Dec. 30, 1924. 1,521,161

B. H. MARSHALL

TOY

Filed March 1, 1924 2 Sheets-Sheet 1

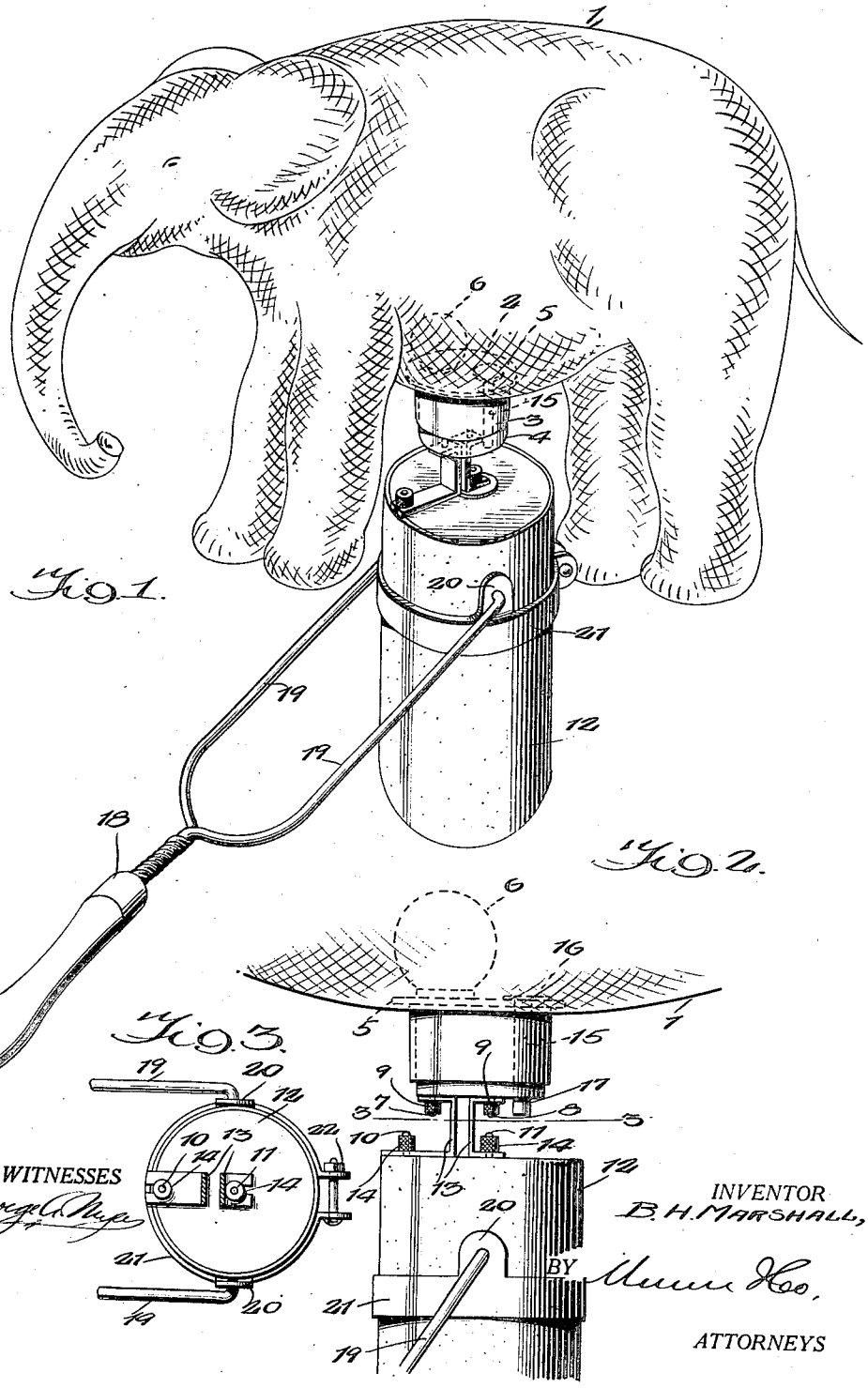


Fig. 1.

Fig. 2.

Fig. 3.

WITNESSES

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2 Sheets-Sheet 2

Fig. 4.

