Dec. 8, 1925. 1,564,674

H. C. HODGKINS

FIGURE TOY

Filed Nov. 14, 1924 2 Sheets-Sheet 1

Fig. 1.

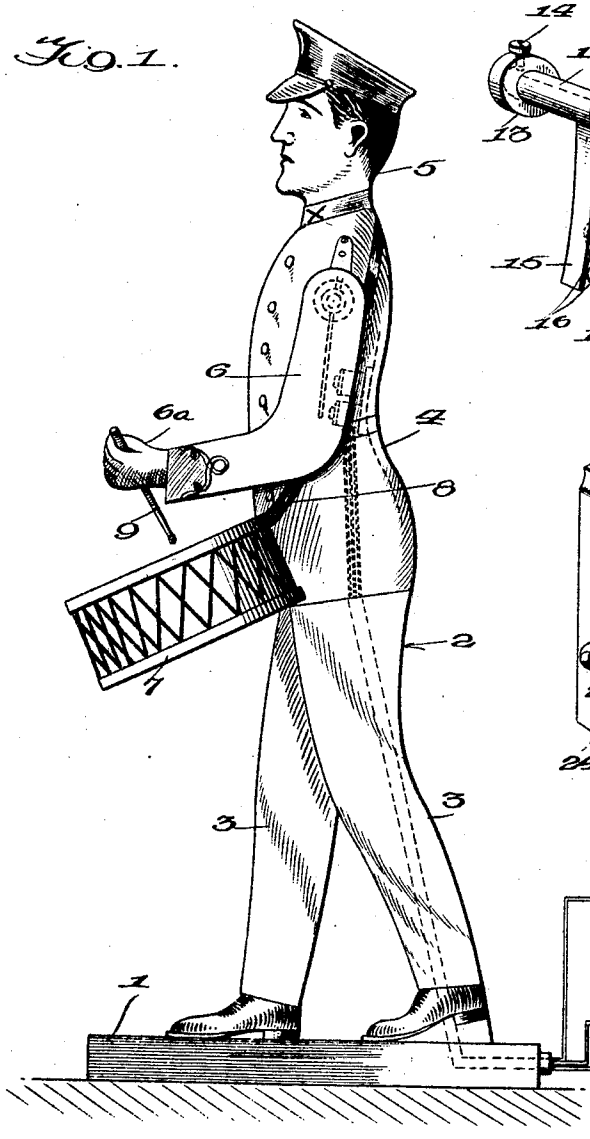
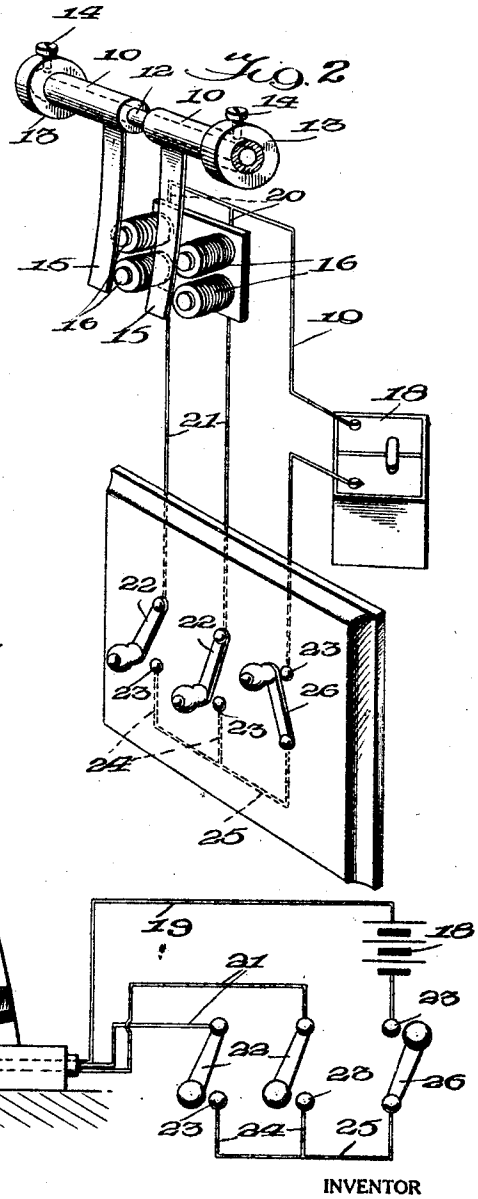



Fig. 2.




