

Nov. 20, 1923.

J. K. HODDINOTT

1,474,589

TOY

Filed Dec. 5, 1921

2 Sheets-Sheet 1

Fig. 1.

Fig. 2.

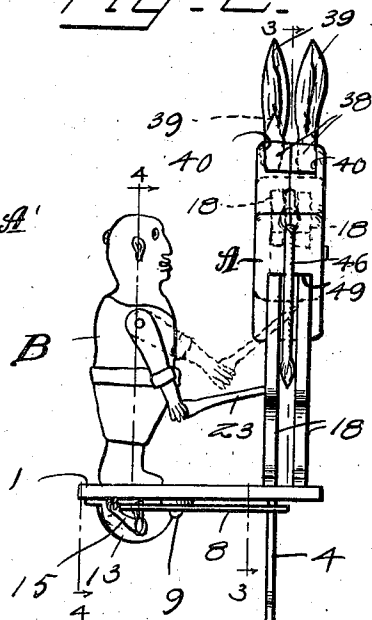
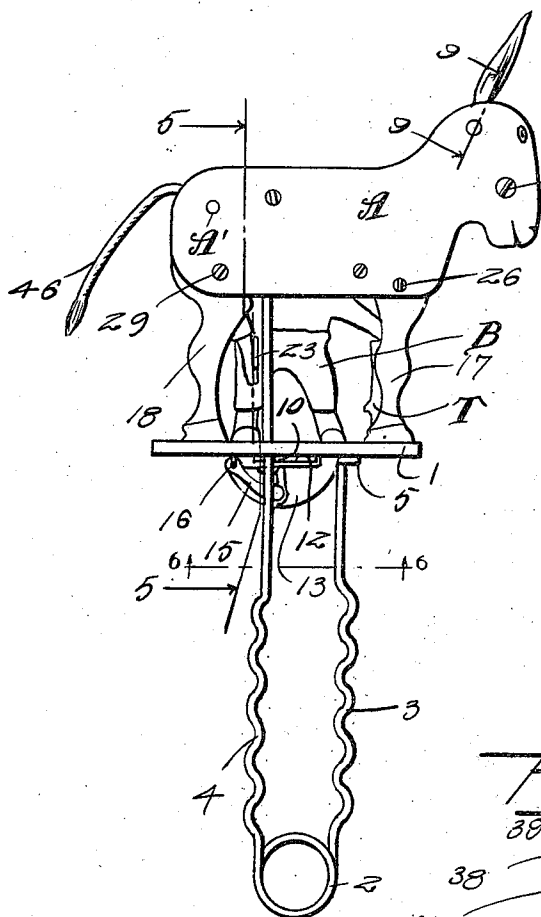


Fig. 6.

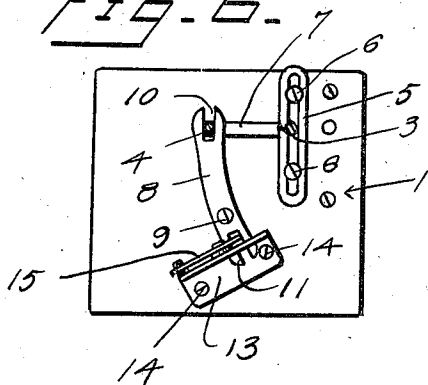
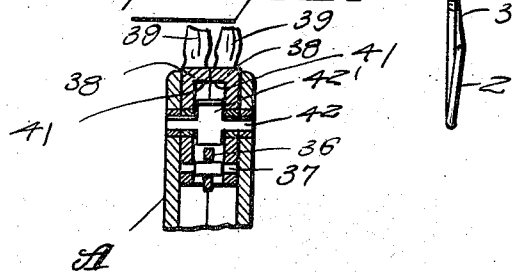


Fig. 5.



Inventor

J. K. Hoddinott

By *[Signature]* Attorney

Nov. 20, 1923.

