

Aug. 4, 1931.

S. L. LONG

1,817,751

TOY

Filed Jan. 13, 1930

Fig-1

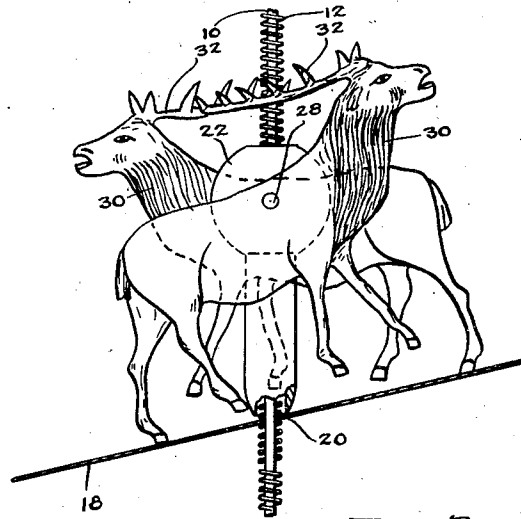
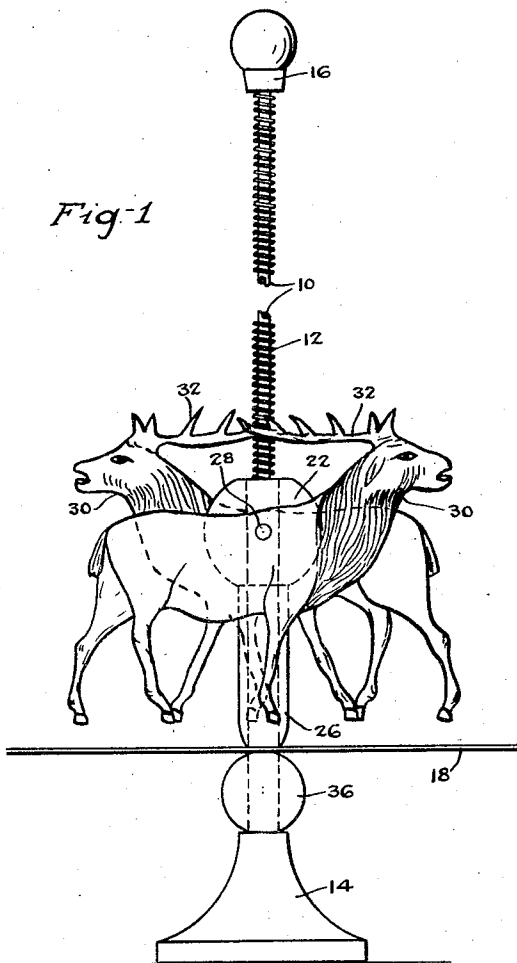


