April 7, 1953 B. D. FUERST 2,633,663

FLUENT MATERIAL OPERATED TOY

Filed Nov. 16, 1950

FIG. I.

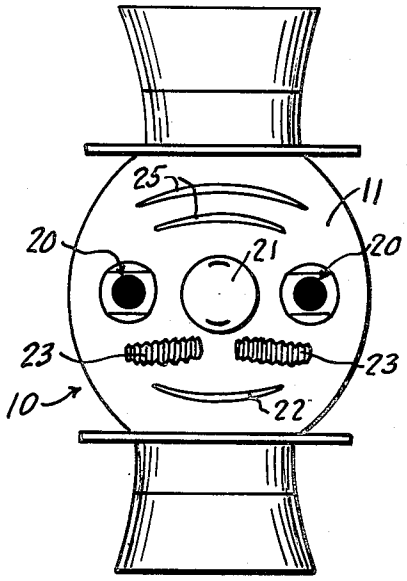


FIG. II.

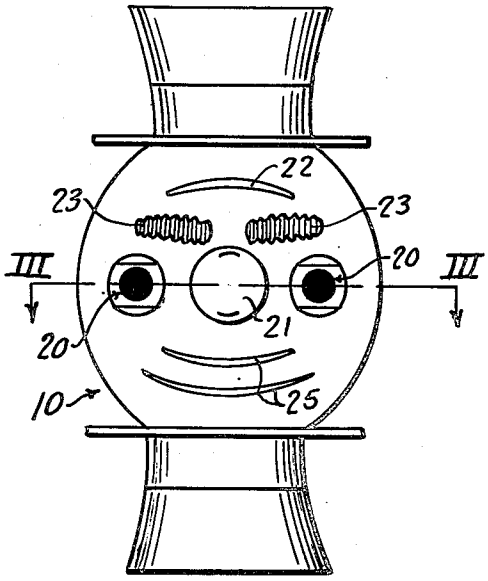


FIG. IV.

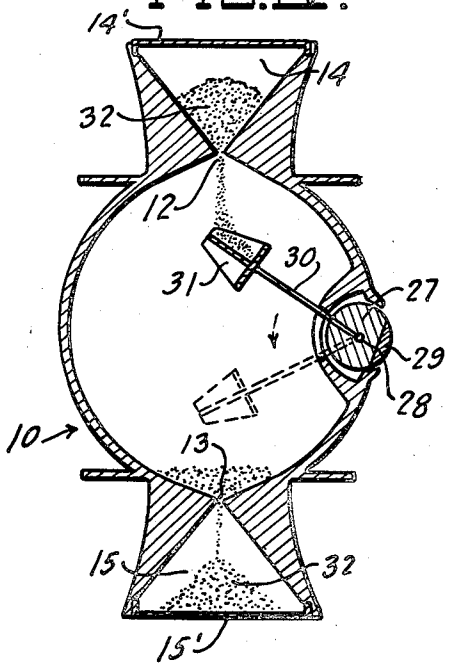
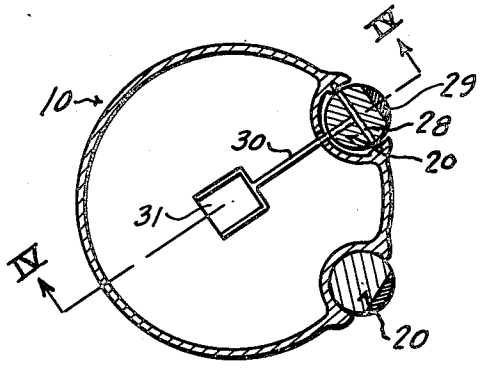


FIG. III



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Patented Apr. 7, 1953 2,633,663

UNITED STATES PATENT OFFICE

2,633,663

FLUENT MATERIAL OPERATED TOY

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Application November 16, 1950, Serial No. 196,029

3 Claims. (Cl. 46—41)

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This invention relates to an advertising device or toy in which an animated object is represented as having a moving part such as a winking eye or the like.

