Sept. 2, 1947. J. ERCOLANI 2,426,675

TOY

Filed Aug. 8, 1944

Fig.1.

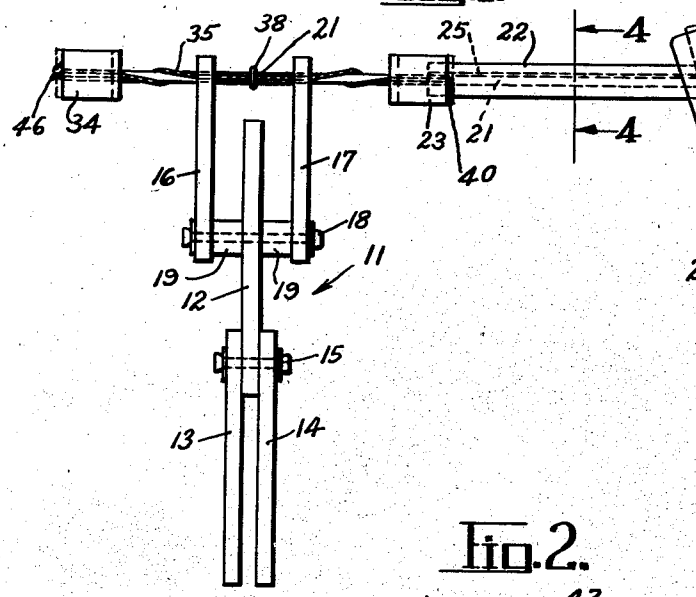


Fig.4.

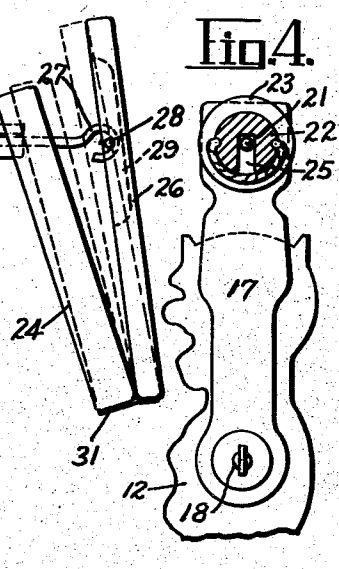


Fig.2.

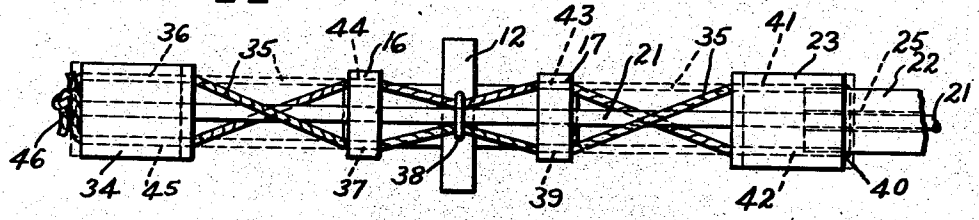


Fig.3.

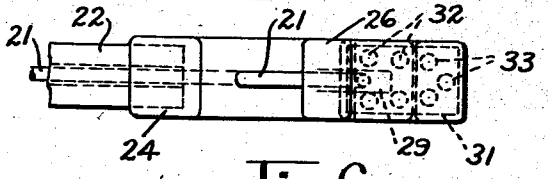


Fig.5.

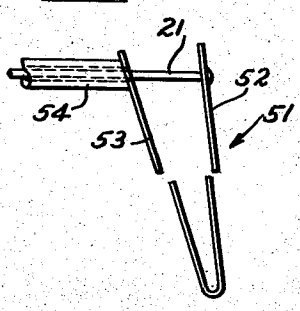
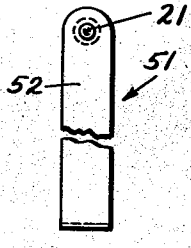


Fig.6.



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TOY

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3 Claims. (Cl. 46—133)

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This invention relates to toys and more particularly to that class of toys generally known as figure toys or jumping jacks and wherein the figure is made to assume various acrobatic positions by manual manipulation of the toy.

The toy of this invention is particularly useful for the amusement of young children, being easily manipulated, and being safe for use, and especially by children who are of an age when they are first beginning to use their hands for grasping articles.

One of the objects of this invention is to provide a toy of the above nature having novel and easily manipulated means to actuate it in its structure.

Another object is to provide in such a toy novel supporting means whereby it will be particularly safe in operation.

A further object is to provide in a toy of the above nature operating means requiring only the pressure developed when closing the hand to actuate it.

A still further object of this invention is to provide an improved toy of the above nature which will be relatively simple in construction, inexpensive to manufacture, readily and safely manipulated, compact, and very efficient and durable in use.

