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TOY RATTLE

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FIG. 1.

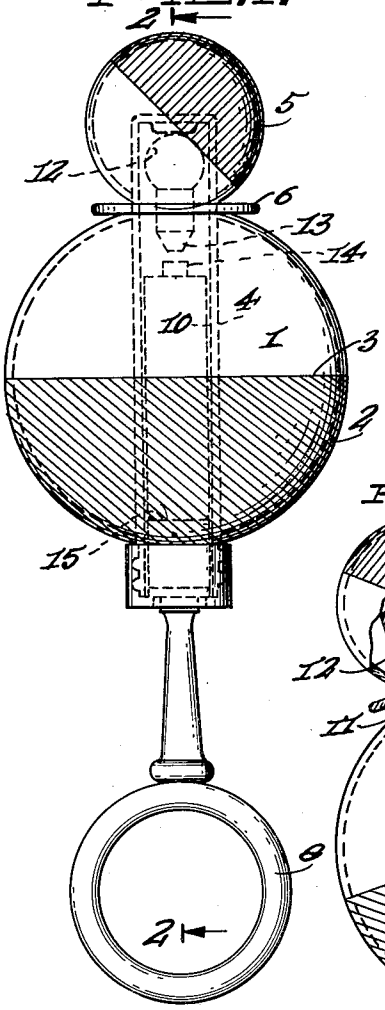


FIG. 2.

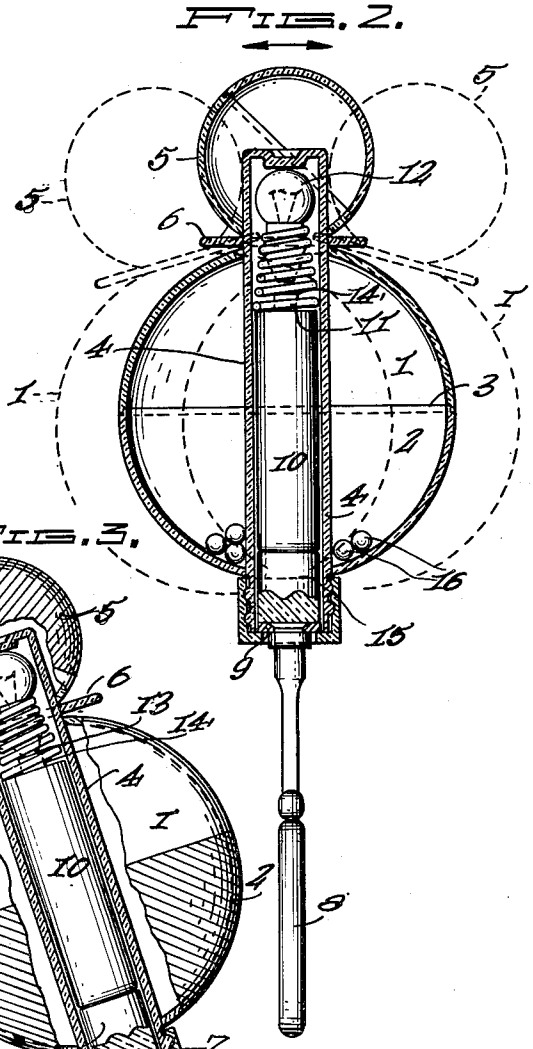


FIG. 3.