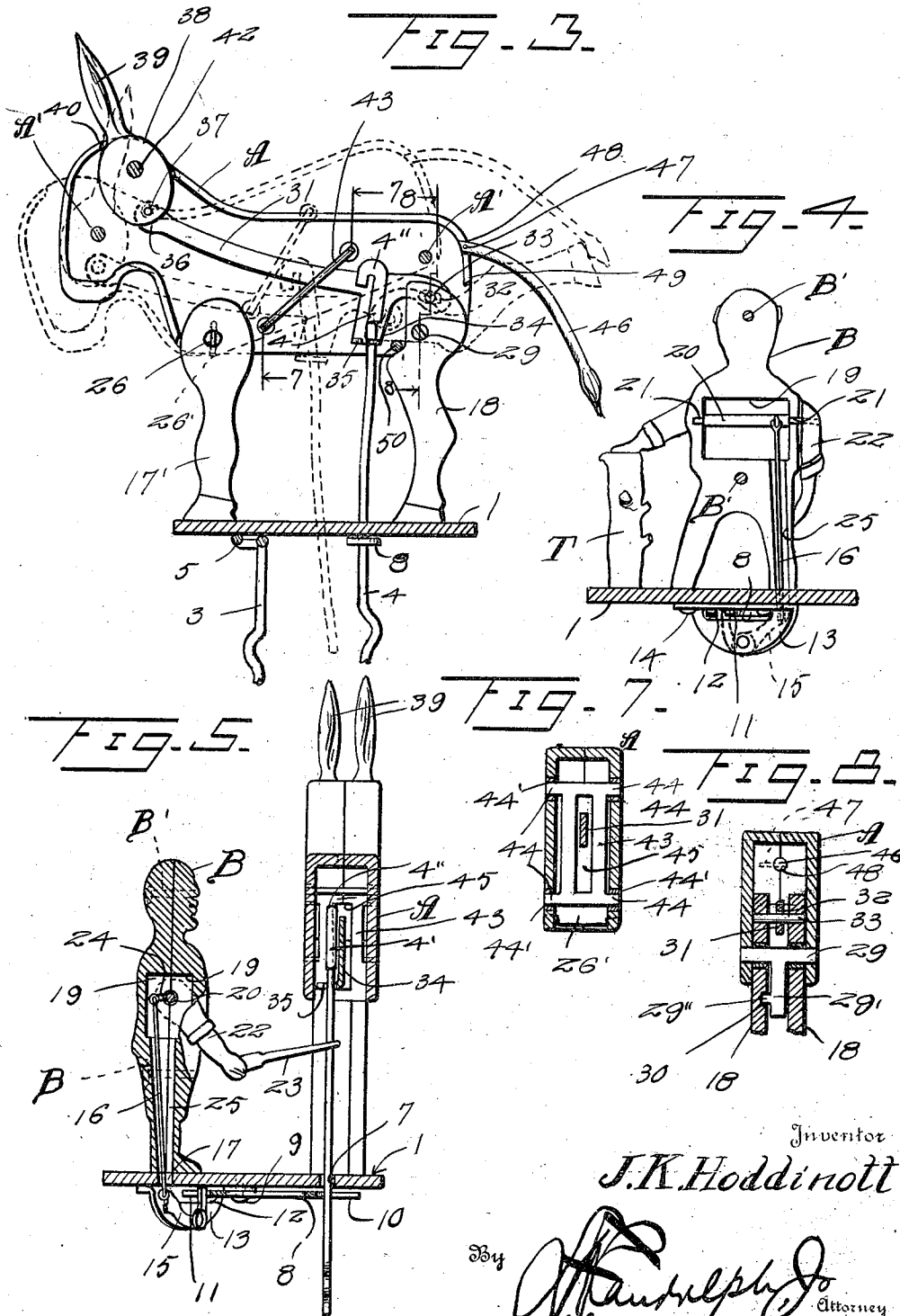
J. K. HODDINOTT

1,474,589

TOY

Filed Dec. 5, 1921

2 Sheets-Sheet 2



Inventor

J. K. Hoddinott

By

A. K. Hoddinott
Attorney

UNITED STATES PATENT OFFICE.