WITNESSES

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FIGURE TOY

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Fig. 3.

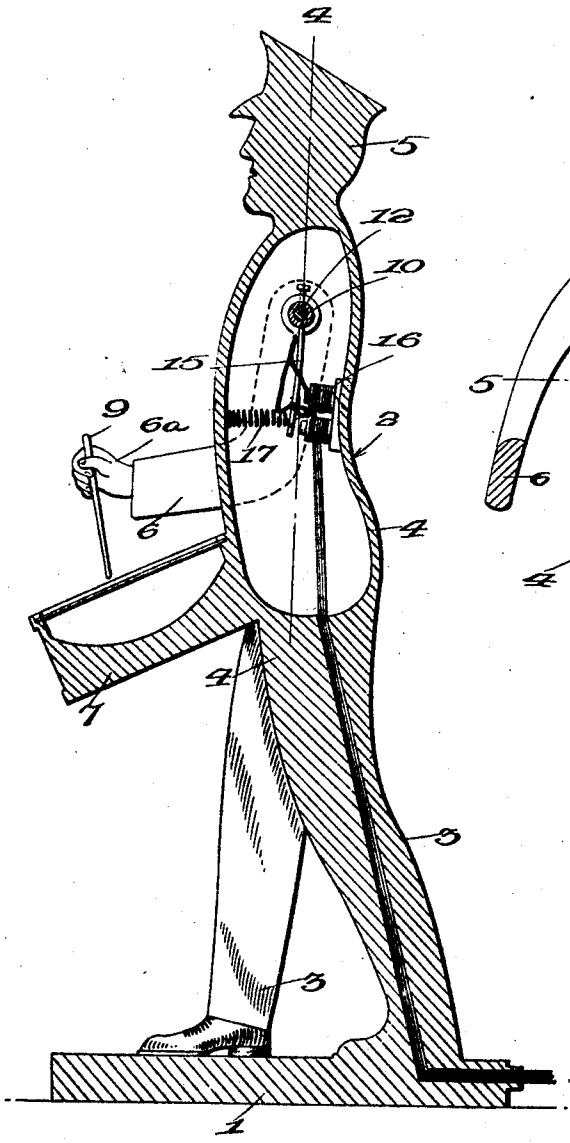



Fig. 4.

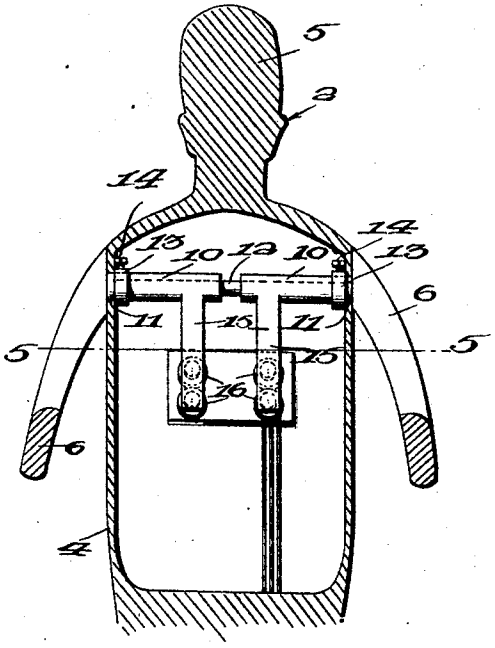
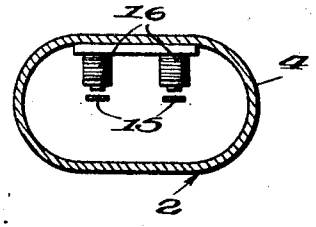



Fig. 5.




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Patented Dec. 8, 1925. 1,564,674

# UNITED STATES PATENT OFFICE.

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## FIGURE TOY.

Application filed November 14, 1924. Serial No. 749,932.

*To all whom it may concern:*

Be it known that I, HERBERT C. HODGKINS, a citizen of the United States, residing at Scotia, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Figure Toys, of which the following is a specification.

This invention aims to provide a figure toy such as a doll or the like which may be operated by electric or electro-magnetic means to produce entertaining and amusing movements on the part of the doll or figure or to cause the doll or figure to operate a musical instrument, such as a drum or the like.