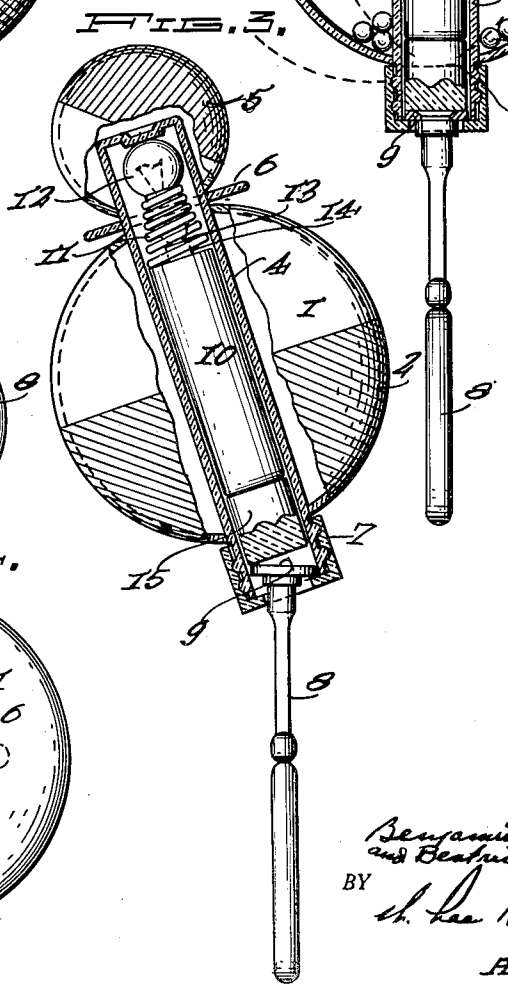
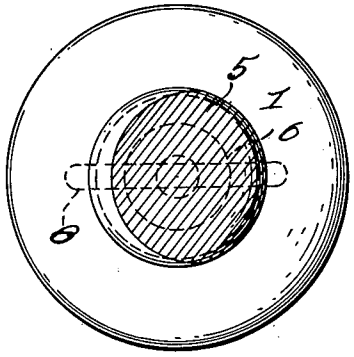


FIG. 4.



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TOY RATTLE

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5 Claims. (Cl. 46—118)

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The object of the present invention is to provide a novel form of toy rattle which, when vibrated, will illuminate the head of the rattle to give a pleasing effect. The specific object of the invention is to provide a toy rattle of such character which will be inexpensive, and which may be made in substantial entirety of blown or molded plastic, which can be easily assembled by unskilled labor, which will employ a dry cell battery as a gravitational weight above a fulcrum point to enable swinging of that part of the rattle rising upwardly from a handle; and to provide spring means which will restore the elements to initial position against the gravitational action of the weight constituted by the dry cell battery.

Referring to the drawings:

Fig. 1 is a view in elevation, partly in dotted lines, showing an embodiment of the invention.

Fig. 2 is a partial longitudinal section on the line 2—2, Fig. 1, showing lateral positions of the rattle body when the device is shaken from side to side.

Fig. 3 is a view similar to Fig. 2, showing the coaction of the handle and battery enclosing a circuit through the electric lamp when the rattle body is thrown to one side.

Fig. 4 is a top plan view of the rattle.

In Figs. 1, 3 and 4 of the drawings the cross-hatched lines indicate color, and any suitable means of decoration may be applied to the structure to add to its attractiveness.

Referring to the drawings, it will be seen that the rattle consists of a primary body member in the form of a hollow ball which may be made in two halves, 1, 2, which may be cemented together at the area 3. Projected through the ball-like body and preferably cemented to its two sections is a tubular member 4. The upper end of the tubular member is projected within a hollow ball 5 and the ball in the present embodiment rises immediately above a ring 6 surrounding tubular member 4. The elements 5 and 6 may be cemented to member 4. In this manner the assembly is made to represent a doll-like figure having a head and body, with a collar interposed between the two.

The lower end portion of the tube 4 is threaded, whereas the upper end of the said tube is closed. Threaded onto the lower end of tube 4 is an internally threaded cup 7, this cup being apertured at its lower end.

The aperture in the lower end of cup 7 is relatively large, and there is projected through the aperture the upper portion of a handle 8; the handle having a disk-like head 9; the diameter

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of the head being greater than the diameter of the aperture in the base of cup 7.

In practice a cylindrical dry-cell battery 10 will be placed in tubular member 4 when its lower open end is exposed by removal of threaded cup 7, and on top of the battery will be placed a light spiral spring 11 which spring is so wound that it will conform with the threads on the shank of a usual type of battery electric lamp 12.

Spring 11 will normally act by engagement with the top of battery 10, which in turn will be lightly pressed down on the top of handle-disk 9, the lamp engaging the upper closed end of tube 4, to maintain the base or axial contact of the electric lamp spaced from the axial contact of the dry cell battery. In other words the elements will be held in the position of Figs. 1 and 2. The axial contact of the lamp is indicated at 13 in Fig. 1 and the axial contact of the battery shown in that figure at 14. In Fig. 1 the spring 11 has been eliminated for clarity of illustration.

