

# UNITED STATES PATENT OFFICE.

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## DANCING DOLL.

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*To all whom it may concern:*

Be it known that I, ATHERTON D. CONVERSE, a citizen of the United States, and resident of Winchendon, Massachusetts, have invented certain new and useful Improvements in Dancing Dolls, of which the following is a specification.

This invention relates to mechanical figures of the type applied to phonographs, which are adapted to be actuated thereby.

The object of this invention is to produce a mechanical figure of the class described, which will function through the mechanism of the phonograph with the least possible amount of added actuating means.

Another object is to provide such a figure which may be readily attached to and detached from the phonograph when a change of record is desired.

These and other objects are accomplished by providing a figure having a head, body and limbs independently movable, said body having both a rotative and an up and down movement. The motive power is conveniently shown as derived from the record turn table, and through the medium of an eccentrically mounted rod and an irregular cam actuates the head and body with its attached limbs respectively.

The invention also includes the novel construction, arrangement and combination of parts more fully hereinafter described and clearly defined in the claims.

In the drawings, which are illustrative of a preferred form of my device only,—

Fig. 1 is a perspective of the complete device.

Fig. 2 is a side elevation partly in section.

Fig. 3 is a rear view.

Fig. 4 is a sectional plan view along the line 4—4 of Fig. 3.

Fig. 5 is a front view of the actuating mechanism with the base block removed.

Figs. 6 and 7 are detail views.

Referring now by reference characters to the drawing it will be seen that the device consists of a base block 1 adapted to be held above the phonograph mechanism housing by means of adjustable legs 2, pivoted to base 1 at 2<sup>a</sup>. Slots 2<sup>b</sup> are provided to receive the legs 2 when the device is folded for shipment.

A positioning member 24 is attached to the rear of the base and is provided with a hole 25 adapted to register with the center

pin of the phonograph. This carries no part of the weight of the figure but merely prevents the device from rotating.

Socketed in base block 1 is an upright post 4 upon which the head 5 is loosely positioned.

The body 6 is hollow and allows post 4 to pass through it. The body is suitably pinned as at 7 to a right angle lever 8 pivoted at 9 to a frame portion 10 rigidly mounted on base block 1. The member 8 is provided with an additional right angle portion 11 carrying between itself and the part 8 a roller 12 which engages a cam more fully hereinafter described.

The friction wheel 3 is adapted to rotate about an axle pin 13 engaging the base block which also carries an irregular cam 15. The cam acting on the roller 12 and thence through member 8 gives the body of the figure not only an up and down motion but also a partial rotation.

Eccentrically carried by the friction wheel is a rod 16, passing upwardly through a hole 17 in frame 10 and engaging the head, conveniently shown as by means of a screw eye 18.

Suitably attached to rod 16 as at 19 is a thread 20 which passes through the head within passage 21, and is attached to a member 22 uniting the arms 23 of the figure. These arms are loosely attached to the body portion in any suitable manner which will allow a certain amount of play.

A skirt or dress 26 may be placed upon the figure just above pin 7 which will conceal the mechanism and give a more realistic appearance to the doll.

The operation of the device is as follows:

The doll is positioned in proximity to the record turn-table so that the legs 2 engage the mechanism housing, the hole 25, the turn-table center pin, and the friction wheel engages the top of the disk.

Upon starting the phonograph motor, the friction wheel rotates and the mechanism operates. It will be seen that the rod 16 due to its extreme right and left movement gives to the head a sidewise motion. The extreme up and down movement imparts to the arms 23 by means of thread 20 also an up and down movement.

The movement of the body is produced by reason of the roller passing over the cam surface through right angle lever 8.