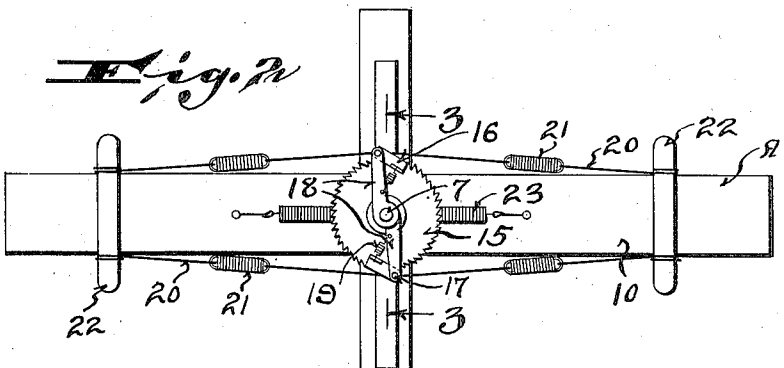
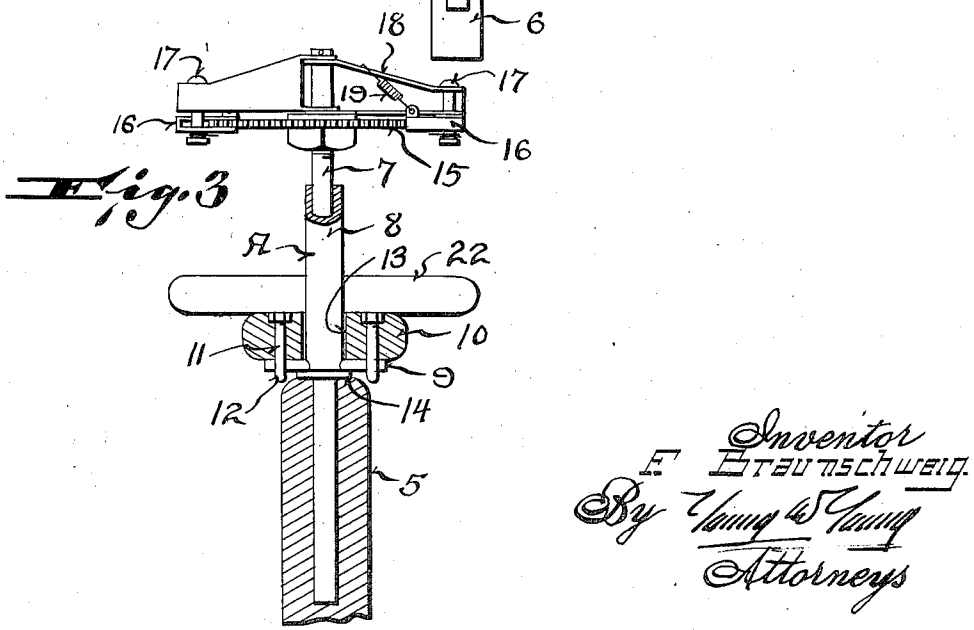


Fig. 3



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Patented Mar. 1, 1938

2,109,897

UNITED STATES PATENT OFFICE

2,109,897

TEETER TOTTER

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Refiled for abandoned application Serial No. 630,682, August 27, 1932. This application October 30, 1937, Serial No. 172,015

3 Claims. (Cl. 272—30)

This invention appertains to amusement devices, and more particularly to see-saws.

One of the primary objects of my invention is to provide a toy or amusement device embodying the principles of a see-saw or teeter, in which the swinging board is given a rotary motion during the oscillation thereof, thereby giving a maximum amount of pleasure to the users of the device.

Another important object of my invention is to provide a combination merry-go-round and see-saw in which a novel ratchet mechanism is provided for advancing the swinging board in a step-by-step motion around the supporting post during swinging movement of the board, the momentum of the board being utilized for causing the turning thereof.

A further salient object of my invention is to provide a combined see-saw and merry-go-round, in which contractile coil springs are utilized for normally holding the board in a predetermined position, and for returning the board to a horizontal plane, the springs being devised to add momentum to the board during the oscillation thereof.

A still further object of my invention is to provide an amusement device for children's playgrounds and the like of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of my improved amusement device, with parts thereof shown broken away and in section to illustrate structural details.

Figure 2 is a top plan view of the improved device.

Figure 3 is an enlarged fragmentary vertical sectional view taken on the line 3—3 of Figure 2, looking in the direction of the arrows.

Referring to the drawing in detail, wherein similar reference characters designate the corresponding parts throughout the several views, the letter A generally indicates my improved combined see-saw and merry-go-round.

