May 31, 1932. W. I. RAVERT 1,860,476

WALKING TOY

Filed May 14, 1931 2 Sheets-Sheet 1

Fig. 1.

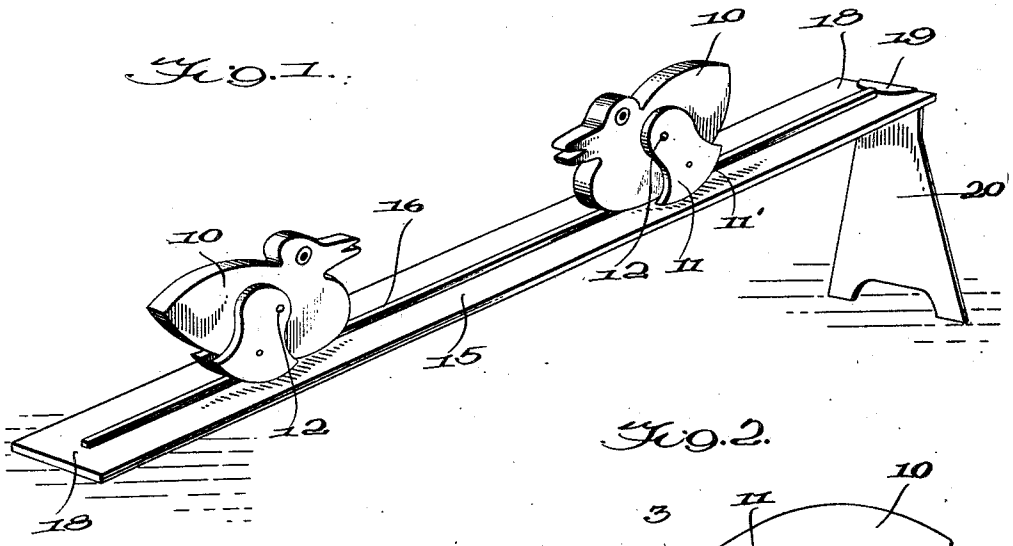


Fig. 2.

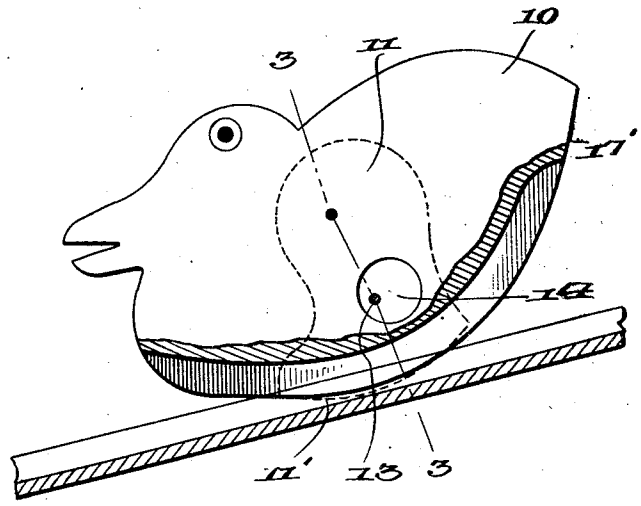
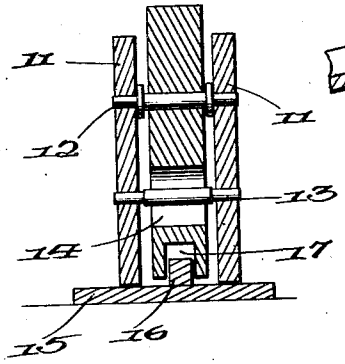


Fig. 3.



Inventor

William I. Ravert,

By Cushman Bryant & Darby

Attorneys

May 31, 1932. W. I. RAVERT 1,860,476

WALKING TOY

Filed May 14, 1931 2 Sheets-Sheet 2

Fig. 4.

