April 28, 1964 M. I. GLASS ETAL 3,130,518

MOVABLE FIGURE TOY

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Fig 1

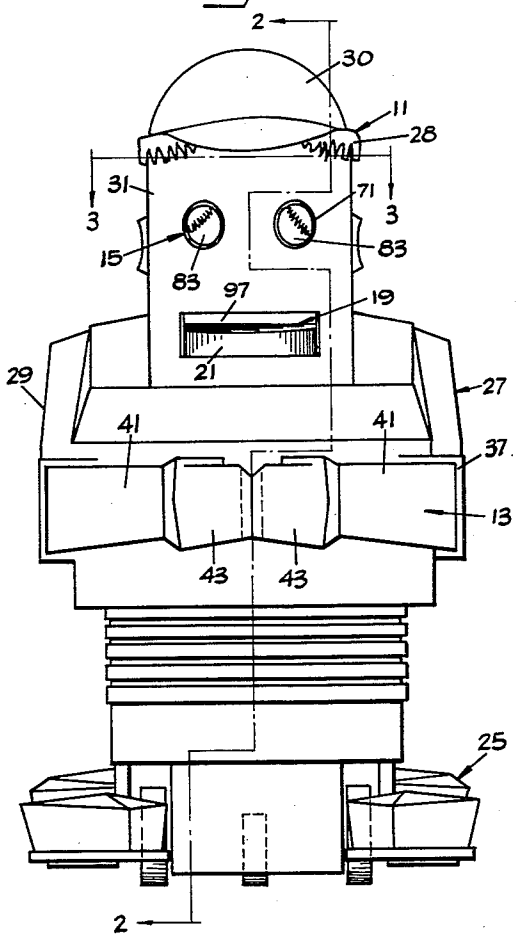


Fig 2

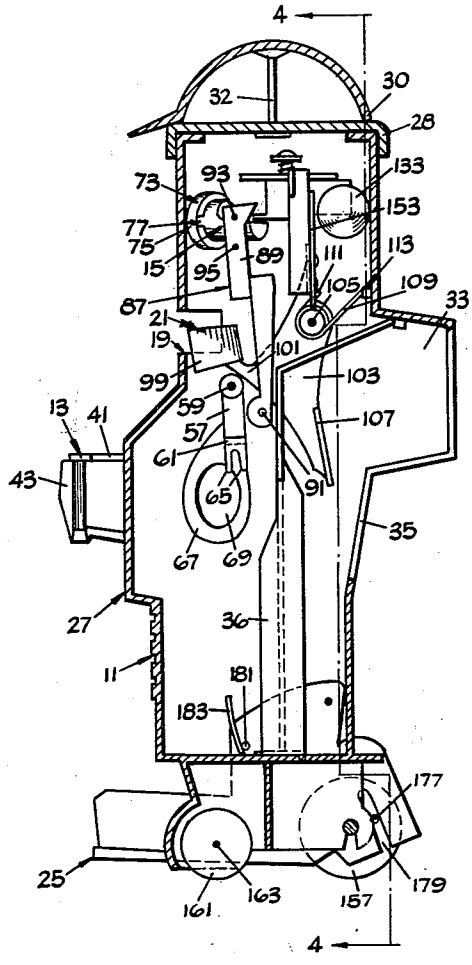
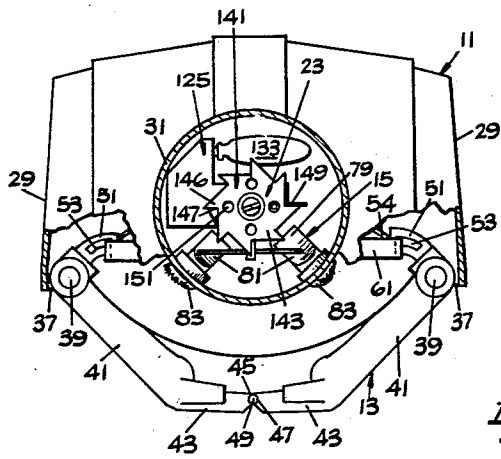