In all cases the disk-like head of the handle 8 will be of less diameter than the internal diameter of the tubular member 4. Also it will be appreciated that the top of the handle in such an arrangement serves as a fulcrum for the rocking of the entire structure above the handle. The battery is relatively heavy, and therefore when the rattle is grasped by the handle and the device swung from side to side, enough pressure will be developed intermediate the fulcrum head 9 and the battery to bring the contacts 13 and 14 into engagement through the upward movement of the battery against the resistance of spiral spring 11. However, when the rocking impulse in either of two directions at any one time is dispelled, the spring 14 will restore the parts to the position of Fig. 2.

When the cup and handle disk 9 are made of non-conducting material the battery 10 may rest directly on the disk. However, the battery may directly rest upon a short freely movable block 15, if desired.

A circuit is effected through the electric lamp 12 via the contacts 13 and 14, thence through the lamp filament to the normally threaded shank of the lamp, thence through the spiral spring 11, and thence through the casing of the battery 10 which, as customary, is of conducting metal and its exposed upper edge remaining in contact with the spring 11 which serves as a conductor.

It will be realized that various modifications may be made in the form and arrangement of the elements constituting the embodiment of the invention illustrated in the drawing, without de-

parting from the spirit of the invention. The ball body may hold any suitable sound-producing element, shot-pellets 16 being shown in the drawings. Also the body and head may be of any suitable form, as for example representing animals, birds or human figures. The material selected for the construction may be widely varied, plastic being preferred. In the embodiment shown the tubular container 4 and the head 5 will be transparent so as to be illuminated by the electric lamp. It is obvious that the lamp can be substituted by a vibratory element such as a buzzer thrown into circuit in the same manner as the lamp.

Having described our invention, what we claim and desire to secure by Letters Patent is as follows:

1. A toy device comprising a body member including a container adapted to receive a dry cell battery, an electric lamp and a spiral spring interposed between the lamp and the battery, in combination with a device having a head disposed in the container at one end thereof and so related to the interior of the container that when the latter is rocked back and forth the head acts against the battery so as to move the latter against the action of the spring and into electrical contact with the lamp.

2. A toy device consisting of a body member including an elongated container adapted to receive a dry cell battery, an electric lamp and a spring interposed between the battery and the lamp, one end of the container carrying a removable closure formed with an aperture, a handle member projected through the aperture and having a head, the relative sizes of the aperture and the handle member permitting angular movement of the container with respect to said handle member to impart endwise movement to a battery within the container.

3. A toy device consisting of a body member including an elongated container adapted to receive a dry cell battery, an electric lamp and spring means for normally holding the lamp and battery relatively out of contact, one end of the container being closed and the second end of the container being formed with an aperture, in combination with a fulcrum device in said aperture so related to the interior of the container that when the latter is rocked back and forth the fulcrum device acts against the battery to impart endwise movement thereto.

4. A toy device consisting of a ball-shaped member, a tubular container projected through the ball-shaped member so that its opposite ends protrude, one end of the container being closed, a second and transparent ball-like member carried by the tubular container at its closed end, a threaded apertured closure carried by the container at its opposite end, a handle projected through the aperture of said closure member, a head on the handle, a battery and an electric lamp, with an interposed spring, disposed within the tubular container, the spring normally holding the lamp against one end of the container and the end area of the battery supported upon said head of the handle, with the contacts of the lamp and battery separated by the spring, all of said elements being adapted to rock upon the head of the handle, whereby the elements within the container are given alternate longitudinal pressure and release as and for the purpose set forth.

5. A rattle comprising a rattle body, a tubular container within the body, an electric lamp at one end of the container and having a contact terminal, a battery having a contact terminal and slidable within the container for movement toward and away from said lamp contact terminal, spring means biasing said battery away from said lamp contact terminal, a rattle handle at the other end of the container for rockably mounting the handle to said other end of the container, and means responsive to relative rocking motion of the handle and container for intermittently moving said battery toward said lamp contact terminal so as to cause intermittent contact between the latter and the battery contact terminal.

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