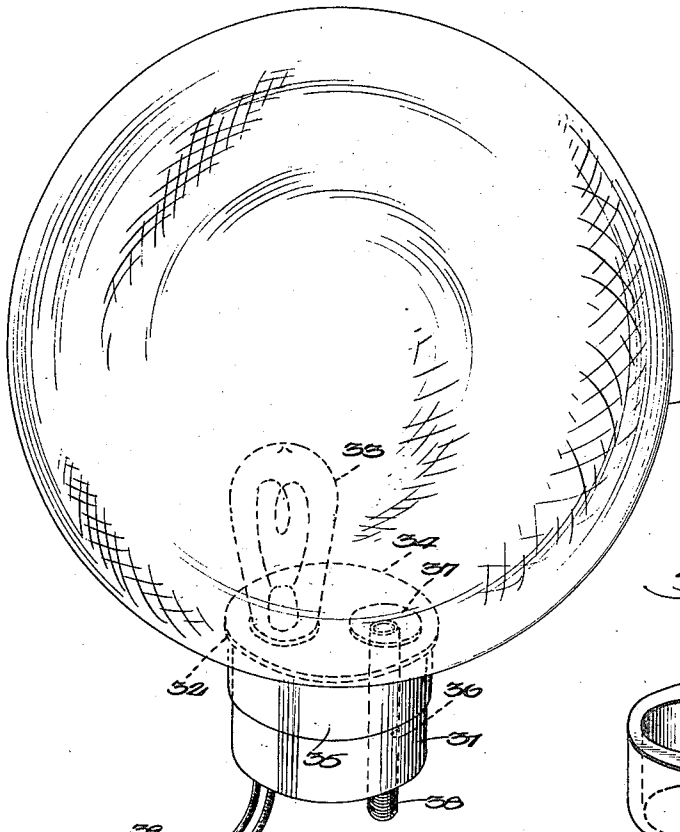


Fig. 5.

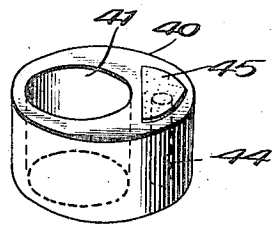


Fig. 6.

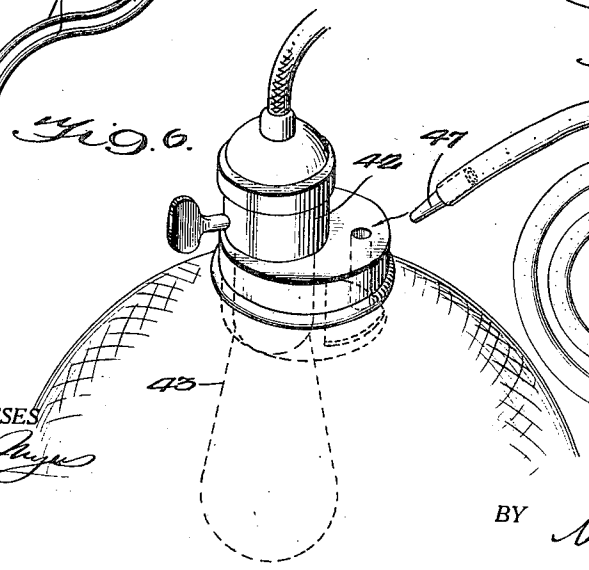
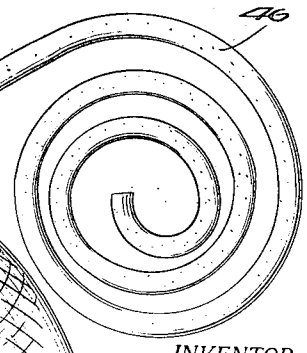


Fig. 7.



WITNESSES

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UNITED STATES PATENT OFFICE.

BURNS H. MARSHALL, OF DETROIT, MICHIGAN.

TOY.

Application filed March 1, 1924. Serial No. 696,266.

To all whom it may concern:

Be it known that I, BURNS H. MARSHALL, a citizen of the United States, and resident of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Toys, of which the following is a specification.

My invention is a toy of that class comprising pneumatic bodies, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of the invention is to provide a toy comprising an inflatable translucent body and means for associating the inflatable body with a light emitting element in such manner that the light emitting element may be disposed within the inflatable body and will illuminate the latter.

Other objects and advantages will be apparent from the following description, considered in conjunction with the accompanying drawings, in which—

Figure 1 is a perspective view showing a toy embodying the invention,

Figure 2 is a fragmentary side elevation of the toy,

Figure 3 is a section along the line 3—3 of Figure 2, looking in the direction of the arrows,

Figure 4 is a perspective view showing a modified form of toy embodying the invention,

Figure 5 is a perspective view showing a modified form of body which may be comprised in an embodiment of the invention,

Figure 6 is a fragmentary perspective view showing the body exhibited in Figure 5, and

Figure 7 is a view showing a tube adapted for use in inflating the inflatable body of the form of the device exhibited in Figure 6.

