March 15, 1927. H. D. DU BOIS 1,621,157

MUSICAL DOLL

Filed Oct. 23, 1926

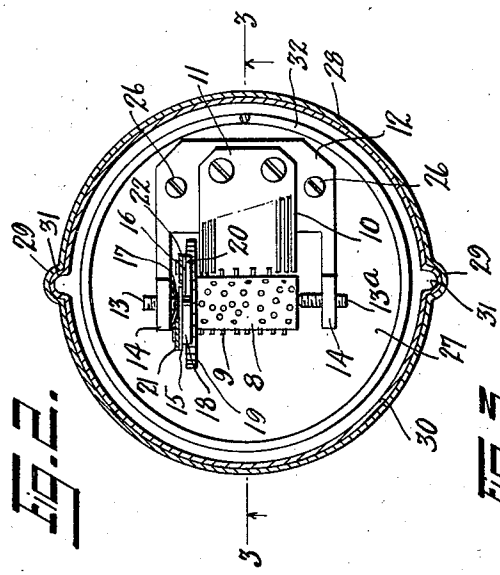


Fig. 2.

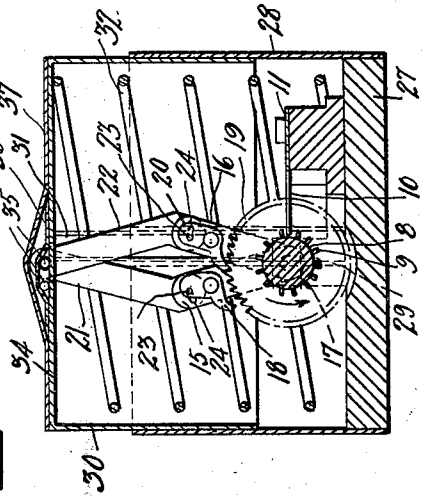


Fig. 3.

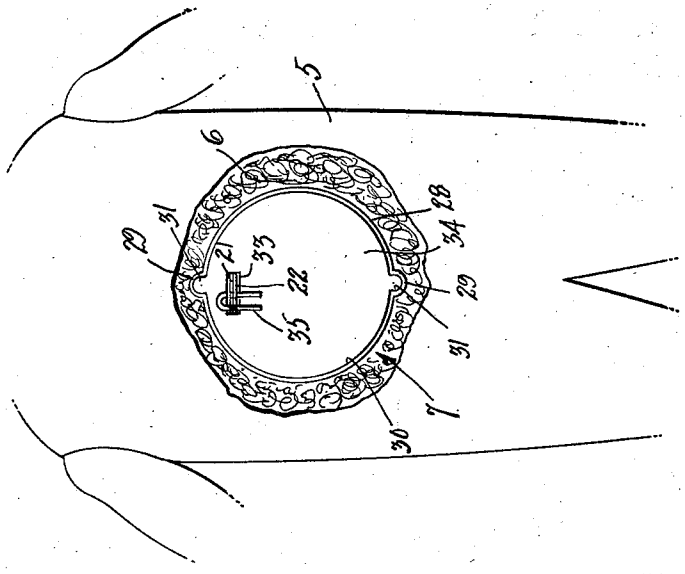


Fig. 1.

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UNITED STATES PATENT OFFICE.

HARRY D. DU BOIS, OF WEST ORANGE, NEW JERSEY, ASSIGNOR TO LOUIS WOLF & CO. INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

MUSICAL DOLL.

Application filed October 23, 1926. Serial No. 143,576.

This invention relates to improvements in musical dolls in general and more particularly to the means for encasing the musical device adapted to be used in dolls.

A particular object of the invention is to provide a stuffed flexible doll with a musical device, enclosed within a container, comprising an outer casing and an inner cover operably connected to the musical device and telescopically arranged within the casing.

Another object of the invention is to provide means between the outer casing and the cover member that will eliminate any relative tipping to one side and rotation of these parts and will insure a positive operation of the device.