Fig-2

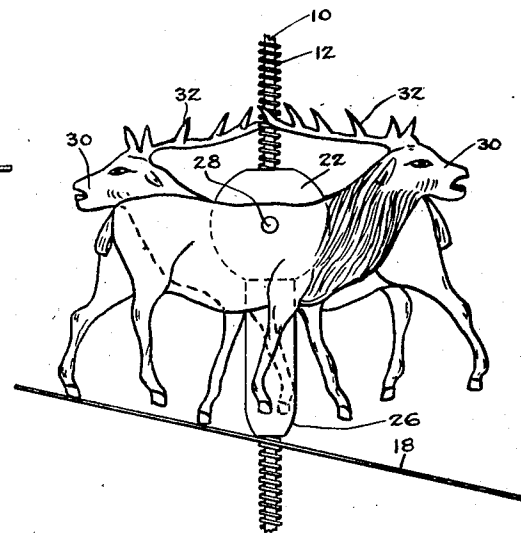


Fig-3

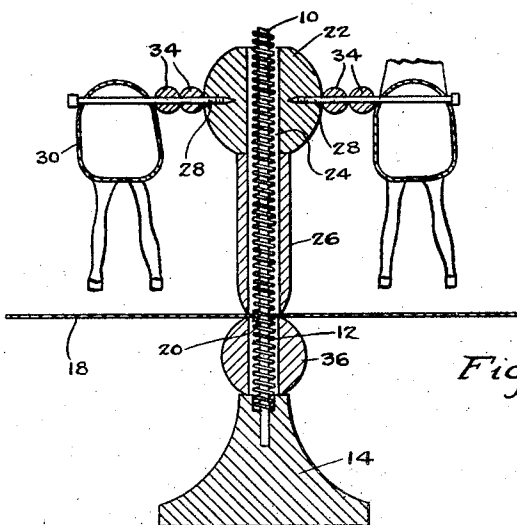


Fig-4

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TOY

Application filed January 13, 1930. Serial No. 420,438.

My invention relates to toys, and an object in general is to provide a device which while of a comparatively simple and inexpensive nature, is of an extremely amusing and attractive character. An object in particular is to provide a device of this kind having two members so related to each other that when the device is in operation, one of the members has a movement which imparts lifelike movement to toy figures carried by the other member. In carrying out my invention, I provide a standard upon which two riders are mounted, one in spaced relation above the other, the device being so constructed and arranged that a wobbling or combined oscillating and rotating motion is imparted to the lower rider and this wobbling motion in turn imparts movement to toy figures carried by the upper rider so that these toy figures are given a galloping, running, dancing, or other lifelike movement on account of the feet thereof being struck in succession by the lower rider while going through its compound movement.

The full objects and advantages of my invention will appear in connection with the detailed description thereof, and the novel features of my inventive idea will be particularly pointed out in the claims.

In the accompanying drawings which illustrate my invention in one of the forms in which it may be embodied,—Fig. 1 is an elevational view of the device with a small portion shown in vertical section. Fig. 2 is a fragmentary elevational view showing one position assumed by the riders and toy figures. Fig. 3 is a fragmentary elevational view showing another position assumed by the riders and toy figures. Fig. 4 is a view in vertical section of the lower portion of the support with the riders thereon in the position which they assume when at the lower end of their travel along the support.

As shown in the drawings, I provide a support or standard 10 in the form of a rod which is surrounded by a helix which may be produced in any suitable manner. In the embodiment herein illustrated, this helix is in the form of a coiled wire 12, the lower end of which is secured to a base

member 14 by which the standard 10 is supported. A ball 16 is placed on the upper end of the standard and engages the upper end of the coiled wire 12. A primary rider which is in the form of a disk 18 is mounted on the standard 10, this rider being constructed of any suitable sheet material. This rider has a central hole 20, the diameter of which is slightly less than that of the diameter of the helix 12 but is slightly greater than that of the standard 10 whereby the rider moves freely with relation to the standard considered per se and hence may have an oscillating movement but at the same time is restrained by the convolutions of the helix so as to be thereby given a rotating movement as it moves downwardly by gravity. The sheet material of the rider is thinner than the distance between adjacent convolutions of the helix with the result that when the rider is disposed at the upper end of the standard, it will work its way downwardly by gravity with a combined oscillating and rotating motion which may be defined as a wobbling movement consisting of two components, one of which is an up and down swinging movement occurring at diametrically opposite sides of the standard progressively around the same and the other of which is a rotating movement around the axis of the standard. Above the rider 18, there is a secondary rider 22 containing a hole 24, the diameter of which is greater than that of the helix so that this rider may slide freely along the helix. Operating means is placed between the two riders whereby the motion of the primary rider imparts motion of a different character to the secondary rider. In the form herein shown, the operating means consists of a spacer element 26 in the form of a tube which is rounded on the lower end and flat on the upper end, this tube containing a hole of sufficient size to permit the tube to slide along the helix. The secondary rider 22 as herein shown is in the form of a hub or central member having a plurality of pivot members 28 extending out therefrom. In the embodiment shown, there are two of the pivot