Referring now to the drawings and particularly to Figures 1 to 3 inclusive thereof, I show in Figure 1 an inflatable body 1 which may be made of thin rubber or like translucent impervious material and may be formed in the similitude of an elephant, as shown, or may have any other desirable form. The inflatable body 1 is provided with an opening, as at 2, from which a tubular boss 3 may extend outward although the provision of a tubular boss is not absolutely essential to the operation of the device, as will presently appear.

A supporting body 4 conforms in cross sectional contour to the tubular boss 3 in the opening 2. The cross sectional area of the supporting body 4 preferably is slightly greater than that of the opening 2 or of the tubular boss 3 at the juncture of the latter with the walls of the opening 2 so that an air tight connection will be provided between the supporting body 4 and the walls of the opening 2 when the supporting body 4 is inserted in the boss 3 to such position that the inserted end of the supporting body 4 is substantially flush with the inner end of the opening 2.

The supporting body 4 is made of a dielectric material and may be formed with a narrow annular flange 5 at its inner or inserted end to further insure a fluid tight connection between the supporting body and the walls of the opening 2 and to prevent accidental displacement of the supporting body from the opening 2. In this connection, it will be understood that the inflatable body 1 is preferably made of a material possessing considerable inherent elasticity so that the supporting body may be conveniently inserted in the tubular boss 3 to the position illustrated in Fig. 1 or be removed therefrom without precluding a fluid fit between the supporting body and the walls of the opening 2 when the supporting body is in the position shown in Figure 1.

The supporting body 4 is provided with a socket in its inner end adapted for engagement with an electric light bulb 6 in an ordinary manner. The electric light bulb 6 will be secured in the socket of a supporting body before the latter is inserted in the tubular boss 3 in the position shown in Figure 1. The terminals of the usual electrical connections of the socket and light bulb 6 extend from the outer end of the supporting body 4 as indicated at 7 and 8 respectively in Figure 2, these terminals preferably having the form of posts screw threaded for engagement with nuts 9. The terminals 10 and 11 respectively of a source of electric current supply, such as a dry cell 12, may be connected electrically with the electrical connections of the socket for the electric light bulb 6 by means of a pair of rigid connectors 13, each of which has a laterally extending arm at its lower end provided with an opening receiving one of the terminals 10 or 11 and a lateral arm at its upper end provided with an opening receiving the corresponding terminal 11 or 8. The lateral arm at the upper end of each of

the connectors 13 is clamped against the outer end of the supporting body 4 by one of the nuts 9 and the laterally extending arm at the lower end of the connector is clamped against the upper end of the dry cell 12 by a similar nut 14 which threadedly engages the terminals 10 or 11 with which the particular connector is associated. The connectors 13 thus not only serve to establish electrical connection between the terminals of the dry cell and the terminals carried by the supporting body 4 but also support the body 4 upon the dry cell in spaced relation to the latter.

The supporting body 4 is provided with an air inlet passage 15 extending longitudinally therethrough and controlled at its inner end by a flap valve 16 which preferably comprises a flat strip of flexible imperforate material disposed upon the inner end of the supporting body 4 in position to cover the passage 15 at the inner end of the latter, the strip 16 being secured for part of the distance around the peripheral edge thereof to the inner end of the supporting body by a suitable cement or in any other known suitable manner so that the valve 16 will open to permit air to be forced through the passage 15 into the inflatable body 1 but will be held closed because of pressure within the inflatable body to prevent the escape of air through the passage 15. If desired, a recess may be provided in the inner end of the supporting body 4 surrounding the inner end of the passage 15 for the reception of the flap valve 16 so that the latter will be flush with the inner face of the supporting body 4. A nipple 17 is provided by preference to extend from the outer end of the passage 15 and is adapted for connection with any suitable source of pressure fluid supply, such as the hose or discharge member of a hand pump.