Fig 3



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MOVABLE FIGURE TOY

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Fig 4

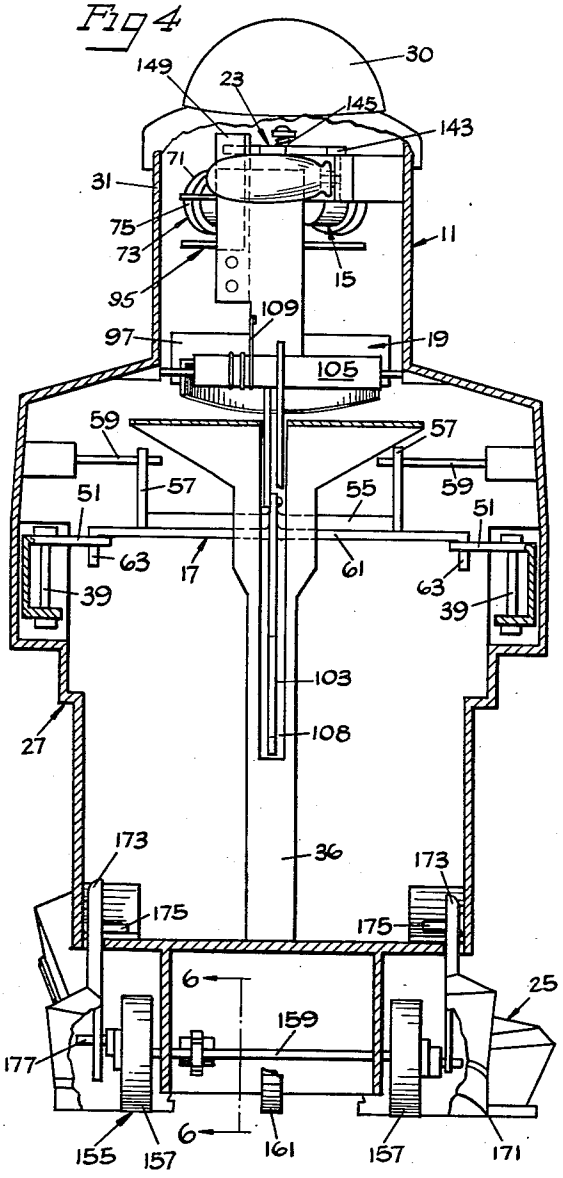


Fig 5

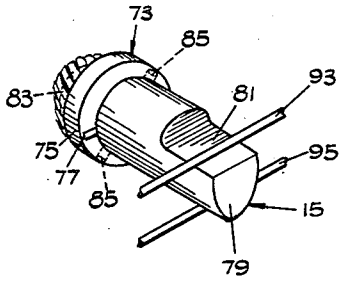


Fig 6

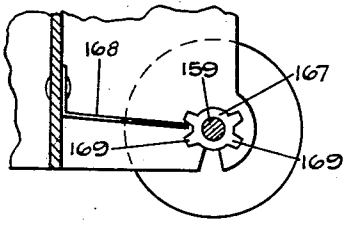
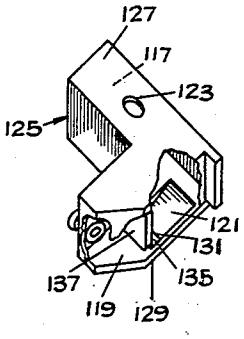


Fig 7



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3,130,518

MOVABLE FIGURE TOY

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3 Claims. (Cl. 46—105)

This invention relates generally to toys, and more particularly to a hand-operated toy figure adapted to perform animated movements.

Toy figures resembling creatures of various sorts have always been a source of fascination to children. In order to initially interest a child and thereafter maintain his attention, such toys should have an attractive appearance and desirably include action features resembling or suggesting well-known human or animal activities.

While some of the previously available toys of this type have included certain action features, these toys have not incorporated a manually operable object-grasping feature, together with a transportation feature as well as other associated features providing related movements of other parts of the figure so as to heighten the action realism of the toy. One particularly desirable associated action feature is a movable eye which is arranged so that the eyes appear to be following the movement of the arms. Another example of a particularly desirable additional activity is an audible utterance feature which is accompanied by suitable jaw movement. Preferably, such utterances include sounds of different pitch which heighten the fascination of the toy by suggesting the conveyance of some message.

