

April 26, 1927.

1,625,955

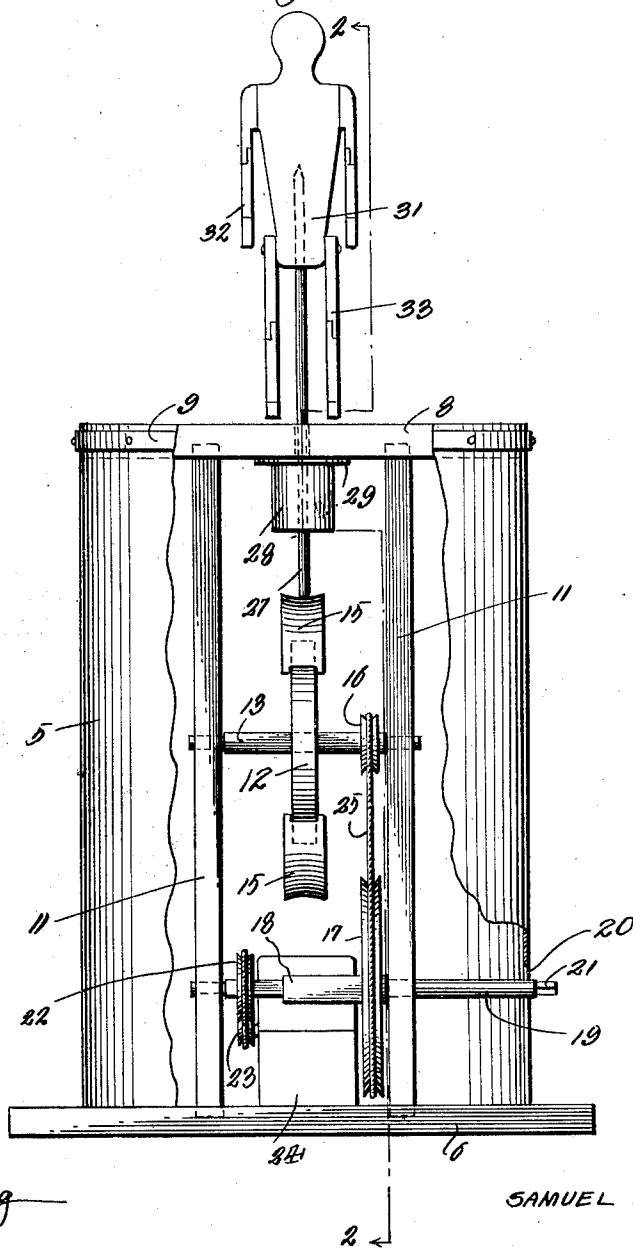
S. M. MOORE

DANCING FIGURE TOY

Filed Dec. 24, 1925

2 Sheets-Sheet 1

Fig. 1.



WITNESSES
Guy M. Shung
E. H. Block.

Inventor
SAMUEL M. MOORE

By *Richard Owen* Attorney

April 26, 1927.

1,625,955

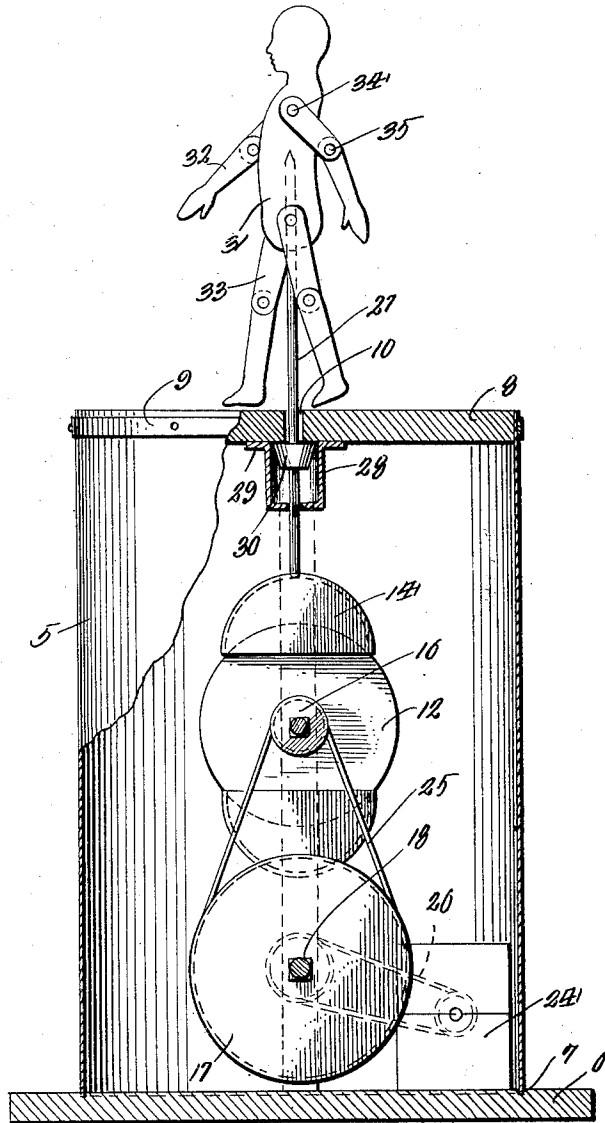
S. M. MOORE

DANCING FIGURE TOY

Filed Dec. 24, 1925

2 Sheets-Sheet 2

Fig. 2.