JOHN K. HODDINOTT, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO JOHN F. HODDINOTT, OF BALTIMORE, MARYLAND.

TOY.

Application filed December 5, 1921. Serial No. 519,991.

To all whom it may concern:

Be it known that I, JOHN K. HODDINOTT, a citizen of the United States, residing at Baltimore, in the city of Baltimore and State of Maryland, have invented certain new and useful Improvements in a Toy; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to certain new and useful improvements in a toy and has for its primary object the provision of a mechanical toy which will not only be amusing but also instructive.

The invention has for another object the provision of a mechanical toy which will be of simple construction and operation and which may include the figure of a kicking mule and a man preferably in the imitation of a negro or darkey with a stick adapted to move toward the mule as the latter kicks, thereby making it appear that the animal has been touched by the stick and is kicking as a result of the annoyance.

The invention has for a further object the provision of a mechanical toy of the character stated which may be operated by the same hand in which the toy is held and manipulated so that the animal will be caused to throw back its ears as it raises its hind legs into the air and the arm of the party standing by the animal moves with the stick in the hand to apparently touch the animal, the operation of all these parts being caused by the manipulation of a single operating member which also serves as the handle of the toy.

The invention has for a still further object a tool of the character stated in which the parts will be constructed and arranged in such a manner that the holding and operating handle may depend from the platform on which the figures are mounted so as not to obstruct view of any of the parts of the toy during operation thereof.

The invention has for a still further object the provision of a toy of the character set forth which will be of simple construction and operation and comparatively inexpensive to manufacture and which may be composed of any suitable material.

With the foregoing and other objects in view, as will appear as the description pro-

ceeds, the invention consists in the novel construction, combination and arrangement of cooperating elements as hereinafter more specifically set forth, claimed and shown in the accompanying drawings forming a part of the present application and in which:—

Figure 1 is a side elevation of the toy,

Figure 2 is a view in end elevation of the toy,

Figure 3 is a sectional view substantially on the plane of line 3—3 of Figure 2, looking in the direction indicated by the arrows,

Figure 4 is a sectional view taken on the line 4—4 of Figure 2,

Figure 5 is a sectional view taken on the line 5—5 of Figure 1,

Figure 6 is a sectional view taken on the line 6—6 of Figure 1,

Figure 7 is a vertical longitudinal section on the plane of line 7—7 of Figure 3, looking in the direction indicated by the arrows, this being taken longitudinally through the animal or between the hairs thereof.

Figure 8 is a view similar to Figure 7, taken on the plane of line 8—8 of Figure 3 and looking in the direction indicated by the arrows, and

Figure 9 is a detail sectional view on the plane of line 9—9 of Figure 3, looking in the direction indicated by the arrows.

Referring more in detail to the drawings in which similar reference characters designate corresponding parts throughout the several views, 1 indicates the platform, 2 the coil portion of the compressible operating handle, 3 the stationary arm of said handle and 4 the movable handle and arm. The stationary arm is bent at the right angle and formed into a loop 5 secured upon the under face of the platform 1 by suitable securing members 6. To prevent the handle from slipping in or from the hand during the manipulation of the handle arm 3 to actuate the toy, this handle arm and the handle arm 4 are crimped or corrugated as shown in the drawings.

The movable handle arm 4 is adapted to work through the elongated slot 7 extended longitudinally through the platform 1, near one side thereof, as clearly shown in the drawings. The portions of the handle arms 3 and 4 beneath the platform 1 are bent so as to form a hand grip by means of which the toy may be readily held and operated, the operation being caused by compressing