Accordingly, the principal object of the invention is to provide a hand-operable toy figure capable of performing animated movements. An additional object of the invention is to provide a toy fiure which can be operated by a child to pick up various objects and transport them, without direct contact between the child and the object, while retaining the "feel" of grasping. Another object of the present invention is to provide a toy figure in which movement of the eyes of the figure is co-ordinated with movement of the arms to provide a highly realistic effect. A further object of the invention is to provide a toy figure which is operable by a child to grasp an object, and which can also be operated to open and close its mouth while at the same time producing audible utterances of different pitches. A still further object of the invention is to provide a toy figure containing a sound-producing means capable of producing audibly different sounds on successive actuations of the means.

Other objects and advantages of the present invention will become apparent with reference to the following description and the accompanying drawings of one embodiment of the invention.

In the drawings:

FIGURE 1 is a front view of a toy figure in accordance with the invention;

FIGURE 2 is a sectional view taken along line 2—2 of FIGURE 1;

FIGURE 3 is a sectional view taken along line 3—3 of FIGURE 1 with parts broken away to show certain of the interior components;

FIGURE 4 is a sectional view taken generally along line 4—4 of FIGURE 2 with certain parts broken away to show certain of the interior components;

FIGURE 5 is a fragmentary view of one of the eyes of the toy figure shown in FIGURE 1;

FIGURE 6 is a fragmentary view of a sound-producing arrangement which operates when the wheels supporting the toy revolve; and

FIGURE 7 is a fragmentary sectional view of a sound-producing arrangement which operates when the jaw of

the toy figure is moved to open and close the figure's mouth.

The toy figure shown in the drawing is adapted to be carried and operated by the hand of a child and comprises a hollow body 11 on which are rotatably mounted a pair of arm members 13. The arm members 13 can be caused to move by the child so as to enable the figure to pick up and carry objects. A pair of eye members 15 are also rotatably mounted on the body 11. Suitable means 17 is provided to move the arm members and the eye members simultaneously so as to effect coordinated movement between them and create the impression that the figure is attentive to what it is picking up.

The body 11 is further provided with an opening 19 which simulates a mouth, and a movable jaw member 21 disposed adjacent this opening and movable so as to open and close the mouth. A sound-producing means 23 is connected with the jaw and is adapted to produce sounds of audibly different pitches on successive openings and closings of the jaw.

Means 25 simulating shoes are mounted on the bottom of the figure and movable so as to simulate the movement of the feet when the figure is pushed in an upright walking position along a supporting surface. Thus, further realism is added to the toy.

More specifically, and with reference to FIGURES 1 and 2, the toy figure shown includes the hollow body 11 which may be formed to resemble various creatures, as for instance, an animal or man. The illustrated figure represents a mechanical robot.

The body 11 comprises a trunk 27, which is somewhat cylindrical in shape, is provided with sides 29 having a somewhat irregular contour, and is shown as being somewhat narrower at the bottom. A cylinder 31 of somewhat smaller diameter is disposed on the top of the trunk 27 to form the head and includes a hair-simulating ring 28 surrounding its upper portion. A cap 30 is rotatably mounted on an upstanding rod 32 and can be rotated to various positions so as to add to the fascination provided by the toy.

The walls of the trunk 27 project outwardly somewhat at the rear of the toy (FIGURE 2) to form a cavity 33 which will accommodate movement of certain of the interior parts, and an opening 35 is provided at the rear of the body 11 to accommodate the hand of the child and permit access to certain of the interior parts which control the animated activity of the toy. A generally vertical support member 36 is disposed within the body 11 to add structural stability to the toy, while also serving as a handle to facilitate carrying. The handle is disposed such that it can be held by the hand of the child while the child is operating various of the internal movable parts of the toy with its thumb or fingers, as will be described in further detail shortly.

