Dec. 14, 1937. J. S. RICHARDS 2,102,335

TOY

Filed Feb. 17, 1936

Fig. 1

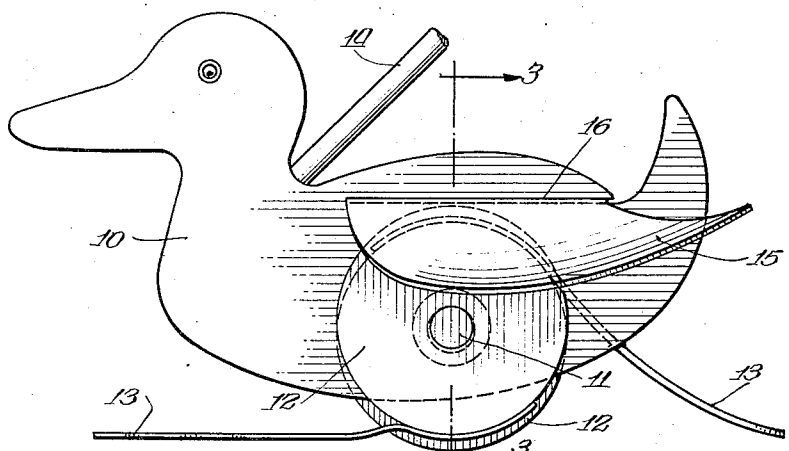


Fig. 2

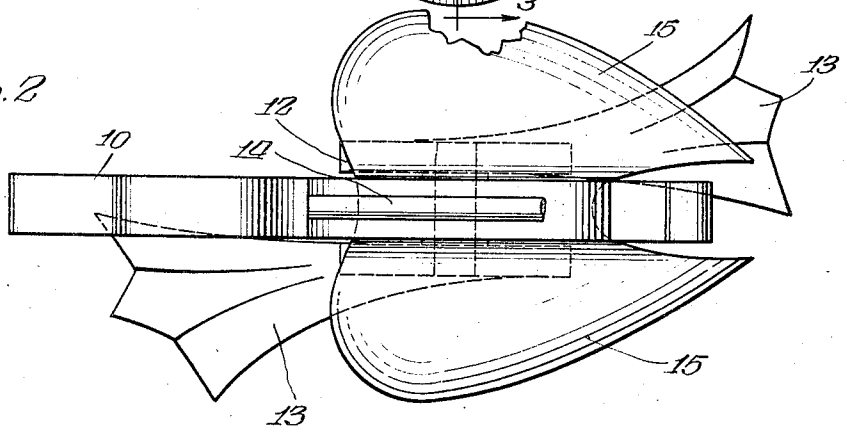


Fig. 3

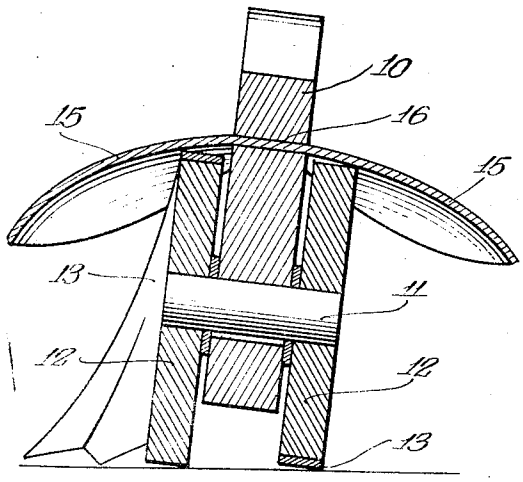
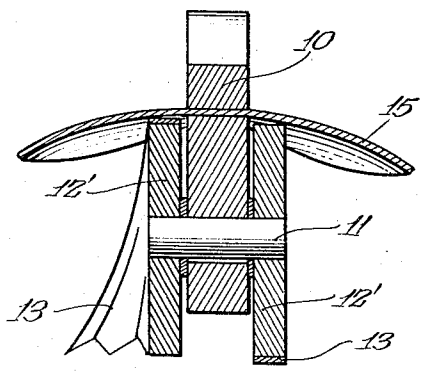


Fig. 4



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UNITED STATES PATENT OFFICE

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TOY

James S. Richards, Cincinnati, Ohio

Application February 17, 1936, Serial No. 64,248

10 Claims. (Cl. 46—104)

The invention relates to improvements in toys and has for its primary object the provision of an improved mechanical toy so constructed and arranged as to have lifelike movements imparted thereto by movement over a floor or the like.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification and in which—

Fig. 1 is a side view of the body of a toy embodying the invention;

Fig. 2 a top plan view of the same;

Fig. 3 an enlarged section taken substantially on line 3—3 of Fig. 1; and

Fig. 4 a smaller view corresponding with Fig. 3, but showing a slightly modified form of construction.