Other objects and advantages reside in certain novel features of the construction, arrangement and combination of parts which will be hereinafter more fully described and particularly pointed out in the appended claim, reference being had to the acompanying drawings forming a part of this specification, and in which:

Figure 1 is a view partly in elevation and partly diagrammatic and showing one embodiment of the invention,

Figure 2 is a perspective view illustrating the operating mechanism of the doll or figure,

Figure 3 is a view in central longitudinal vertical section,

Figure 4 is a view in vertical section taken approximately on the line 4—4 of Figure 3, and

Figure 5 is a view in horizontal section on the line 5—5 of Figure 4.

Referring to the drawings wherein for the sake of illustration there is shown one embodiment of the invention, the numeral 1 designates a base on which a figure 2 is mounted, the figure 2 in the present embodiment taking the form of a drummer and including legs 3, body 4, head 5, and arms 6, the arms in the present instance being the movable members of the figure.

A drum 7 is integrally formed with or secured to the body 4 and appears to be supported on straps 8. Drum sticks 9 are fixed to the hands 6ª of the arms 6 and serve to beat the drum 7 when the arms are oscillated up and down in a manner which will hereinafter more clearly appear.

The body 4 of the figure is hollow as shown to advantage in Figs. 3 and 4 and it is to be understood that the body is provided with a number of removable plates or may be made in sections suitably secured to each other to enable ready access to be had to the interior of the hollow body. Each arm 6 is carried on the outer end of a sleeve shaft 10, the sleeve shafts 10 being mounted for rotation in bearings 11 formed in the body and being constrained to rotate about a common axis by means of a centering shaft 12. Suitable means is provided for preventing endwise displacement of the sleeve shafts 10 and such means may take the form of collars 13 fitted on the sleeve shafts and held in position by set screws 14, the collars 13 co-acting with the body to constrain the shafts 10 to rotary movement.

Electrical or electro-magnetic means is provided for the purpose of oscillating the sleeve shafts 10 back and forth so that the arms 6 will be moved back and forth to cause the drum sticks 9 to beat the drum 7. For the sake of illustration this electro-magnetic means is shown as comprising an armature 15 releasably secured to each sleeve shaft 10. A pair of electro-magnets 16 is provided for coaction with each armature 15 and when the electro-magnets 16 are energized they attract the armatures 15 and so rotate the shafts 10 as to cause the arms 6 to swing downwardly, whereby the drum sticks 9 strike the drum 7. Retractile coil springs 17 connect the outer end of each armature 15 with the body and these retractile coil springs tend to so swing the armatures 15 as to move the shafts 10 in such manner that the arms 6 will swing upwardly and the drum sticks move away from the drum 7.

The electro-magnet 16 may be energized in any suitable manner and for the sake of illustration these magnets are shown as connected to one side of the battery 18 by means of a wire 19 having branches 20, the branches 20 being connected to the magnets. Wires 21 also lead from the magnets to the movable members 22 of controlling switches. The movable members 22 are designed for co-action with fixed contacts 23 which are electrically connected to branches 24 of a wire 25 leading back to the battery 18. A cut-out switch 26 may be embodied in the wire 25. It is to be understood that while one type of switch has been shown for the sake of illustration any suitable type of switch may be employed and the use of a push button type of switch as well as various other types of switches is contemplated.

It is to be understood that the switches 22 may be selectively operated to cause the drum sticks 9 to beat the drum 7 in the desired manner. Of course, each time a movable member 22 of either switch engages its contact 23 current will flow from the battery 18 through the wire 19 to the coils of the magnets 16 included in the circuit in which the switch has been closed. After the current has passed through the coils of the magnet and energizes the same it will flow through the wire 21, movable member 22, contact 23, branch 24, and wire 25 back to the battery provided, of course, the switch 26 is closed. The switches which control the magnets may be placed at a point remote from the doll or figure and the conductors which lead from the switches and from the battery pass in through the base 1 and up through one of the legs 3 of the figure to the magnets 16 which are located within the hollow body of the figure.

I claim:

In a figure toy, a figure representing a drummer and including a hollow body, a pair of arms, means for mounting the arms for swinging movement at the shoulders of the body and including a sleeve shaft for each arm and a central shaft for the sleeve shafts, drum sticks carried by the arms, a drum carried by the body and arranged and designed to be sounded by the drum sticks when the arms are swung back and forth, and means for swinging the arms back and forth including armatures fixed to the sleeve shafts within the hollow body, electro-magnets associated with the armatures, circuits for the magnets and selectively operable switches for the circuits.

HERBERT CHARLES HODGKINS.