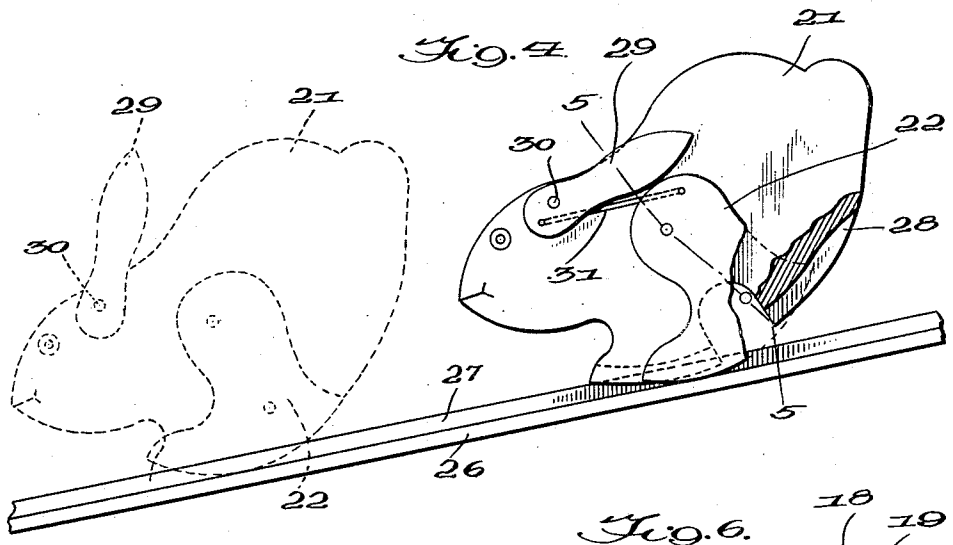


Fig. 5.

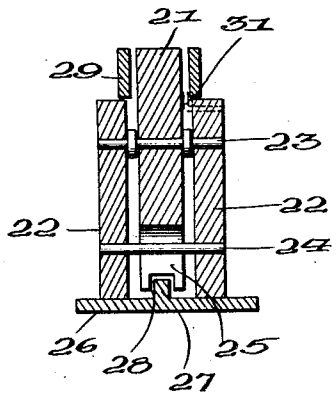


Fig. 6.

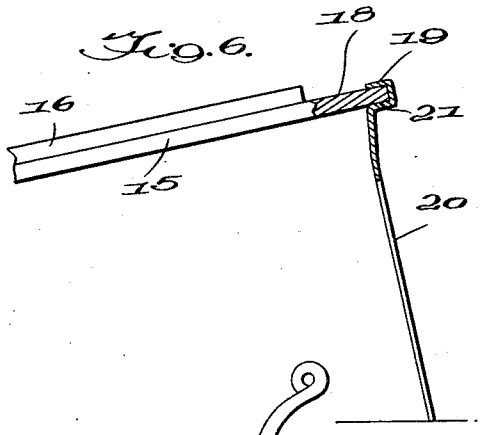
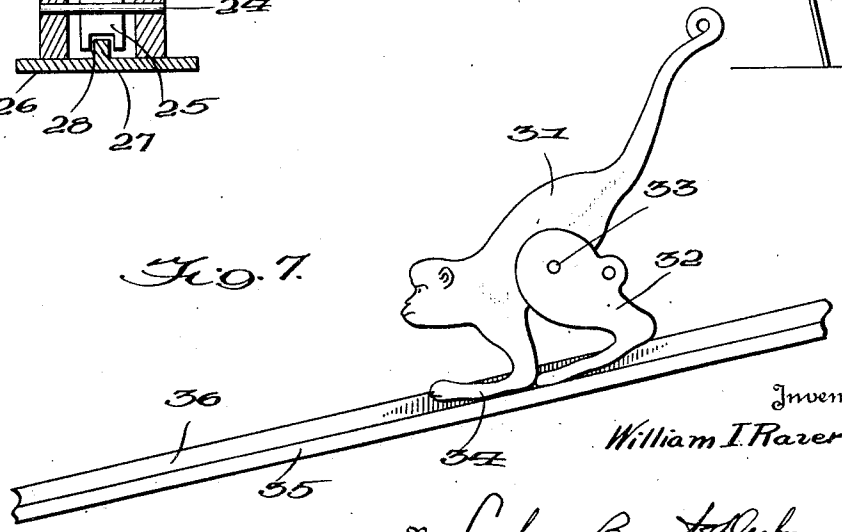


Fig. 7.



Inventor

William I. Ravert,

By Cushman Bryant & Darby

Attorneys

Patented May 31, 1932 1,860,476

UNITED STATES PATENT OFFICE

WILLIAM I. RAVERT, OF HAZLETON, PENNSYLVANIA, ASSIGNOR TO A. W. DRAKE MANUFACTURING COMPANY, OF HAZLETON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA

WALKING TOY

Application filed May 14, 1931. Serial No. 537,385.

The present invention relates to improvements in the construction and operation of figure toys, and more especially to that type of toy which automatically walks, jumps, or hops down an inclined track or plane.

Heretofore, the interest and attractiveness of toys of this type has been considerably lessened due to the fact that the toy when placed on an inclined surface has a tendency to move sidewise and unless under constant observation will fall off of the track before it reaches the lower end thereof.

An important object of the present invention is to provide means for guiding or controlling the direction of movement of an animal or figure toy on an inclined track so that once the toy starts down the track, it will travel in a straight or predetermined path without danger of falling off of the track before it reaches the bottom thereof.

Another object comprehends the provision of means for causing the simultaneous actuation of different parts of the animal body so that the toy in its downward movement on the track will simulate the natural or life-like characteristics of the animal depicted by the toy.