the handle arms 3 and 4 toward one another and thereby causing movement of the movable handle arm 4 in the slot 7. A rock arm 8 is pivoted intermediate its ends on the under face of the platform 1, as shown at 9 and the movable handle arm 4 extends through the slotted end 10 of the arm 8, passing through the slot 7 of the platform 1, thereby making it necessary for the rock arm 8 to move with each operation of the movable handle arm 4. The opposite slotted end 11 of the rock arm 8 is adapted to work back and forth in a slot 12 of the segmental supporting plate 13, on the underside of the platform 1, adjacent the edge or side of the platform 1 opposite that in which the slot 7 occurs. The segmental supporting plate 13 has one arm extended at an angle and secured to the platform by suitable securing members 14, as shown in the drawings. This segmental supporting plate also serves as the support for the bell crank lever 15 which is pivoted on one side thereof, as shown in the drawings and has one arm engaged in the slotted end 11 of the rock arm 8 so that the bell crank lever 15 will be operated by the operation of the rock arm 8. Pivotaly connected with the remaining arm of the bell crank lever 15 is a rod 16 which works through an opening 17 in the platform 1. The upwardly extended ends of the movable handle arm 4 and the rod 16 serve as the figure actuating members, as will be later clearly understood.

Mounted on the upper face of the platform 1 are the figures A and B, the figure A being shown as representing a mule while the figure B is a manikin and represents a darkey standing by the side of the animal and having one arm extended with the arm thereof resting upon the post T, which latter is also mounted on the platform 1. The figures A and B are formed in halves separated longitudinally and vertically. The halves of the animal figure A form the body of the same and are secured together by suitable securing members A' to form the body which is mounted pivotally on the separated forward legs 17, which latter are mounted rigidly on the platform 1, preferably near a corner thereof and opposite one end of the slot 7, thereby placing the figure A over this slot to permit the extended upper end of the movable handle arm 4 to project into and work into the parts of the figure A, between the forward legs 17 and the rear legs 18 of the animal.

The toy figure B representing the darkey is preferably mounted on the platform 1 with the forward section or half thereof securely fastened by the seat of the figure to the platform 1, this section carrying the extended arm of the figure resting on the post T near the toy figure A. The remaining or rear section of the toy figure B is secured to

the forward section by suitable securing members such as the screws B'. The halves of the figure B have opposed recesses in their portions forming the upper part of the body of the figure to provide the pockets 19 within which is placed the transverse rock shaft 20 between the arms of the figure, as shown clearly in Figure 4 of the drawings. Suitable bearing slots or recesses 21 are formed in the forward half of the figure B for the end portions of the rock shaft 20. One end of the rock shaft 20 is extended through the side of the figure and has the movable arm 22 mounted rigidly thereon and forming one arm of the figure B. A stick or other punishing member 23 is carried in the hand of the arm 22 and directed toward the animal figure A. It is to be also noted that the rock shaft 20 has an eye or ear 24 projecting laterally therefrom, near one end and having pivotal connection with the upper extremity of the actuating rod 16. Suitable slots are extended longitudinally in the opposed faces of one leg of the halves of the figure B to provide the pockets or slot 25 to accommodate the actuating rod 16. It will therefore be evident that upon each operation of the movable handle arm 4, the actuating rod 16 will rock the rock shaft 20 and thereby swing the arm 22 of the figure B and the stick 23 carried by this arm and make it appear that the man is touching the animal with the stick 23 beneath the rear portion of the body of the animal, as will be evident by referring to the drawings, for the purpose of exciting the animal and causing the latter to kick up its hind legs and throw back its ears while keeping its forward legs firm upon the platform 1. This movement of the parts of the animal is also caused by the movable handle arm 4, as will now be described.

The body of the animal representing the figure B is formed in longitudinal halves or sections and is pivoted at the lower corner of the body portion of the animal upon the pivot member 26 extended through the upper ends of the forward legs 27 of the animal. This will permit the body to swing upon the stationary forward legs 27 upon operation of the movable handle arm 4, as will be later clearly understood. The rear legs 28 of the animal are mounted on the pivot member 29 extended through the rear lower corner portion of the body of the animal, as shown clearly in the drawings. The pivot member 26 for the forward legs has an enlarged central portion 26' which serves to space apart the upper end portions of the forward legs 27. The upper ends of the rear legs 28 are spaced apart by the laterally extended arm 29' of the pivot member 29. The pivot member 29 is prevented from turning in the rear legs 28 by a locking finger 29'' extended from the side of the arm 29' and projecting into a recess 30 formed in one