The embodiment of the invention illustrated in Figs. 1, 2 and 3 comprises a body member 10 preferably formed of wood in the outline of a duck or the like as shown. An axle 11, also preferably of wood, is mounted to extend laterally through the lower portion of the body 10 and has wheels 12, also preferably of wood, eccentrically fixed to the ends thereof in opposed relation.

Each of the wheels 12 has a flexible flap 13, preferably of rubber, fixed to the periphery thereof.

Each of the flaps 13 comprises a narrow portion secured to the periphery of the wheel and a broader portion roughly in the outline of the webbed foot of a duck and ornamented accordingly as shown. A suitable handle member 14 is provided by means of which the toy may be propelled over a floor or the like.

As the wheels 12 revolve during such propulsion, the flaps 13 will be periodically thrown forward to rest upon the floor in front of the wheels and thereby will closely represent, from above, the appearance of a duck walking. As will be noted, each flap is secured to its corresponding wheel at the point of the periphery closest to the axle so that at the time the flap is thrown forward that side of the duck body is depressed and the other side elevated, whereby a wobbling motion is imparted to the duck body closely simulating the wobbling motion of an actual duck in walking. It is also to be noted that there is a slight looseness provided in the bearing for the axle 11 in the body member 10, which looseness also tends to accentuate this wobbling motion.

Flexible members 15 are secured to the upper portion of the body member 10 to project laterally from the sides thereof to cover and more or less conceal the wheel members 12 from above. These flexible members are preferably formed, as indicated, from a single sheet of rubber shaped to imitate the partial spread wings of a duck and correspondingly ornamented as indicated. In order to provide convenient means for securing the flexible members 15 in place, the upper portion of the body 10 is provided with a longitudinal slot into which the central portion of the flexible members is inserted and properly secured. As will be noted, especially from an examination of Fig. 3, the arrangement is such that as each wheel revolves, its "high spot", or point of the periphery farthest from the center of the axle 11, intermittently contacts with and rubs against the underside of the corresponding wing member 15, thereby imparting a lifelike movement thereto. Also as each flap 13 revolves, its free end is thrown into contact with the corresponding wing member, further imparting lifelike movement thereto. In this manner an attractive and amusing toy for children may be readily constructed from comparatively inexpensive materials. The specific form and arrangement of parts constitutes a simple and effective one for the purpose.

In the modification illustrated in Fig. 4, the wheels 12' are shown as concentrically mounted on the axle 11 and of a size so that the flaps 13 will strike the undersides of the wing members 15 during movements of the toy and thereby impart lifelike movements to the wing members, although not quite so pronounced as is imparted by the eccentricity of the wheels as indicated in Fig. 3. Otherwise the construction is the same as that illustrated in Figs. 1, 2 and 3.

While I have illustrated and described the preferred form of construction for carrying the invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I therefore do not wish to be limited to the precise details disclosed, but desire to avail myself of such variations and modifications as fall within the scope of the appended claims.

I claim:

1. A toy of the class described comprising a body member; movable members projecting from the sides thereof; and wheels on the sides of said body member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto.

2. A toy of the class described comprising a body member; flexible movable members projecting from the sides thereof; and wheels eccentrically mounted on the sides of said body member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto.

3. A toy of the class described comprising a body member; movable members projecting from the sides thereof; wheels on the sides of said body member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto; and flexible flaps on said wheels arranged to be thrown forward periodically as the wheels revolve.

4. A toy of the class described comprising a body member; flexible movable members projecting from the sides thereof; wheels eccentrically mounted on the sides of said body member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto; and flexible flaps on said wheels arranged to be thrown forward periodically as the wheels revolve.

5. A toy of the class described comprising a body member; movable members projecting from the sides thereof; an axle member extending laterally through said body; and wheels fixed to the ends of said axle member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto.

6. A toy of the class described comprising a body member; flexible movable members projecting from the sides thereof; an axle member extending laterally through said body; and wheels eccentrically fixed to the ends of said axle member arranged to contact with and rub against the undersides of said movable members to impart lifelike movements thereto.

7. A toy of the class described comprising a body member; movable members projecting from the sides thereof; an axle member extending laterally through said body; wheels fixed to the ends of said axle member and arranged to contact intermittently with the undersides of said movable members to impart lifelike movements thereto; and flexible flaps on said wheels arranged to be thrown forward periodically as the wheels revolve.

8. A toy of the class described comprising a body member; flexible movable members projecting from the sides thereof; an axle member extending laterally through said body; wheels eccentrically fixed to the ends of said axle member and arranged to contact intermittently with the undersides of said movable members to impart lifelike movements thereto; and flexible flaps on said wheels arranged to be thrown forward periodically as the wheels revolve.

9. A traction element for a toy of the class described comprising a wheel adapted to run upon a surface and having a flexible flap secured thereto and arranged to be thrown forward periodically onto said surface as the wheel revolves.

10. A traction element for a toy of the class described comprising a wheel adapted to run upon a surface and having a flexible flap secured on the periphery thereof and arranged to be thrown forward periodically onto said surface as the wheel revolves.

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