Nov. 19, 1957 E. H. TIEBE 2,813,371

TOY DANCING DOLL

Filed May 5, 1955

Fig. 2

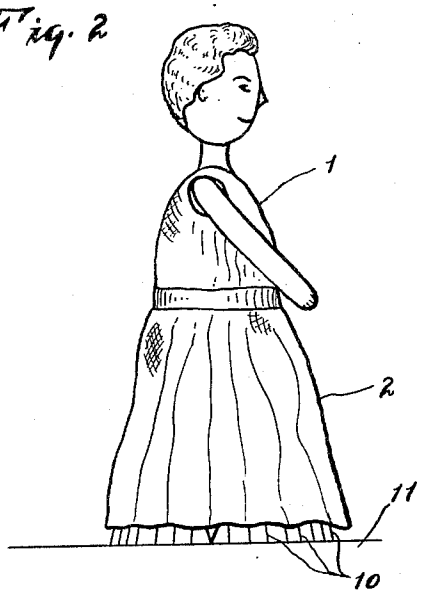


Fig. 1

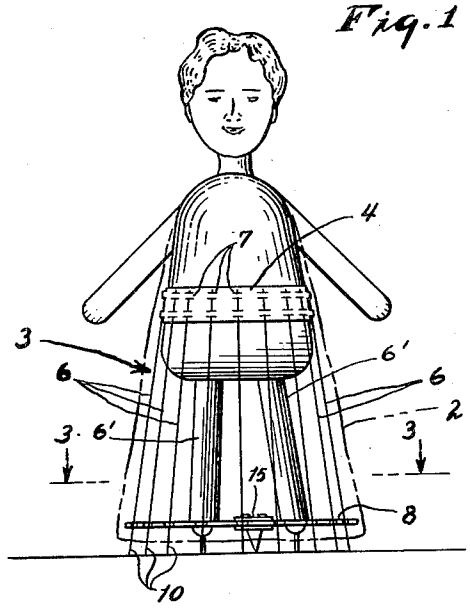


Fig. 3

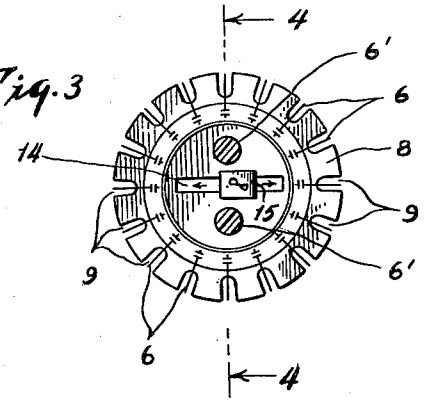


Fig. 4

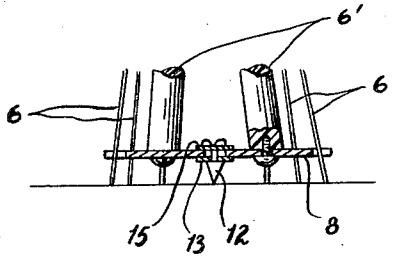
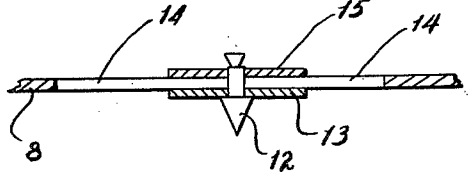


Fig. 5



INVENTOR.
ERWIN H. TIEBE
BY Fiesler Harper
ATTORNEY

United States Patent Office 2,813,371 Patented Nov. 19, 1957

2,813,371

TOY DANCING DOLL

Erwin H. Tiebe, New York, N. Y.

Application May 5, 1955, Serial No. 506,311

1 Claim. (Cl. 46—137)

This invenion relates to movable toys and more particularly to dolls capable of exhibiting dancing movements.

An object of the invention is a doll, or other toy, adapted to exhibit dancing movements under control of external vibrations.

Another object of the invention is to provide a doll with a number of elongated supporting elements susceptible to be moved under control of external vibrations transmitted to these elements either directly over the supporting base or indirectly over the air.

A further object of the invention is to attach to a peripheral portion of the body of the doll a number of relatively rigid longitudinal wires consisting of metal or plastic which, while supporting the doll in an upright position on any desired base, represent so little friction that the doll under control of external vibrations will be caused to describe straight or curved movements of rather large amplitude and in the rhythm of these vibrations.

Still another object of the invention is to support the doll on its base not only on a number of circumferential attachment points, but also on one or several central points which are preferably adjustable to permit the doll under control of the external vibrations not only to describe translatory movements, but also gyratory movements of an adjustable diameter.