As shown, my improved device comprises a supporting standard 5, which can be either anchored in the ground in a suitable concrete base, or provided with an enlarged supporting base 6 for engaging the upper surface of the ground. The upper end of the standard 5 has anchored therein the axially disposed shaft 7, and this shaft extends a material distance above the supporting post or standard 5. Rotatably mounted upon the shaft 7 is a tubular shaft or sleeve 8. Secured to the lower end of the sleeve 8 in any preferred manner are the outwardly extending trunnions 9, on which is journaled the swinging board 10.

The board 10 can carry any preferred type of bearings 12 for receiving the trunnions, and in the present instance these bearings have been shown to be of the U-bolt type. The center of the swinging board 10 is provided with a longitudinal slot 13, through which the shaft 7 and sleeve 8 extend. This allows the free rocking movement of the board 10 without coming into contact with the sleeve 8. A suitable bearing or washer 14 can be interposed between the top of the post or standard 5, and the lower end of the sleeve 8, to facilitate turning of the sleeve and board on said shaft 7.

Keyed or otherwise secured to the shaft 7 above the sleeve 8 is a large ratchet wheel 15. This ratchet wheel at diametrically oppositely disposed points is adapted to be engaged by pivot dogs 16. These dogs 16 are secured by means of pins 17 to outwardly extending arms 18 for swinging movement. The arms 18 are rotatably mounted on the shaft 7 above the ratchet wheel 15 and the toothed ends of the dogs are normally held in engagement with the teeth of the ratchet wheel by springs 19.

The outer ends of the swinging arms 18 are connected to the swinging board 10 adjacent to the outer ends thereof by means of cables, or the like, 20. These cables can have interposed in the length thereof contractile coil springs 21. As shown, the inner ends of the cables 20 are connected to the pins 17, and at their outer ends to handles 22 secured to the board 10. The springs 21 tend to reduce shock, and to also add momentum to the board.

Relatively heavy contractile coil springs 23 are connected to the upper end of the sleeve 8 and to the board 10 on opposite sides of the sleeve. These springs also act as shock absorbers, and add momentum to the swinging board. These springs 23 also function to normally hold the board in a horizontal position.

In operation of my improved device, persons sit on opposite ends of the board in the ordinary manner, and swinging motion is imparted to the board by said persons. Upon downward move-

ment of the board at one end, the cables 20 and the springs 21 will draw the arms 18 toward one another, and in the direction of the downward movement of the board. The pawl or dog 16 on one of the arms will ratchet over the ratchet wheel 15, while the other dog will catch on the teeth of the ratchet wheel and turn the board and sleeve on the shaft 7. As the board returns to its normal position, the dog, which initially ratcheted over the wheel 15, will catch on the teeth of the ratchet wheel, and continue the turning movement of the board. The other dog will ratchet over the wheel. This motion is continued during the tilting or oscillation of the board, and consequently the board is given both an oscillating and a turning movement.

From the foregoing description, it can be seen that I have provided a combination see-saw and merry-go-round, which is of an exceptionally simple and durable character, and which will afford a maximum amount of pleasure to the users thereof.

Changes in details may be made without departing from the spirit or the scope of this invention, but what I claim as new is:

1. A combination merry-go-round and see-saw comprising a stationary vertically disposed shaft, a sleeve rotatably mounted on the shaft, a teeter board rockably mounted on the sleeve intermediate its ends, a ratchet wheel rigidly secured to the shaft, a pair of swinging arms mounted on the shaft, oppositely extending spring-pressed dogs pivotally secured to the outer ends of the arms engaging the teeth of the ratchet wheel, oppositely directed flexible cords connected to the outer ends of the arms and to the board adjacent to the opposite ends thereof, and contractile coil springs interposed in the length of the pull cords.

2. A combination merry-go-round and see-saw comprising a supporting post, a shaft anchored in said post, a sleeve rotatably mounted on the shaft, a teeter board rockably mounted on the sleeve intermediate its ends, relatively heavy contractile coil springs connecting the sleeve to the board on opposite sides of the shaft, a ratchet wheel rigidly secured to the shaft, swinging arms mounted on the shaft and extending radially therefrom, oppositely directed dogs pivotally connected to the outer ends of the arms normally urged into engagement with the teeth of the ratchet wheel, cords connecting the opposite ends of the arms to the board adjacent to the ends thereof, and contractile coil springs interposed in the length of the cords.

3. A combination merry-go-round and see-saw comprising a stationary vertically disposed shaft, a sleeve rotatably mounted on the shaft, a teeter board rockably mounted on the sleeve intermediate its ends, a ratchet wheel rigidly secured in place relative to the teeter board, a pair of swinging arms movable around the ratchet wheel, oppositely extending spring-pressed dogs pivotally secured to the outer ends of the arms engaging the teeth of the ratchet wheel, and oppositely directed flexible cords connected to the outer ends of the arms and to the teeter board adjacent to the opposite ends thereof.

FRED BRAUNSCHWEIG.