The arm members 13 are mounted on the body 11 so as to be free to move in a substantially horizontal plane with the outer ends of the arm members moving toward and away from one another in an arcuate path. More specifically, the arm members 13 extend outwardly from the interior of the body through openings 37 near the forward portion of the trunk and adjacent the sides 29 and are rotatably attached to the trunk 27 by means of substantially vertical hinge pins 39, one of which is suitably mounted within the body 11 adjacent each of the openings 37.

Each of the arm members 13 comprises a hollow tubular forearm 41 of rectangular cross-section, and a hand member 43 which is disposed inwardly at an angle to the longitudinal axis of the forearm 41 to provide an effective grasping action. The forearms 41 and hand members 43 are of such combined length that when the arm members 13 have been moved toward each other a sufficient

distance, the leading edges 45 of the hand members 43 contact one another.

In order that the arm members may be more effective to grasp an object, the leading edges 45 of each of the hand members 43 is provided with a generally vertical elongated recess 47 of semi-circular cross-section, which recesses co-operate with one another when the hands are in contact to form a cylindrical groove 49 (FIGURE 3). Grasping of an object is also enhanced by the fact that the line of contact of the leading edges is somewhat spaced from the front wall of the trunk 27.

Attached to each of the arm members 13 at its inner extremity and adjacent the point where it is hinged to the body 11 is a horizontally extending lever 51 having an arcuate slot 53. Each of the horizontal levers 51 is adapted to be engaged by the arm and eye moving means 17 which will hereinafter be described. A strip of resilient material 54 is disposed adjacent the lever 51 of each arm with one end adapted to be contacted by the lever 51 as it moves with the arm 15. The interaction of the strip 54 and the lever 51 provides a creaking noise as the arms are moved thus adding to the fascination which the toy provides.

The arm and eye moving means 17 comprises a horizontally disposed supporting bar 55 having an upwardly extending bracket 57 fixed to each of its ends. Each of the brackets 57 is pivotally hung on the adjacent inwardly projecting ends of a pair of horizontally disposed circular rods 59. The circular rods 59 are fixed in alignment to each other in the opposite walls of the body 11, thereby defining a horizontal axis about which the supporting bar 55 is free to rotate.

Fixedly attached to the lower surface of the supporting bar 55 is an arm-connecting bar 61, which extends past the ends of the horizontal supporting bar 55 and occupies a position in partially overlying relation to the horizontal levers 51. Depending downwardly from each end of the bar 61 is a bracket 63 which has a pair of spaced apart prongs 65 (FIG. 2), one of which is positioned within the slot 53, while the other prong is positioned outside the slot and adjacent the forward edge of the lever 51. In this manner, the levers 51 and hence the arms 13 will be caused to rock about a vertical axis in response to swinging of the brackets 63 about a horizontal axis.

In order that the arm-connecting bar 61 can be moved by the child so as to move the arms 13, a trigger 67 is attached to the supporting bar 55 and the arm-connecting bar 61. The trigger 67 depends downwardly from the bars 55 and 61 and includes an opening 69 to accommodate one finger of a child's hand. The trigger 67 is thus disposed such that it can be moved by the forefinger of the child when the vertical support 36 is gripped in the hand.

In moving the arms 13 to the closed position for grasping an object, the child moves the trigger 67 in a rearward direction, thus causing the supporting bar 55 and the connecting bar 61 to rock in the counterclockwise direction, as seen in FIGURE 2, about the horizontal axis defined by the rods 59. Rocking movement of the bars 55 and 61 causes related movement of the brackets 63 which are in engagement with the horizontal levers 51, thereby causing the arm members 13 to be rocked about their hinge pins into contact with one another, both arms moving simultaneously through substantially similar paths.

When it is desired to move the arms to the open position, the trigger 67 is moved in a forward direction, thus causing the brackets 63 to rock in a clockwise direction as seen in FIGURE 2 and, by virtue of the interaction of the brackets 63 and horizontal levers 51, causing the arm members to move away from one another into an open position. The amount of force applied to maintain a grasp on a particular item can be varied as necessary to support the item by varying the force with which the trigger is displaced rearwardly. Thus, a child playing with the figure still has the "feel" of grasping an object, even though he does not directly contact the object.