These and other objects of the invention will be more fully described in the drawings annexed herewith in which Figs. 1 and 2 represent front and side elevations respectively of a doll embodying certain features of the invention.

Fig. 3 is a cross section taken on line 3—3 of Fig. 1 in the direction of the arrows, and Fig. 4 is a side view partly in section taken on vertical line 4—4 of Fig. 3 in the direction of the arrows.

Fig. 5 represents an enlarged view of a portion of the bottom section of the doll.

Generally the doll may consist of plastic and can be manufactured in several manners.

In one form the lower part of the doll body remains unchanged but the breast portion is provided with a jacket having attached thereto a conical supporting structure consisting of a number of fiber needles.

The legs of the doll, or any other portion of the doll such as the dress, has attached thereto a bottom plate having a number of slots corresponding to the number of fiber legs and permitting these fiber needles sufficient freedom of motion.

A guiding slot provided in the center of the bottom plate serves to receive a movable tip which may form an axis of rotation around which smaller or larger dancing radii can be adjusted.

The body of the doll is provided with a dress which makes the fiber structure invisible. Spacing from the fiber legs is maintained by a bottom plate which insures freedom of vibrations.

In another embodiment of the invention, the lower part of the doll is removed and the needle supporting jacket is directly connected through a central bolt with the bottom plate.

The fiber needles serve to receive very small and even larger vibrations transmitted through base materials capable of resonance, such as thin wood, cardboard, metal, etc.

These vibrations are sufficient to set the doll into motion. The adjustable center tip serves to translate this motion into a gyratory movement.

For the manufacture of the doll light material should be employed as far as possible to cause as active a movement as possible.

The doll can be dressed in any desired manner without departing from the scope of the invention.

More specifically in Figs. 1 and 2 a doll body 1 is provided with a dress 2, under which there is arranged a supporting structure 3 permitting pointwise contact with a supporting base.

While structure 3 may have any desired form, a preferred embodiment is shown to consist of an aluminum holder, or supporting ring 4, arranged along the waist of body 1, which has a number of relatively rigid plastic wires 6 of approximately equal length attached thereto at 7 by welding, clamping, insertion into openings, or in any other known manner without departing from the scope of this disclosure.

Wires 6 form a conical structure of a total length slightly projecting underneath dress 2.

In order to keep the relative distance between supporting wires 6, a cover plate 8 is provided at the bottom of doll 1, which is either attached to the garment, or as shown in Fig. 1 to legs 6'. Otherwise wires 6 extend through slots 9 of cover plate 8 and their tips 10 support the doll on a flat base 11.

Any vibration of doll body 1 mainly transmitted over base plate 11 which may be a resonance box such as for example, provided by the top of radio or phonograph apparatus, will cause body 1 to be rocked or displaced on wires 6. Continuing vibrations therefore will cause a continuous rhythmic displacement effected even by relatively small forces such as derived from the diaphragm of a radio loud speaker, thereby making the doll appear to dance in the rhythm of acoustic vibrations.

The invention is of course not limited to dolls but may be applied to animals such as dogs or any other type of toy or element capable of acoustically controllable animation.

The supporting structure may be arranged in any desired manner. It may be made part of the dress, for example, in the form of a crinoline or in any other form without departing from the scope of this disclosure.

The supporting elements need not be exactly of the shape and structure shown and described, but may be formed, for example, by the peaked ends of a crinoline dress or in any other manner.

As apparent from Figs. 4 and 5, in addition to a number of more or less peripherally arranged supporting points represented by the tips of wires 6, as illustrated in Figs. 1 to 3, there can be provided in one form of the invention, one—or more—central supporting points or tips as shown, for example, at bottom plate 8, where a tip 12 is attached to or formed on a plate 13, which in turn is attached through slot 14 of bottom plate 8 to a top plate 15.

Sliding movement of plate assembly 13, 15 permits adjustment of the eccentrical position of tip 12 with respect to the tips 10 of wires 6.

In this way the doll under control of external vibration will not only describe translatory but also gyratory movements.

Adjustment of tip 12 will cause variation of the size of the radius of this gyratory movement.

The invention is not limited to form, type and structure of the doll, and supporting elements described and illustrated.

I claim:

A toy simulating a dancing doll comprising a body, a supporting ring provided around the waist of the body, a plate having an elongated slot therein and a plurality of peripheral slots extending a short distance radially into the disc, a pair of leg portions secured to the body and to the plate, a plurality of supporting wires secured to the ring and each extending through a peripheral slot in the plate for support on a surface, and a central tip slidably mounted in the elongated slot in the plate and being

adjustable in the slot to vary the gyratory movement of the toy induced by the wires.

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