An object of the present invention is to provide a device of the character indicated in which a fluent material is properly confined within the object and arranged to pass by gravity to operate a movable part of the object such as the eyeball of a person and, more specifically, I have in mind the simulation of a person in which fluent material operates a suitable mechanism to simulate the winking of an eye of the person.

A further object of the present invention is to provide a device of the character indicated in which the entire object may be reversed or placed upside down from its original position and the operation of the mechanism will then continue in the reversed position until the actuating material is all transferred from one end of the object to the other.

Further objects and advantages are within the scope of the invention such as relate to the arrangement, operation and function of the related elements of the structure, to various details of construction and to combinations of parts, elements per se, and to economies of manufacture and numerous other features as will be apparent from a consideration of the specification and drawing of a form of the invention, which may be preferred, in which:

Figure I is a front elevation of the device in one position;

Figure II is a similar view with the device located in a reversed position;

Figure III is a section on the line III—III of Figure II; and

Figure IV is a section on the line IV—IV of Figure III, showing the movement in dotted lines.

In the particular embodiment of my invention illustrated herewith, I provide a body portion 10 in the form of a hollow oval-shaped representation of a man's head, the face being indicated at 11. The body 10 as shown in Figure IV is provided with two small openings, one opening 12 connected with a chamber 14 and the other opening 13 connected with a similar chamber 15 at the bottom of the object 10. It will be apparent that the exterior of the chambers 14 and 15 can represent a man's hat, as shown. The body 10 and the hat material may be made of plastic, papier-mâché, wood, metal or other material. Each of the chambers 14 and 15 are sealed at the outer ends by a sealing part 14' and 15'.

The outside surface of the body 10 as shown

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in Figure I may be made to represent a caricature or an exact representation of a person, for example, and may be painted, drawn or otherwise depicted on the body 10 or the same may be stamped thereon in relief or intaglio. In Figure I, it will be seen that the face shown has a pair of eyes 20, a representation of the nose 21, mouth 22 and mustache 23. I have also shown indications at 25 on the forehead of the object so that when the device is reversed as in Figure II these indications 25 will appear as the mouth, while the mustache 23 appears as eyebrows.

Either one or both of the eyes 20 may have a movable ball portion 27 located in a suitable socket, said ball 27 being mounted on pivots 28, and is adapted to oscillate around said pivots in a suitable arc. To this end I also provide a counterweight 29 carried on the outside portion of said ball 27 and an arm 30 fixed to the movable ball 27, the latter having extending in toward the interior of the hollow body 10 at its inner end a double scoop 31, each portion thereof being substantially identical and open in opposite directions with the backs of each scoop together as shown.

In the chamber 14 is located an amount of comminuted material 32 such as sand, small shot, pebbles or the like, or some fluent material such as a suitable liquid, oil or other substance which would be stable and non-injurious to the interior of the object. It will be noted that the flat portions 14' and 15' which close the containers or chambers 14 and 15 also form a flat support for the object in either of its positions shown in Figure I or II.

From the foregoing it will be understood that when in upright position illustrated in Figure I, the sand 32 slowly falls through the opening 12 and on to the upper part of the scoop 31. When the weight of the sand in the scoop 31 overcomes the counterweight 29, the eyeball 27 will move around the pivots 28 to give the effect of a winking eye. When the scoop 31 has moved down to the lower position shown in dotted lines in Figure IV, the sand 32 contained therein will slide off by gravity into the lower part of the hollow part 10 through the small opening 13 and into the lower chamber 15. As soon as the fluent material has slid off the scoop 31 the counterweight 29 returns the eyeball 27 to normal position and the sand or other fluent material 32 again falls by gravity into the scoop 31 and the operation is repeated. Thus, the winking eye will continue to wink until all the fluent material 32 has passed down from the top chamber 14 to the lower chamber 15. An

attendant then reverses the object from its position in Figure I to its position in Figure II and the material 32 will then be in the top, whereupon by gravity it will fall into the scoop 31 now contacting the other side of the scoop and the entire operation will be repeated. As the capacities of the chambers 14 and 15 are made substantially larger than that of the scoop 31, it will be seen that a large number of movements of the eyeball 27 will be accomplished while the device is in one position and before it is turned over. However, if a different type of device were made, it might be that the capacity of the chambers 14 and 15 could be substantially equal to the scoop 31, whereupon the movable part of the object would move only once until it was reversed.