Referring now to the eyes of the figure, the forward wall of the head 31 includes a pair of openings 71 which are adapted to receive a pair of eye sockets 73 which support the eye members 15. The eye sockets 73 can be seen best in FIGURE 2 and comprise a circular ring 75 having an annular groove (not shown) in its inner circumference. A pair of openings 77 are provided in the inner wall of the eye socket 73 and are in communication with the eye socket groove. The openings 77 are disposed diametrically opposite to one another, and serve to permit the eye members 15 to be seated in the socket 73, as will be hereinafter described.

The eye members 15 are seated in the sockets 73 as shown in FIGURE 5. Each of the eye members comprises a generally cylindrical body section 79, the upper rear portion of which is cut away to provide a relatively flat horizontal surface 81. Each of the eye members is provided with a convex forward end surface 83 which is painted or otherwise decorated to resemble an eye partially shielded by an eye-lid (FIGURE 1).

In order that the eye members 15 may be held within the eye socket 73, each eye member is provided with a pair of lugs 85 which protrude from diametrically opposite sides of the body section 79 of the eye member immediately behind the convex end surface 83. The lugs 85 extend at an angle to the flat upper surface 81 at the rear of the eye members, such as for example 30°. After insertion of the lugs 85 into the openings 77, the eye member is then rotated so as to maintain the eye member within the socket ring 75 and to provide a downwardly and outwardly inclined axis of rotation. Once the eye member has been inserted in the socket 73 in this manner, it is free to pivot about the axis defined by the lugs 85 and thus simulate glancing movement of an eye which is both downward and inward as the arms move together.

In order that the eye members may be made to pivot about the axis defined by the lugs 85, and also that this rotation may occur simultaneously with the movement of the arm members 13, the trigger 67 is connected through suitable means 87 for causing pivoted movement of the eyes in co-ordination with movement of the arm members.

The means 87 (FIG. 2) comprises a bracket 89 which is pivotally fixed at its lower end to the trigger 67 by a rivet or similar fastner 91, and extends upwardly approximately midway between; and to a point above, the eye members 15. A rod 93 extends through the bracket 89 such that it is disposed in overlying relation to the flat surfaces 81, of each of the eye members, and a second rod 95 extends through the bracket 93 such that it is disposed in underlying relation to the rearwardly extending portion of each of the eye members (FIG. 3). Accordingly, vertical movement of the rods 93 and 95 is effective to cause pivotal movement of the eye members about the axis defined by the lugs 85.

With reference now to the mouth and sound-producing means, the opening 19, provide in the head 31 to simulate the mouth, can be seen in FIGURES 1, 2, and 4 of the drawing and takes the form of a curved slot 97 which extends across the front and a portion of the sides of the outer surface of the head.

The jaw member 21 is disposed within the body 11 adjacent the mouth opening 19 and is in the form of an inverted cup 99 supported on a forwardly extending arm 101 of a bracket 103. The bracket 103 is rotatably mounted on a horizontally extending hinge pin 105 fixed to the walls of the body 11. The jaw is therefore rotatable about the hinge pin 105 so as to effect opening or closing of the mouth opening 19 when the bracket 103 is moved.

In order that the bracket 103 may be moved by the child so as to open and close the mouth 19, a push plate

107 extends along the rearward edge of the bracket 103, which plate can be pushed with the thumb to close the mouth. An opening 108 is provided in the vertical support 36 to provide clearance for rocking movement of the bracket 103. Thus, when the vertical support 36 is gripped by the child, the jaw 21 may be operated by means of the thumb. It is noted therefore that the arms and eyes of the toy, as well as the jaw, can be operated by the fingers and thumb of the child simultaneously when the supporting member 36 is gripped and the toy is carried or otherwise supported.

The jaw is maintained in a normally open position by a biasing means 109 in the form of a coil spring disposed about the hinge pin 105. One end 111 of the biasing means 109 is supported against a portion of the bracket 103 and the other end 113 engages the rearward wall of the body 11 so as to urge the jaw toward the open position.