WITNESSES

Guy M. Spring
Ed. Block

Inventor
SAMUEL M. MOORE

By

Richard C. Owen Attorney

UNITED STATES PATENT OFFICE.

SAMUEL M. MOORE, OF SUMNER, ILLINOIS, ASSIGNOR OF ONE-SIXTH TO WILLIAM J. MOORE, OF SUMNER, ILLINOIS, AND ONE-SIXTH TO ROSIE A. WELTON, ONE-SIXTH TO MARY BLANCHIE MOORE, ONE-SIXTH TO BONNIE R. SAGERS, AND ONE-SIXTH TO BERT SAGERS, ALL OF LAWRENCEVILLE, ILLINOIS.

DANCING FIGURE TOY.

Application filed December 24, 1925. Serial No. 77,598.

This invention relates to improvements in toys and has particular reference to what is commonly termed a figure toy.

An important object of the invention is to provide a toy having means of operation whereby the structure may be actuated in the simulation of a dancing figure.

A further object of the invention is the provision of a toy of the above character which may be very easily actuated and designed to assume amusing positions.

A still further object of the invention is the provision of a toy structure of a simple and durable nature having positive operating means adapted to properly actuate the figure in life like movement.

A still further object of the invention is the provision of a toy of the above character which will be of simple design so as to be manufactured at a comparatively low cost.

Other objects and advantages of the invention will become apparent as the description progresses.

In the accompanying drawings forming a part of this specification and in which like reference characters are employed to designate corresponding parts throughout the same:

Figure 1 is a rear elevation of a toy constructed in accordance with my invention a portion of the structure being broken away to show the interior construction, and

Figure 2 is a vertical sectional view taken on the line 2—2 of Figure 1.

In the drawings, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 5 generally indicates a support casing which is of cylindrical formation and preferably constructed of sheet metal or the like. The lower extremity of this casing rests upon a base plate 6 which may be of rectangular formation and constructed of wood or similar material. The upper side of the base plate 6 is provided with a circular groove 7 in which the lower edge of the casing 5 is firmly seated, so as to retain the casing in a secure vertical position. The upper end of the casing 5 is closed by means of a circular top plate 8 arranged so as to be snugly fitted in the upper end of the

casing and secured firmly thereon by an outer retaining band 9, riveted or otherwise secured to the upper edge of the casing and top plate 8. This top plate is provided at its center with an opening 10, the purpose of which will become apparent as the description progresses.

Mounted in the casing and disposed in parallel spaced positions therein are a pair of frame beams 11 preferably of rectangular cross section having their upper and lower extremities projecting in suitable recesses formed in the base plate 6 and top plate 8 so as to firmly retain the same in position. These beams are arranged to support suitable actuating mechanism, rotatably mounted between the frame beams.

This mechanism embodies an actuating disk 12 secured on the central portion of a transverse shaft 13. This shaft is arranged to extend between the frame beams 11, at approximately the center thereof, the intermediate portion of the shaft being preferably square in cross section while the end extensions are cylindrical for engagement with suitable openings formed in the frame beams to permit rotary movement of the shaft. The disk 12 is firmly secured on the center of the shaft and is rotatable in a vertical plane. Secured upon the peripheral edge of the disk 12 in diametrically opposed positions are a pair of semi-circular cam plates 14, of somewhat wider construction than the disk 12 and provided with arcuate pockets therein. These pockets are arranged to conform to the curvature of the disk so that the cam plates 14 may be firmly positioned upon the periphery thereof, as shown to advantage in the drawings. The cam plates may be secured upon the disk by means of a suitable adhesive, or if necessary retaining pins may be inserted through the overlapping side portions. The arcuate edges of the cam plates are formed to provide radial grooves 15, the purpose of which will be described more specifically hereinafter.

From this construction, it is apparent that a rotary cam member is provided arranged to actuate a follower in reciprocating movement. Secured to the shaft 13 adjacent one end thereof is a comparatively small drive

wheel 16 secured to the shaft and adapted to rotate therewith and arranged in vertical alignment with a comparatively large companion wheel 17 secured upon an auxiliary shaft 18 rotatably mounted adjacent the lower ends of the frame beams. This auxiliary shaft is provided on one end with a longitudinal extension 19 adapted to project through a suitable slot 20 formed in the casing and provided on its end with a non-circular shank 21. Thus, it is apparent, that a conventional type of crank may be detachably mounted on the shank 21 of the shaft 18 for rotation of this member. Although structure is disclosed for the manual operation of the mechanism, it is not intended to restrict the device to this particular operation, as it is contemplated to permit connection of mechanical or electrical operating means.