With these and other objects in view, which will appear as the description proceeds, there have been illustrated in the accompanying drawings a preferred and modified form in which the features and principles of this invention may be embodied in practice, it being understood that various changes may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings:

Figure 1 is a side elevational view of a toy embodying the features and principles of this invention in its structure;

Figure 2 is an enlarged partial top view of the toy;

Figure 3 is an enlarged bottom view of the toy parts not shown in Figure 2;

Figure 4 is an enlarged sectional view taken on the line 4—4 of Figure 1;

Figure 5 is a broken side view of a modified form of operating means; and

Figure 6 is a broken end view of the operating means illustrated in Figure 5.

Referring now to the drawings, wherein like reference numerals designate like parts throughout the several views, the numeral 11 denotes a figure, which may be of amusing nature, com-

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posed of a body 12, a pair of legs 13 and 14, which are pivoted to swing upon a pivot pin 15, and a pair of arms 16 and 17, each of which is pivoted at its lower end to the body 11 by a common pivot pin 18. Each arm is spaced from the body 11 by a sleeve 19. The upper end of each arm is pivoted upon a rod 21 to be supported thereby and about which the entire figure may rotate. The rod 21 constitutes one of the operating members of the toy.

The rod 21 is supported by a handle member comprising an elongated grooved member 22 having a cylindrical member, or button, 23 secured to one of its ends and a hand engageable portion 24 secured to the other end of the member 22 and extending at an obtuse angle to the axis of the member 22 and of the rod 21. The rod 21 extends through the cylindrical member 22, in and along a groove 25 provided in the member 22, and through the upper end of the portion 24. In this structure the rod 21 is supported at each end of the handle member, and intermediate these supported points, is covered by lying within the groove 25 in the member 22.

The rod 21 extends without and beyond the hand engageable portion 24 and is pivotally secured to another hand engageable part 26 by having its end formed into a hook 27 which is hooked over a pin 28 extending crosswise through the part 26. The part 26 is grooved, as at 29, to freely receive the hook end 27. The lower ends of the hand engageable portion 24 and the part 26 are hinged together, for instance, by a strip of leather 31 tacked, or otherwise secured, to these ends, by tacks 32 and 33 respectively.

The other end of the rod 21 passes through and is secured in a cylindrical member, or button, 34. The spaced apart arms 16 and 17 of the figure are disposed on the rod 21 substantially midway between the member 23 and the member 34. A cord 35 is threaded through an opening 36 provided in the member 34, then obliquely disposed across and over the rod 21 to and threaded through an opening 37 provided in the arm 16. From the opening 37 the cord passes through one end of a loop member 38 and is then threaded through an opening 39 provided in the arm 17. The cord 35 is then obliquely disposed across and over the rod 21 to and threaded through an opening 41 in the member 23. The cord 35 is then wrapped, as at 40, downwardly and around the adjacent end of the cylindrical member 22 and threaded through an opening 42 provided in the member 23. From the opening 42 the cord 35 obliquely crosses the rod 21 in under the same

and is threaded through an opening 43 in the arm 17. From the opening 43 the cord passes through the other end of the loop member 38 and is then threaded through an opening 44 provided in the arm 16. From the opening 44 the cord obliquely crosses in under the rod 21 and is threaded through an opening 45 provided in the member 34. The cord ends outside of the member 34 tied together in a knot 46.

The openings 36, 44, 43, and 41 in the member 34, arm 16, arm 17, and member 23 respectively are all spaced from one side of the rod 21 and their axes are in alignment and parallel to the axis of said rod. The openings 45, 37, 39, and 42, in the member 34, arm 16, arm 17, and member 23 respectively are all spaced from the other side of the rod 21 and their axes are in alignment with and parallel to the axis of the rod 21 and with the axes of the openings 36, 44, 43 and 41.

The figure 11 may be made to assume various acrobatic positions and to swing about the rod 21 by compressing together the hand engageable portion 24 and the hand engageable part 26 (see dotted lines in Figure 1). The compressing together of the portion 24 and the part 26 separates the members 23 and 34 whereby the cord 35 is untwisted to assume an uncrossed position (see dotted lines in Figure 2) in respect to the rod 21 and by so doing rotates the arms 16 and 17 upon the rod 21. Being pivoted to the arms 16 and 17, the body 12 swings on the pivot pin 18 and the legs 13 and 14 swing on the pivot pin 15. In the structure illustrated the amount of movement of the portion 24 and the part 26 toward each other is substantially equal to the amount of movement of the members 23 and 34 away from each other. The actuation of the device is easy to accomplish as the portion 24 and the part 26 are grasped by the hand of the user and require but relatively slight pressure by the closing of the hand to cause the cord to become untwisted to move the figure as above described.