To increase the fascination which the toy provides, a sound-producing means 23 adapted to produce audibly different sounds on successive actuations of the means is disposed within the head 31 of the body 11. The sound-producing means is connected to the jaw bracket 103 so as to be actuated by movement of the jaw 21, as will be described shortly.

The sound-producing means 23 comprises a resonating chamber 117 (FIG. 7) connected to an air passageway 119. A wedge 121 having a knife edge 131 is disposed partially within the chamber 117 in adjacent relation to the air passageway 119 and is adapted to cause a vibration of an air column within the resonating chamber 117 when a current of air having a relatively high velocity passes over it. The resonating chamber 117 includes, intermediate its ends, an aperture 123 which is adapted to be selectively opened and closed so as to vary the effective length of the air column and thus vary the frequency at which the air column resonates. Thus, audibly different sounds are produced, depending on whether the aperture is opened or closed.

More specifically, the sound-producing means 23 shown most clearly in FIGURE 7, comprises a hollow L-shaped enclosure 125 having one leg 127 which constitutes the major portion of the resonating chamber 117, and a second leg or base 129 which constitutes the major portion of the air passageway 119 leading to the resonating chamber.

Disposed at one end of the resonating chamber 117 and adjacent to the end of the air passageway 119 is the wedge 121. The wedge forms a portion of a wall of the enclosure 125 and is adapted to cause a vibration of the air column within the resonating chamber 117 when air is passed across its knife edge 131 at a relatively high velocity.

Means are provided for causing air to flow through the air passageway 119 and across the knife edge 131 of the vibratory member. Said means comprises a compressible bulb 133 (FIG. 3) connected to the outer end of the air passageway 119, and a slot 135 located in the wall of the passageway immediately adjacent the edge 131 of the wedge 121. Accordingly, when the bulb 133 is collapsed, air will pass from the bulb, through the air passageway 119, across the edge 131 of the wedge 121, and through the slot 135. The passage of air across the knife edge of the wedge 121 causes the air column to vibrate.

To insure that the air will have sufficient velocity to cause a substantial vibration of the air column, the air passageway 119 is considerably restricted by an internal wall panel 137 immediately adjacent the edge of the slot 135 opposed to edge 131 of the wedge 121. This reduces the cross-sectional area of the air passageway 119. Since the rate of flow of air through the air passageway is the same at both ends of the passageway, and since the quantitative rate of flow is directly proportional to both the cross-sectional area of the passageway and the velocity of air through the passageway, the decrease in cross-sectional area results in a corresponding increase in the velocity of the air.

The effective length of the air column in the resonating chamber can be changed to produce audibly different sounds by suitable means for opening and closing the aperture 123. In the disclosed construction, this means includes a valve means 141.

The valve means 141 comprises a relatively flat disc 143 rotatably mounted on the upper surface of the enclosure 125 on an upstanding pin 145. The particular disc shown in FIGURE 3 is provided with eight teeth 146 which project outwardly from the rim of the disc and define a series of generally right angular notches 147 spaced about the perimeter of the disc. As will be described in further detail shortly, the teeth 146 are adapted to be engaged by a ratchet arm 149 when the device is actuated, thereby rotating the disc 143 approximately 45° upon each engagement by the ratchet arm.

The disc 143 is disposed in overlying relation to the aperture 123 so as to be capable of closing the aperture 123. However, the disc includes four openings 151 which are spaced approximately 90° from one another and are disposed so that one of the openings 151 will align with the aperture 123 of the resonating chamber 117 each time the disc 143 is rotated approximately 90°. Since the disc rotataes only 45° each time it is engaged by the ratchet arm 149, it will be seen that the aperture 123 is opened every other engagement of the ratchet arm with the disc.

In order that the sound-producing means may be actuated upon the opening and closing of the jaw 21 of the figure, the jaw bracket 103 includes an arm part 153 which supports the before mentioned ratchet arm 149 and which extends upwardly for engagement with the compressible bulb 133. The ratchet arm 149 constitutes a spring blade which is biased to the left as seen in FIGURE 3, i.e., toward the disc 143, but is laterally resilient so as to permit side-to-side movement as the ratchet arm 149 is rocked backward and forward by the jaw bracket 103. When the jaw bracket is in its normal position with the jaw 21 in its open position, as shown most clearly in FIGURE 3, the ratchet arm 149 occupies a position within one of the notches 147 of the disc 143.