It will be manifest from the foregoing that the inflatable body 1 may be inflated when in position on the supporting body 4 and that the electric light bulb 6 will be energized by current supplied thereto from the dry cell when the supporting body 4 is connected with the dry cell 12 in the manner described. The inflatable body 1 may be of such form as to render it suitable for use as a banner or for advertising purposes. For example, the form of the device exhibited in Figure 1 may be used appropriately in a political campaign preceding an election. The dry cell 12 with the inflatable body 1 supported thereon in the manner described may be conveniently carried in elevated position through the agency of a handle 18 having forks 19 at one end, the forks being provided with inturned end portions pivotally received in openings provided in ears 20 on a clamping band 21 which embraces the dry cell 12 and may be releasably held in embracing relation to the dry cell through the agency of fastening means such as the bolt and nut designated generally 22, said fastening means being arranged in engagement with aligned openings in radially extending outturned end portions of the band 21.

In the modification exhibited in Figure 4, the inflatable body is designated 30 and has the form of a toy balloon. A supporting body 31 is similar to the supporting body 4 in essential respects. The supporting body 31 has an annular flange 32 at its inner end and is provided with a socket in its inner end in which an electric light bulb 33 may be secured. The body 30 has an opening 34 from which a tubular boss 35 extends outward and the supporting body 31 may be inserted in the boss 35 through the opening 34 to the position shown in Figure 4. An air inlet passage 36 extending through the body 31 longitudinally of the latter normally is closed at its inner end by an inwardly opening flap valve 37 which is identical in essential respects with the flap valve 16 hereinbefore described. A nipple 38 protruding from the outer end of the air passage 36 may be threaded for connection with the discharge member of an air pump. The body 31 differs from the body 4 in that it is not provided with terminals extending from the outer end thereof but the electrical connection of the socket for the bulb 33 has flexible conductors 39 attached thereto in any suitable known manner, each of said conductors may have portions thereof molded in the body 35 at the time the latter is formed or may extend through suitable openings (not shown) for connection with the contact elements of the socket for the bulb 33. The conductors 39 may lead to any suitable source of electric current supply.

The modified form of supporting body shown in Figure 5 is designated 40 and is formed with an opening 41 extending therethrough longitudinally thereof. The opening 41 is adapted to be slipped over the lower end of a socket 42 of ordinary construction for holding an electric light bulb 43, the body 40 being sustained in place on the socket 42 when the electric light bulb 43 has been secured in the latter or may be retained in place on the socket 42 by any suitable known means. The body 40 also is provided with an air passage 44 extending longitudinally thereof and being covered by a flap valve 45 at the normally inner end thereof. The inflatable body 30 is shown in Figure 6 supported on the body 40 although obviously the inflatable body 1 or an inflatable body having any other desired shape may be used with the supporting body 40. A tube 46 has a nipple portion 47 at one end insertable in the passage 44 at the outer end of the latter.

The tube 46 provides a convenient means through which air may be forced into the inflatable body to inflate the latter. The operation of all forms of the device illustrated in the foregoing are identical in essential respects and will be understood without any further explanation herein.

Obviously, my invention is susceptible of embodiment in forms other than those illustrated in the accompanying drawings and I therefore consider as my own all modifications and adaptations of the forms of the device herein described as fairly fall within the scope of the appended claims.

I claim:—

1. A toy comprising an inflatable body having an opening and being made of a translucent impervious material, a supporting body made of dielectric material and insertable in said opening, said supporting body being adapted to have a fluid tight fit with the walls of said opening, said supporting body being provided with a socket at its inner end for the reception of an electric light bulb, means carried by said supporting body extending exteriorly of the inflatable body for conducting electric current to the contacts of said socket, said supporting member also having an air passage therethrough, and an inwardly opening flap valve carried by the supporting body for controlling the flow of air through said air passage.

2. A toy of the character described comprising an inflatable body made of translucent impervious material and having an opening, a supporting body made of dielectric material and adapted to be inserted through said opening to have a fluid tight fit with the walls of the latter, said supporting body having a socket at its inner end for the reception of an electric light bulb and being provided with terminals connected electrically with the contacts of said socket and extending from the outer end of said supporting body, and rigid electrical connectors for connecting the terminals of the supporting body with the terminals of a dry cell and for supporting said supporting body on said dry cell.

3. A toy of the character described comprising an inflatable body made of translucent impervious material and having an opening, a supporting body made of dielectric material and adapted to be inserted through said opening to have a fluid tight fit with the walls of the latter, said supporting body having a socket at its inner end for the reception of an electric light bulb and being provided with terminals connected electrically with the contacts of said socket and extending from the outer end of said supporting body, rigid electrical connectors for connecting the terminals of the supporting body with the terminals of a dry cell and for supporting said supporting body on said dry cell, a clamp adapted to be secured in embracing relation to said dry cell, and a handle for supporting said clamp in elevated position.

BURNS H. MARSHALL.