By the provision of the elongated rod supporting handle member constituted by the member 23, cylindrical member 22 and hand engageable portion 24, the figure 11 is supported a sufficient distance from the hand of the user to avoid the possibility of it striking said hand whereby the toy is safe to be used by young children. By looping the cord back of the member 23 and around the cylindrical member 22 each strand of the cord 35 will have equal tension thereon. By passing the strands of the cord through a loop member 38 instead of tying them at this point or to the arms, also allows freedom of movement thereof and thus equal tension on each strand is provided. Equal tension on the strands of the cord 35 reduces the possibility of breakage of the cord and thus increases the life of the toy, and also obviates the possibility of the rod 21 being bent and binding in its support, or in the arms 16 and 17, thus requiring more pressure to actuate the toy.

Figures 5 and 6 illustrate modifications in the form of certain parts of the previously described form of device. In place of the two parts 24 and 26 a V-shaped member 51 formed from a metallic strip and having one of its arms 52 secured to the end of the rod 21 and its other arm 53 secured to a tubular member 54, the tubular member 54 being used in place of the cylindrical member 22. Compressing together of the arms 52 and 53 of the V-shaped member 51 will actuate the figure 11 as above described. By spring tensioning the

V-shaped metallic member 51 the cord 35 will be returned to its twisted position should the figure 11 be of insufficient weight to do so.

It will be understood that the novel features and principles of this invention may be embodied in other specific forms without departing from the spirit and essential attributes thereof, and it is therefore desired that the present embodiments be considered in all respects as illustrative, and not restrictive, reference being had to the claims rather than to the foregoing description to indicate the scope of the invention.

Having fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent, is:

1. In a toy of the class described, the combination of outer and inner handle members hingedly connected together at their lower ends and adapted to be pressed together at their upper ends, an elongated member, having a lengthwise groove therein, secured at the upper end of said inner handle member and extending forwardly therefrom, a first button secured to the end of said grooved member, a rod having one end hingedly fastened to the outer handle member adjacent its upper end and extending loosely through said inner handle member, through the groove in said grooved member, and through and beyond said first button, a second button fastened to the outer front end of said rod, a loose jointed figure having a pair of spaced apart elements, through which the rod passes, pivotally hung from said rod intermediate said buttons, each of said figure elements having a hole therethrough at each side of said rod, each of said buttons having a hole extending therethrough at each side of said rod, and a length of cord extending from one button to the other at each side of said rod and passing through the holes therein at the same side of said rod, crossing the rod and passing through holes in said figure elements on the same side of said rod, crossing the rod and passing through the holes in said figure elements at the other side of said rod.

2. In a toy of the class described, the combination of relatively wide outer and inner handle members hinged together at their lower ends and being spaced apart and adapted to be pressed together at their upper ends by the pressure of closing the hand grasping the handle members, an elongated member having a lengthwise opening therein secured at one of its ends to the upper end of the inner handle member and extending forwardly therefrom, a first button secured to the forward end of said elongated member, a rod having one of its ends fastened to the outer handle member adjacent its upper end and extending loosely through said inner handle member, through the opening in said elongated member, and through and beyond the first button, a second button fastened to the outer front end of said rod, a loose jointed figure having a pair of spaced apart elements, through which the rod passes, pivotally hung from said rod intermediate the buttons, each of said figure elements having a hole therethrough at each side of the rod, each of said buttons having a hole extending lengthwise therethrough at each side of the rod, and a length of cord passing through a hole in and extending from one button, crossing to the other side of the rod and passing through a hole in each figure element and crossing the rod to a hole in the other button, then passing through a hole

in the latter button, crossing the rod and passing through a hole in each of the figure elements and crossing the rod to a hole in the other button, said cord being looped about the outer end of one button and having its ends brought together and tied about the outer end of the other button.

3. In a toy of the class described, the combination of a relatively wide outer and inner handle members fastened together at their lower ends and being spaced apart and adapted to be pressed together at their upper ends by the pressure of closing the hand grasping the handle members, an elongated member having a lengthwise opening therein secured at one of its ends to the upper end of the inner handle member and extending forwardly therefrom, a first button secured to the forward end of said elongated member, a rod having one of its ends fastened to the outer handle member adjacent its upper end and extending loosely through said inner handle member, through the opening in said elongated member, and through and beyond the first button, a second button fastened to the outer front end of said rod, a loose jointed figure having a pair of spaced apart elements, through

which the rod passes, pivotally hung from said rod intermediate the buttons, each of said figure elements having a hole therethrough at each side of the rod, each of said buttons having a hole extending lengthwise therethrough at each side of the rod, and a length of cord extending from one button to the other at each side of said rod and passing through the holes therein at the same side of said rod, crossing the rod and passing through the holes in said figure elements at the other side of said rod, and a ring encircling the cord lengths and the rod at a point intermediate said figure elements.

JOHN ERCOLANI.

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