In the operation of the jaw 21 and actuation of the sound-producing means 23, the push plate 107 of the bracket 103 is moved inwardly, causing the bracket 103 to pivot about the hinge pin 105, thereby moving the jaw 21 to a position closing the mouth opening 19. At the same time, the arm part 153 rocks rearwardly, thereby compressing the bulb 133 and causing a flow of air through the passageway 119 and past the knife edge 131 of the wedge 121. This flow of air causes the air column to vibrate so as to produce an audible sound. The frequency at which the air column resonates and hence the pitch of the resulting audible sound wave depends upon whether the aperture 123 is open or closed, i.e., whether one of the openings 151 in the valve disc 143 is aligned with the aperture 123.

When the ratchet arm 149 is carried rearwardly by the arm part 153 a sufficient distance, it rides off the edge of the particular tooth 146 against which it was engaged and, in view of its biased condition, shifts sideways toward the center of the figure, for engagement in the next notch between the teeth. When pressure on the push plate 107 is subsequently released, and the bracket 103 rocks counterclockwise, as seen in FIGURE 2, by action of the biasing means 107, the ratchet arm 147 is carried in a forward direction, thereby rotating the disc 143 about 45° in the clockwise direction as seen in FIGURE 3. Suitable stops (not shown) may be provided to determine the limiting positions of the ratchet arm 149. Thus, the audible sound is produced during closing of the jaw, while the valve disc 143 is rotated during the subsequent opening movement of the jaw.

Of course, the pitch determining arrangement can be varied in many ways, as for instance, by providing the resonating chamber **117** with a number of apertures of various sizes and at various distances from the vibratory member **121** and by providing the valve disc **143** with a series of apertures which are selectively alignable with the apertures in the resonating chamber.

In order to facilitate movement of the figure, when it is carrying objects or otherwise, a set of wheels **155** is provided at the lower end of the trunk **27** of the body **11**. The set of wheels **155** comprises a pair of relatively large wheels **157** fixedly mounted on a single horizontal axle **159** near the rear of the toy, and a single smaller wheel **161** mounted near the center of an axle **163** disposed near the front of the figure. Both of the axles **159** and **163** are rotatably journaled in the side walls of the figure. The larger wheels **157** are located in indentations provided in the opposite sides of the lower portion of the trunk **27**.

When the toy is pushed along a supporting surface, a clicking sound is produced by a sound-producing means which is shown in FIGURE 6 and which is connected to the axle **159** for operation incident to rotation of the wheels. The sound-producing means comprises a toothed wheel **167** fixed to the axle **159** and a resilient strip **168** fixed to the inner surface of the front wall of the trunk **27** and disposed as to be contacted by the teeth of the wheel **167**. As can be seen in FIGURE 6, the teeth **169** of the wheel are irregularly spaced around the wheel **167** so as to produce a clicking sound, in co-ordination with the walking movement of the foot members **25**, thereby adding to the fascination provided by the toy.

In order that the toy may be caused to create a walking impression, a pair of foot members **25** are provided adjacent the set of wheels **155**. Each of the foot members comprise a hollow body **171** with an inner wall **173** extending upwardly in adjacent relation to one of the wheels **157** and inwardly of the exterior sides of the trunk above the wheel. The inner wall **173** is connected to the trunk **27** near its upper end by means of a pivot pin **175**. The foot member is thus free to pivot about the pin **175**.

The foot members **25** are caused to pivot about the pins **175** by suitable means comprising a cam rod **177** which projects outwardly from the outer side of each of the larger wheels **157** and into engagement with a cam slot **179** provided in the inner wall **173** of each foot body **171** near the heel. The slot **179** is inclined so that its extended axis will pass through the pin **175** about which the associate foot member pivots. When the large wheels rotate, the cam rods **177** move in the respective cam slots **179**, causing each of the foot members **25** to pivot about their respective pivot pins **175**. Since each foot member **29** is formed to resemble a shoe, their movement simulates a walking action. In order to insure that the foot members pivot in substantially one plane, a pin **181** is provided which projects inwardly from the inner wall **173** and engages an arcuate ledge or guide **183** to provide support for the foot member as it pivots. Preferably, the foot members **25** do not move in the same direction at the same time. Hence the cam rods **177** which project outwardly from the side of each of the larger wheels **157** are located about 180° out of alignment. In this manner, when the toe of one of the foot members **25** is moved in an upward direction, the toe of the other member is moving in a downward direction, thereby more effectively simulating a walking movement.