A further object consists in providing an inclined track with a guide rib which extends longitudinally of the upper surface thereof and terminates short of each end of the track so as to detachably receive a supporting stand at its raised end.

A further object is to provide a supporting stand for engaging the elevated end of the track, said stand comprising a ground engaging portion and a laterally offset clip for receiving the upper end of the inclined track to maintain it at the desired inclination and also permit parts of the track to be readily assembled or dismantled so that when not in use the track and support may assume a compact form.

Another object is to provide a reversible walking toy with means for guiding it down an inclined surface.

Other objects and advantages of the invention will become apparent from the following description when taken in conjunction with the accompaying claims.

Referring to the drawings in which is shown several embodiments of the invention:

Figure 1 is a perspective view of the invention showing a reversible walking toy being guided in its downward movement on the track.

Figure 2 is an enlarged detail view of Figure 1 with parts in section for the purpose of illustration.

Figure 3 is a sectional view taken substantially along the line 3—3 of Figure 2.

Figure 4 is a side elevation of a modified form of the invention shown in full lines, one position of the parts of the animal body, and in dotted lines a different position of said parts caused by the downward movement of the toy.

Figure 5 is a sectional view taken substantially along the line 5—5 of Figure 4.

Figure 6 is a sectional view of the upper end of the inclined track showing its connection with the supporting stand.

Figure 7 is a detail side elevation of a further modification.

Referring to the drawings in which like numerals indicate like parts in the several views, and more particularly Figure 1, 10 indicates the body of a walking figure toy, which, for convenience of illustration, has been shown as a duck. The body 10 has pivotally connected thereto, the legs 11 by the pin 12 (Figure 3), the swinging movement of the legs being limited by the stop pin 13 which moves in an opening 14 in the body 10 so that when the toy is placed on an inclined surface or track 15, the curved lower end portions 11′ of each leg 11 will coact with the inclined track to impart an oscillating advancing movement to the toy in a manner well known in this art.

In order to prevent the toy from falling off the track 15 before it reaches the bottom thereof, means are provided for insuring the toy moving in a straight or predetermined path down the track, which means consist in providing the upper side of the track 15 with a longitudinally extending guide rib 16 which is preferably positioned medially of the track and arranged to fit into a curved groove

or recess 17 formed in the concave bottom 17′ of the body 10.

While the inclined surface 15 is shown provided with the rib for fitting into the recess formed in the body of the toy, it is obvious that these parts may be interchanged.

The bottom 17′ of the toy body 10 is so curved, and the legs 11 pivoted to the body in such a manner that the toy is reversible in its movement on the track, that is to say, either end of the toy may constitute the front or leading end as clearly shown in the two positions of the toy in Figure 1.

The rib 16 of the inclined track 15 preferably terminates short of each end of the track to provide the smooth portions 18 that are arranged to detachably receive the clip 19 of the supporting stand 20. The supporting stand 20 is preferably stamped from metal and has its upper end bent to form the laterally disposed recess 21′ (Figure 6) which receives the upper end of the track 15 and constitutes the clip 19 by virtue of which the track may be detachably supported in the desired inclined position. The stand 20 is of such a height as to insure the inclination of the track to be such as to effect the proper downward movement of the toy when placed thereon. When not in use the track 15 and stand 20 may readily be dismantled to assume a compact form.

In the modification of the invention illustrated in Figure 4, the body 21 is represented as that of a rabbit, and has its legs 22 pivoted thereto by the pin 23. The swinging movement of the legs 22 are limited by the pin 24 which is positioned in a recess 25 in the lower portion of the body 21. The downward movement of the toy on the track 26 is guided or controlled by the rib 27 which extends from the upper surface of the track and fits into a curved recess or groove 28 in the underside of the body 21. In order that the animal depicted by the toy may have parts thereof simulate the lifelike characteristics of the animal when in motion, the ears 29 are pivoted as at 30 to the body 21 and are operatively connected to the legs 22 by a link 31 so that as the toy moves down the track, the movement of the legs 22 imparts a simultaneous actuation of the ears 29, causing them to swing from the position shown in full lines in Figure 4 to the dotted line position. It will be noted that the connection of the ears 29 to the legs 22 is such that when the legs swing forwardly the ears are raised, which is a characteristic of the movement of these parts of a live rabbit when it runs.

Obviously, any part desired of an animal or figure toy may be arranged to be actuated in the same manner as the ears 29.

In the form of the invention shown in Figure 7, there is illustrated a hopping, leaping or jumping toy in the form of a monkey 31 that has its rear legs 32 pivoted thereto as at 33 and its front legs 34 formed so that when the toy is placed on an inclined track 35, the rear legs 32 swing about their pivot to cause the body and the legs 34 to oscillate so as to impart a hopping or jumping downward movement to the toy. By providing the track 35 with a rib 36, the toy 31 will be guided in its path down the track and thus be prevented from falling off thereof before it reaches the bottom. The rib 36 is of such a height that the upward movement of the front legs 34 will not be sufficient to jump over it, thus insuring the controlling of the toy 31 in its downward movement on the track 35.