Other objects and novel features of construction of my invention will become apparent as the specification proceeds.

Referring to the drawings forming a part of this specification:

Figure 1 is a fragmental front view of a doll body with part of the front covering removed, showing my invention as applied thereto.

Figure 2 is a top plan view partly in section of the musical device and container and Figure 3 is a sectional view taken on line 3—3, Fig. 2.

Referring to the drawings in detail, 5 indicates a doll body of the flexible type, the inside of which may be stuffed with cotton wadding 6 or the like. Inserted into the body and surrounded by the cotton wadding is a musical instrument or device 7. This device per se forms no part of the invention, but the means for enclosing same and adapting same for use in a doll is the subject matter thereof.

The device comprises the usual cylinder 8 provided with pegs 9 which when operated, strike against teeth 10 of a steel comb 11, secured to a base bracket 12. The cylinder 8 is mounted for rotation on cone pointed screws 13 and 13^a threaded into extending bearing arms 14 on the base bracket 12. Lever arms 15 and 16 are rotatably mounted on the screw 13 and are frictionally held thereon by a spring 17 made of flat material. The lever 15 has pivotally mounted thereon a pawl 18 normally out of engagement with the teeth of a ratchet wheel 19 fast to the cylinder 8 and the lever 16 has a pawl 20 pivotally mounted thereon normally in mesh with the teeth of the said ratchet wheel 19. Links 21 and 22 are connected at their lower ends to the pawls 18 and 20 respectively by means of pins 23 passing through arcuate slots 24 in the levers 15 and 16.

The device thus far described is obtainable in the open market. To adapt it for use in dolls, I secure the device by means of screws 26 passing through the bracket 12 into a base or bottom 27 of a cylindrical casing 28 provided with corrugations or grooves 29 diametrically opposite to each other. A cover member 30 substantially the same depth as the casing 28 and provided with ribs 31 is slidingly mounted and telescopically arranged in the casing 28. A coiled wire spring 32 is previously inserted into the casing and exerts a tension between the casing and cover. The links 21 and 22 extend outside of the cover 30 through an opening 33 in the upper wall 34 thereof (Figure 1) and are joined together by a pin or staple 35 which is maintained against the outer surface of the wall 34 by a covering 36 (Figure 3). A final covering 37 prevents any of the doll stuffing from coming in contact with the projecting ends of the links 21 and 22.

The device is operated by pressing the doll body in the region of the head 34 of the cover 30, which actuates the links 21 and 22 causing the levers 15 and 16 to move outwardly, lifting the pawl 20 out of engagement with the ratchet wheel 19 and causing the pawl 18 to engage the teeth of the ratchet wheel and revolve the cylinder 8 and cause the pegs 9 thereon to strike the teeth 10 of the comb 11 and produce music thereby.

It will be seen by referring to Figures 1 and 2 that the grooves 29 and ribs 31 will prevent any relative rotation between the casing 28 and cover 30 and that due to the depth of the cover 30 no relative tipping of these parts is possible, thus assuring a positive action of the device no matter at what point of the head pressure is applied.

From the foregoing it will be seen that I have provided a doll with a musical instrument adapted to be operated by pressure from without and means for enclosing and positively operating the said device.

Having described my invention, what I claim as new is:

1. A sound producer for dolls, comprising a container having a plurality of vertically disposed grooves in its side walls, a pressure operated musical instrument within the container, a cover telescopically arranged in the container having corresponding ribs in sliding engagement with the grooves, and instrument operating means in co-operative engagement with the instrument and cover.

2. A musical doll, comprising a body, a container within the body comprising a casing and a cover telescopically arranged therewith, a pressure operated musical instrument secured to the base of the casing, instrument operating means in cooperative engagement with the instrument and cover, and means on the casing and cover to prevent relative rotation therebetween.

In testimony whereof I hereunto affix my signature.

HARRY D. DU BOIS.