The disclosed toy provides fascination for a child both because of the animated movements which it performs, and also because of the control exercised by the child in grasping and transporting objects. Further, the various operable features of the toy disclosed can be actuated simultaneously by the child so as to add to the realism which the toy provides.

Various of the features of the invention are set forth in the following claims.

What is claimed is:

1. A hand-operated toy figure comprising a hollow body having an opening in a wall thereof to accommodate a hand of a user, an elongated arm member mounted adjacent one of its ends on each of opposite sides of said body for swinging movement about a generally vertical fixed axis, said body having a wall defining a pair of eye openings, an eye member mounted on said body adjacent each of said eye openings for rotation about an inclined axis, each of said eye members being provided with a simulated pupil on a surface visible through said eye opening, and a selectively movable manually operable lever within said body interconnecting said arm members and connected to said eye members to effect controlled swinging movement of said arm members from a position in which said arm members are spread relative to one another to a position i nwhich their outer ends are proximate while concurrently causing pivotal movement of said eye members about their respective axes so as to move said simulated pupils downwardly and toward one another, whereby the figure can be caused to grasp an object by means of said arm members and to move its eyes so as to convey the impression that it is visually following the movement of the arm members toward the object to be grasped.

2. A hand-operated toy figure comprising a hollow body having an opening therein to accomodate a hand of a user, wheel means rotatably mounted at the lower end of said body, a pair of foot members pivotally mounted on said body near the lower end thereof, said foot members being connected to said wheel means so as to be rocked about said pivot when said wheels rotate, said connection being such that said foot members rock generally in opposite directions to one another, an elongated arm member mounted adjacent one of its ends on each of opposite sides of said body for swinging movement about a fixed axis, said body having a wall defining a pair of eye openings, an eye member mounted on said body adjacent each of said eye openings for rotation about an inclined axis, each of said eye members being provided with a simulated pupil on a surface visible through said eye opening, and a selectively movable manually operable lever within said body connected to said arm members and said eye members to effect controlled swinging movement of said arm members from a position in which said arm members are spread relative to one another to a position in which their outer ends are proximate while concurrently causing pivotal movement of said eye members about their respective axes so as to move said simulated pupils downwardly and toward one another, whereby the figure can be caused to grasp an object by means of said arm members and to move its eyes so as to convey the impression that it is visually following the movement of the arm members toward the object to be grasped.

3. A hand-operated toy figure comprising a hollow body having an opening therein to accommodate a hand of a user, an elognated arm member mounted adjacent one of its ends on each of opposite sides of said body for swinging movement about a fixed axis, said body having a wall defining a pair of eye openings, an eye member mounted on said body adjacent each of said eye openings for rotation about an inclined axis, each of said eye members being provided with a simulated pupil on a surface visible through said eye opening, and manually operable means within said body for effecting selective controlled swinging movement of said arm members from a position in which said arm members are spread relative to one another to a position in which their outer ends are proximate while concurrently causing pivotal movement of said eye members about their respective axes so as to move said simulated pupils downwardly and toward one another, whereby the figure can be caused to grasp an object by means of said arm members and to concurrently move its eyes so as to convey the impression that it is visually following the movement of the arm

members toward the object to be grasped, said manually operable means comprising an extension projecting from the inner end of each of said arm members, means engageable with each of said extensions effective to cause swinging movement of said arm members when moved in a predetermined manner, a movable manually-engageable lever connected to said extension-engaging means for effecting movement thereof, a camming surface provided on each of said eye members, and means extending from said manually-engageable lever for engaging the camming surface of each of said eye members to cause movement thereof.

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