It is to be understood that the several forms of the invention shown and described are merely illustrative of different embodiments which the invention may assume, and that such changes may be made thereto as fall within the purview of one skilled in the art without departing from the spirit of the invention and the scope of the appended claims.

I claim:

1. In combination with an inclined track having a guide rib extending from the upper surface thereof, an animal simulating toy arranged to move down the track, said toy including a body provided with a recess arranged to engage said rib, spaced members pivoted to the sides of the body and adapted to coact with the track for imparting an oscillating movement to the toy when mounted on the track.

2. In combination with an inclined track having a medially disposed guide rib in the upper surface thereof, a figure toy arranged to move down the track, said toy including a body having a concave bottom provided with a recess arranged to receive said rib, and a member pivoted to the body and coacting with the track to impart an oscillating advancing movement to the toy.

3. In combination with an inclined track having a medially disposed guide rib extending longitudinally thereof, an animal simulating toy arranged to move down the track, said toy including a body having a curved bottom surface provided with an arcuately disposed recess arranged to receive said rib, a pair of spaced members pivoted to the body and coacting with the track to impart an oscillating advancing movement to the toy.

4. In combination with an inclined track having a rib extending from the upper surface thereof, a reversible walking toy arranged to move down the track, said toy including a body having a curved track engaging portion provided with an arcuately disposed recess, said recess arranged to receive said rib for guiding the toy on the track, a pair of members pivoted to the sides of the body and having curved end portions arranged to engage the track and coact therewith to impart an,

oscillating advancing movement to either end of the toy when positioned on the track.

5. An inclined track for walking toys comprising a flat member having a rib extending longitudinally from the upper surface thereof, a support for one end of the track and means detachably connecting the support to the track.

6. An inclined track for walking toys comprising a flat member having a rib extending longitudinally from the upper surface thereof and terminating short of the ends of said member, a support and means detachably connecting the support to one end of the track.

7. An inclined track for walking toys comprising a flat member having a rib extending longitudinally from the upper surface thereof and terminating short of the ends of said member, and a support having a laterally offset clip arranged to engage one end of said member.

8. In combination with a track having a substantially flat inclined surface, a figure toy arranged to move automatically on the track, said toy having means coacting with the track for imparting an oscillating advancing movement to the toy, and means on the upper surface of the track coacting with complementary means on the toy for directing the path of movement of the toy on the track.

9. In combination with a track having an inclined flat surface, an animal simulating toy arranged to move automatically down the track, means pivoted to the toy coacting with the track for imparting an oscillating advancing movement to the toy, and means on the upper surface of the track and coacting with complementary means on the toy for directing the path of movement of the toy on the track.

10. In combination with a track having an inclined flat surface, an animal simulating toy arranged to move automatically down the track, means pivoted to the toy coacting with the track for imparting an oscillating advancing movement to the toy, means on the upper surface of the track and coacting with complementary means on the toy for directing the path of movement of the toy on the track, movable parts connected to the body, and means simultaneously actuating the parts upon the oscillation of the body during its downward movement.

11. In combination with a track having an inclined flat surface, an animal simulating toy arranged to move automatically down the track, said toy including a body having legs pivoted thereto and coacting with the track to impart an oscillating advancing movement to the toy, ears pivoted to the body, means operatively connecting the ears to the legs whereby to cause their simultaneous actuation upon the movement of the toy, and means on the upper surface of the track coacting with complementary means on the toy for maintaining the toy in a predetermined path in its downward movement on the track.

12. In combination with an inclined track, an animal simulating toy arranged to move down the track, said toy including a body, spaced members pivoted to the body and adapted to coact with the track for imparting an oscillating movement to the toy when mounted on the track, and complemental rib and groove means on the toy and track for guiding the toy along a predetermined path down said track.

13. In combination with an inclined track, an animal simulating toy arranged to move down the track, said toy including a body, spaced legs pivoted to the body and adapted to coact with the track for imparting an oscillating movement to the toy when mounted on the track, complemental rib and groove means on the toy and track for guiding the toy along a predetermined path down said track, a pair of additional body members mounted on the body for movement independently of the body, and means operatively connecting said body members with the legs whereby to cause simultaneous actuation of the body members upon movement of the toy.

14. In combination with an inclined track, a figure toy arranged to move down the track, said toy including a body, a member pivoted to the body and coacting with the track to impart an oscillating advancing movement to the toy, and complemental rib and groove means on the bottom of the toy body and the track to guide the toy along a predetermined path on said track in the course of its oscillating movement.

In testimony whereof I have hereunto set my hand.

WILLIAM I. RAVERT.