of said rear legs 28. The purpose of this will also presently appear. The rear legs 28 are caused to swing through the lower rear corner portion of the body, as the body swings on the forward legs 27. This is caused by the longitudinally movable operating bar 31 which is curved slightly longitudinally and extended practically the entire length of the body and between the halves or sections thereof. This bar 31 has an elongated slot 32 near its rear end portion and through which extends the pin 33 serving to connect the upper end portions of the rear legs 28, above the pivot 29. The bar 31 also has a depending arm 34 provided with a laterally turned and slotted lower end 35 within which is engaged the upper end portion of the movable handle arm 4, said movable handle arm 4 having its upper extremity 4' enlarged so as to prevent this arm 4 from working out of the depending arm 4 of the bar 31. The forward end of the bar 31 has a perforated eye 36 formed thereon and through which is extended a pivot member 37 connecting the enlarged inner ends 38 of the ears 39 of the animal. These ends 38 of the ears 39 are enclosed in the upper end of the head portion of the animal so that the ears 39 project through the slots 40 provided for this purpose and accommodating the curved ends of the enlarged portions 38 of said ears 39. These ends 38 of the ears 39 have arcuate flanges 41 around their upper edge portions and for engagement with one another when the ears are in proper position. These ears are pivotally mounted in the upper portion of the head of the animal by a suitable pivot member 42 extended therethrough and through the side portions or sections of the head, as shown clearly in the drawings. This pivot member 42 has an enlarged central portion 42' which serves to properly space the inner end portions 38 of the ears 39. It is to be understood that the pivot member 42 is located above the pivot member 37 so that the ears 39 may be operated together with the rear legs 28 upon proper operation of the bar 31 by the movable handle arm 4. There is a suitable guide for the bar 31, I have provided a guide plate 43 which is positioned between the halves of the body of the figure A and inclined rearwardly and upwardly. This plate has projections 44' which are received in suitable openings 44 in the side of the body of the animal so as to securely hold the guide 43 in position. This guide plate 43 has an elongated longitudinal slot 45 through which the bar 31 operates. It is also to be noted that a flexible member 46 may be employed to represent the tail of the animal. One end of this member 46 by means of a suitable pin 47 is secured in registering recesses in the rear flanged ends of the sections of the body members of the animal. It is also to be noted that the rear lower end walls 49 of the flanges of the body members serve to limit upward swinging movement of the rear legs 28, while the stop pins 50 are located in the lower rear edge portions of the figure A to limit forward swinging movement of the rear legs 28. It is also to be noted that the lower edge portions of the inturned flanges or edges of the body members of the figure A are cut away so as to permit proper operation of the device without interference or movement of the movable handle arm 4 and the rear legs 28 through the lower side portion of the figure A or movement of the entire figure A upon the forward legs 27, as previously stated. Attention is also directed to the fact that the enlarged upper end 4' of the movable handle arm 4 has a forwardly curved member 4'' formed thereon for rising contact with the rear inclined face of the guide plate 43, so as to force the body of the figure A to swing upon the pivot member 26 of the forward stationary legs 27 and thereby throw the head of the animal downwardly and the rear portion of the body upwardly, at the same time drawing the ears 39 rearwardly and throwing upwardly and outwardly the legs 28 of the animal. This is a full and complete representation of an animal such as a mule kicking up its hind legs and throwing back its ears, the complete movement being caused at the same time the figure B is operated to move the stick 23 forwardly and upwardly toward the hind legs and the lower portion of the rear part of the animal all of the operations being caused by movement of the movable handle arm 4 toward the stationary handle arm 3, as previously set forth. It is also evident that the weight of the figure A and the parts carried thereby will assist in retarding the figure of the animal to normal position with the rear feet of the animal resting upon the platform 1, as the movable parts are drawn back by return of the movable handle arm 1 to normal position or position of rest. At the same time the return movement of the rock plate 8 with the movable handle arm 4 will cause a return of the movable arm 22 of the figure B and the stick 23 carried by this arm to their normal position, as shown in the drawings.