It will be understood that by suitable connections each of the eyeballs could be made to move as well as one only, since a flexible shaft could be connected from one eyeball 27 to the other. Many other adaptations of a movable part to a representation or object could be used and my invention incorporated therein.

Attention is called to the fact that I may provide various types of stops in the specific embodiment of my invention in which a part of the eyeball contacts the eyeball housing to stop the movement of the pivoted lever. At this contacting point, a substance in the form of rubber or the like may be used or, on the other hand, a metallic or other sounding material which would form a distinct audible indication which might be used in some embodiments of the invention.

It is apparent that, within the scope of invention, modifications and different arrangements may be made other than is herein disclosed, and the present disclosure is illustrative merely, the invention comprehending all variations thereof.

What I claim is:

1. In a mechanical device of the class described, a closed body portion having a surface representation of an animated object, said representation being distinguishable both in one position and in a substantially reversed position; an oscillatory part for said representation; a pivot for said part; an inwardly extending arm connected therewith; a scoop member fixed to the inner end of said arm; said scoop member having two oppositely faced open scoops thereon; and a pair of chambers on opposite ends of said body, each having a single unobstructed discharge outlet aligned with said scoop member, each of said outlets arranged both to discharge material to and receive material from said scoop, said chambers adapted to contain an amount of comminuted material arranged to pass through said outlets into the scoop facing the same and to swing said arm from one position to another to move said movable part; means to return said arm to original position, said scoop arranged to transfer said material from one chamber to the opposite chamber through the outlet from said last-mentioned chamber, each of said chambers having a flat end portion adapted to form a base to support said device in either said original position or said reversed position.

2. In a device of the class described, a hollow body portion, the exterior portion having a single fixed representation of an animated object having a face with a movable eye, said single representation being distinguishable in both an original and a reversed position, means whereby said object

may be supported in either of said positions; a chamber on opposite ends of said face portion; a centrally located restricted opening from each chamber into said hollow portion; each end chamber being substantially like the other and each having an exterior configuration of another portion of said object conforming with said face representations; pivots for said movable eye; an arm fixed to said eye, said arm terminating adjacent the center of said hollow body; a pair of transfer scoops on said inner end of said arm, one scoop facing one of said chambers and the other scoop facing the other chamber; a counterweight on said eye opposite said scoops; and an amount of fluent material located in one of said chambers adapted to gravitate through said restricted opening onto the adjacent scoop on said arm until the weight thereof overcomes said counterweight and swings said arm about said eye pivots to transfer said material to the hollow body adjacent the opening at the other side of said body to pass into the opposite chamber and arranged to pass to the other scoop and be returned to the first-mentioned chamber when said object is reversed.

3. In a device of the class described, a hollow body portion, the exterior portion having a single fixed representation of an animated object having a face with a movable eye, said single representation being distinguishable in both an original and a reversed position, means whereby said object may be supported in either of said positions; a chamber on opposite ends of said face portion; a centrally located restricted opening from each chamber into said hollow portion; each end chamber being substantially like the other and each having an exterior configuration of another portion of said object conforming with said face representations; pivots for said movable eye; an arm fixed to said eye, said arm terminating adjacent the center of said hollow body; a pair of transfer scoops on said inner end of said arm, one scoop facing one of said chambers and the other scoop facing the other chamber; a counterweight on said eye opposite said scoops; and an amount of fluent material located in one of said chambers adapted to gravitate through said restricted opening onto the adjacent scoop on said arm until the weight thereof overcomes said counterweight and swings said arm about said eye pivots to transfer said material to the hollow body adjacent the opening at the other side of said body to pass into the opposite chamber and arranged to pass to the other scoop and be returned to the first-mentioned chamber when said object is reversed, the internal contour of the body adjacent the outlets of each chamber arranged to direct said material into said outlet.

BROOKS D. FUERST.

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