Firmly mounted on the opposite reduced end of the shaft 18 is an auxiliary wheel 22 arranged in complementary relation with a similar wheel 23 which is carried on an extension shaft of a conventional type of music box 24. With reference to the drawings, it will be noted that the wheels are provided with peripheral grooves so that a drive belt 25 may be trained over the complementary wheels 16 and 17 for simultaneous rotary movement of these members and a second belt 26 trained over the pulleys 22 and 23 for operation of the music box 24. It is thus seen by imparting rotary movement to the extension 19 of the lower shaft 18, the cam member secured upon the upper shaft 13 is rotated, and at the same time, the music box 24 is operated.

In order that a suitable figure may be actuated by the foregoing operating mechanism, a longitudinal rod 27 is slidably mounted through the opening 10 formed in the top plate, guided in vertical movement by a guide casing 28. This guide casing is provided with a flange 29 to permit attachment to the lower side of the top plate and provided with a central opening at its lower closed end through which the rod 27 projects. From this arrangement, it is apparent that the rod 27 will be, by force of gravity, positioned in contact with the cam member and movement of this member will force the rod 27 in reciprocating movement. In order to prevent displacement of the rod 27 during the movement thereof, a collar 30 is secured to the intermediate portion thereof, this collar being readily movable in the casing 28 so as to limit the vertical movement of the rod.

Securely fastened on the upper extremity of the rod 27 is a figure, in the present instance, in the form of a human body, embodying a trunk 31, arms 32, and legs 33. The lower portion of the body 31 is provided with a bore adapted to receive therein

the upper portion of the rod 27 for securely fastening the body in position thereof. The arms 31 are pivotally connected with the body by means of pivot pins 34 and are rendered of a flexible nature by an intermediate pivotal connection 35 in imitation of an elbow joint. The legs 33 are of similar construction being secured to the body in a pivotal manner and pivotally jointed at the knees to permit flexible movement thereof.

In operation, when the lower shaft 18 is rotated by means of a hand crank or other operating mechanism, the cam member embodying the disk 12 and cam plates 14 will be rapidly rotated causing vertical reciprocating movement of the rod 27 and producing a jigger movement of the figure. The particular construction of the legs will cause the lower extremities thereof to contact with the top plate 8 so that a dancing effect is produced. The flexible construction of the arms 32 will cause these members to swing in a loose fashion so that the entire figure structure presents a loosely actuated jiggling or dancing form. Furthermore, during the dancing movement of the figure, the apparatus will operate the music box 24 so as to produce music during the dancing movement of the toy.

It is readily apparent, from the foregoing description and the drawings, that highly simplified and durable figure structure has been devised, constructed with a view of producing an amusing device at a lower manufacturing cost.

It is to be understood that the form of my invention herewith shown and described is to be taken as the preferred example of the same, and that various modifications may be affected, without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A device of the character described comprising a casing, a cam member comprising a circular disk and eccentric projections mounted on the disk secured upon a rotatable transverse shaft, means for rotatably operating the shaft and cam member, a rod movably mounted in the upper portion of the casing arranged to contact with the cam member and reciprocated thereby, and a figure having flexible limb members pivotally secured thereto mounted on the upper end of the rod.

2. A toy of the character described comprising a casing including a base and a top plate, the top plate having an opening, a supporting frame mounted in the casing, a transverse shaft rotatably mounted in the central portion of the frame, a transverse shaft mounted adjacent the lower portion of the frame, a cam member on the upper shaft

including a pair of oppositely disposed eccentric members, complementary drive wheels secured upon the upper and lower shafts connected by a belt, a music box having a laterally extending shaft mounted in the casing, a second drive wheel mounted on the lower shaft and arranged to connect with a wheel on the music box shaft, means for rotatably operating the shafts, a vertically movable rod extending through the top plate of the casing, guide means associated with the rod to limit the reciprocating movement thereof, the lower end of the rod being arranged in contact with the cam and reciprocated thereby, and a figure in the form of a human body mounted on the upper end of the rod having flexibly connected

arms and legs to simulate dancing movement.

3. In a dancing figure toy comprising a casing, figure operating mechanism including a circular disk secured in vertical position on a transverse rotary shaft, eccentric members detachably engageable with the disk, means for rotatably operating the said shaft, a rod mounted for vertical reciprocating movement in the upper portion of the casing, and a figure secured to the upper end of the rod having flexible limb members pivotally secured thereto.

In testimony whereof I affix my signature.

SAMUEL M. MOORE.