members 28 extending out horizontally from diametrically opposite sides of the rider 22, but it will be understood that the number of pivot members may be increased without changing the character of the invention. Toy figures 30 are supported on the pivot members 28 for rocking or swinging movement, the pivoting place of the figures being such that the figures will normally assume substantially the natural position which they have when standing in repose and with legs disposed appreciable distances from each other on opposite sides of a vertical line passing through the pivot point. As shown herein, the toy figures are in the form of reindeer having horns 32, but it will be understood that the particular shape or form given to the figures is no part of the invention and that the same may be varied as desired. As shown in Fig. 4, the outer ends of the pivot members 28 are provided with heads which retain the figures pivotally mounted while beads 34 are placed between the hub 22 and the figures to space the latter the proper distance from the center of rotation. When the rider 18 has reached the lower end of its travel, it comes to rest upon a bead 36 which is freely movable on the helix and is shown resting upon the base member 14. Upon grasping the bead 36, the riders may be quickly slid to the upper end of the standard, it being understood that when sufficient force is applied, the rider 18 will slide over the helix 12.

The operation of the toy will be understood from the foregoing description especially in connection with Figs. 2 and 3. It will be noted that at least some of the feet of the toy figures are always spaced from the rider since the distance between this rider 18 and the pivot is greater than the average distance between the feet and a horizontal plane passing through the pivot. Therefore, when the rider 18 is working its way downwardly, the oscillating movement thereof will cause different feet of the toy figure to be struck and lifted successively by the rider so that the figures are given a swinging movement as will be apparent from the two positions shown in Figs. 2 and 3. The sound produced by the rider striking the feet will simulate the sound produced by galloping or other movement and will add to the attractiveness of the toy.

I claim:

1. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof with a compound motion, an upper rider mounted on said helix, spacer means between said riders whereby said upper rider is supported above said lower rider, pivot members carried by said upper rider, and objects mounted on said pivot members, said objects having projec-

tions so disposed as to be struck successively by said lower rider to thereby give a swinging motion to said objects.

2. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof with a combined oscillating and rotating motion, an upper rider mounted on said helix, spacer means between said riders whereby said upper rider is supported above said lower rider, pivot members extending out from said upper rider, and objects mounted on said pivot members, said objects having projections so disposed as to be struck successively by said lower rider to thereby give a swinging motion to said objects.

3. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof in a combined oscillating and rotating motion, an upper rider mounted on said helix, spacer means between said riders actuated by the motion of said lower rider to cause said upper rider to rotate, pivot members extending out horizontally from said upper rider, and toy figures provided with feet and mounted on said pivot members in such manner that the distance between the lower rider and the pivot is greater than the average distance between the feet and a horizontal plane passing through the pivot.

4. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof with a combined oscillating and rotating movement, an upper rider loosely mounted on said helix, spacer means between said riders actuated by the motion of said lower rider to cause said upper rider to rotate, horizontal pivot members extending out radially from said upper rider, and toy figures provided with feet and mounted on said pivot members with said feet so disposed as to be struck successively by said lower rider to thereby give a swinging motion to said figures in a vertical plane.

5. A toy comprising a standard surrounded by a helix, a lower rider mounted on said helix and adapted to gravitate from top to bottom thereof with a combined oscillating and rotating movement, an upper rider loosely mounted on said helix and caused to rotate by said lower rider, horizontal pivot members extending out from said upper rider, and toy figures provided with feet and mounted on said pivot members with said feet disposed appreciable distances from each other on opposite sides of a vertical line passing through the pivot point so as to be struck successively by said lower rider to thereby give a swinging motion to said figures in a vertical plane.

6. A toy comprising a standard surround-

ed by a helix, a lower rider mounted on said
helix and adapted to gravitate from top to
bottom thereof with a combined oscillating
and rotating movement, an upper rider
5 loosely mounted on said helix, a tube loosely
mounted on said helix between said riders,
said tube having a rounded lower end
for engagement with the upper surface
of said lower rider and having a flat upper
10 end for engagement by said upper rider
whereby a rotating motion is imparted to
said upper rider by the movement of said
lower rider, horizontal pivot members ex-
tending out from said upper rider, and toy
15 figures provided with feet and mounted on
said pivot members with said feet so dis-
posed as to be struck successively by said
lower rider to thereby give a swinging mo-
tion to said figures.
20 In testimony whereof I hereunto affix my
signature.

SIDNEY L. LONG.

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