It is believed that the complete construction and operation of this device may be readily understood without further detail description. It may be briefly stated, however, that the complete operation of the toy may be caused by simply grasping the stationary handle arm 3 and movable handle arm 4 and pressing these handles toward one another and permitting them to return to their normal or separated positions. It is evident that the simultaneous operation of

the movable parts of the two figures A and B will cause it to appear that the man has touched the animal with the stick 23 and thereby excited the animal and caused it to throw up her hind heels and throw back her ears while keeping the front heels firmly planted upon the platform 1, the rear or hind legs and ears as well as the body of the animal returning to normal position as the stick 23 is withdrawn. A repeated operation of the arms 3 and 4 may cause considerable amusement to the parties watching the operation of this toy as well as serve as instructions in mechanical movement, the optical illusion being so completed that it appears that the stick 23 actually touches the animal and causes the movement of the same when in reality these parts never meet.

While the preferred embodiment of the invention has been shown and described, it is to be understood that minor changes in the details and arrangement of parts may be resorted to within the scope of what is claimed without departing from the spirit of the invention.

I claim as my invention:—

1. A figure toy comprising a platform, an articulate animal figure pivotally mounted on said platform, a figure stationary on said platform and having a movable arm, a compressible handle member, one portion of said handle member being rigid with said platform, the other portion of said handle member extending through and adapted to operate in said platform, and means controlled by said second mentioned portion of the handle to simultaneously operate said arm of said second figure and cause pivotal movement of the animal figure on said platform and articulate movement of parts of the animal figure.

2. A mechanical toy comprising a platform, an animal figure having its forward legs rigid on said platform and having articulate ears and rear legs, a figure representing a man positioned stationary on said platform, said last mentioned figure having a movable arm, a handle having a stationary portion connected with said platform and a movable portion operable through said platform, means controlled by said movable portion of the handle for causing movement of said arm of the second mentioned figure, means operable synchronously with said means to cause pivotal movement of the animal figure on the stationary forward legs thereof and at the same time compel swinging movement of said rear legs and said ears.

3. A mechanical toy comprising a plat-

form, a compressible handle having a stationary portion secured to said platform and the movable portion working through a slot in the platform, an animal figure including stationary legs mounted on said platform, a body pivotally mounted on said stationary legs, movable legs pivotally mounted on said body of the animal figure, ears pivotally mounted in the head of the body portion of said animal figure and projecting from the body of said animal figure, means to represent the tail of the animal, a second figure representing a man stationary on said platform and having a movable arm with a stick extended therefrom, said movable portion of the handle extending into the body of the animal figure, operative parts within said body of the animal figure and controlled by the end of the movable member of the handle to cause the animal figure to swing upon the stationary legs and move the pivoted legs and ears of the animal figure, and means operable by movement of the movable member of the handle to cause a simultaneous movement of the arm of the second mentioned figure.

4. A mechanical toy comprising a platform, a plurality of figures mounted on said platform, one of said figures representing an animal and another figure representing a man, said figures having their body portions formed in sections, the forward legs of the animal being stationary on said platform, the rear legs of the animal being pivotally mounted in the body thereof, the ears of the animal being pivotally mounted in the body of the animal, a handle member carried by said platform and including a movable arm working through said platform and extending into the body of the animal, means controlled by said movable arm of the handle to cause a pivotal movement of the body of the animal on the stationary legs thereof and a pivotal movement of the remaining legs of the animal and the ears as the body swings upon the stationary legs of the animal, guiding means for the movable operating means of the pivoted legs and ears of the animal, and means controlled by said movable arm of the handle to cause a simultaneous movement of the figure representing a man to swing said arm together with a stick carried thereby toward and away from the animal during operation of the latter.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN K. HODDINOTT.

Witnesses:

JOHN R. SMITH,
MONROE STUBBINS.