June 24, 1930. B. BERKO ET AL 1,767,911

ATOMIZER

Filed April 13, 2 Sheets-Sheet 1

Fig. 1.

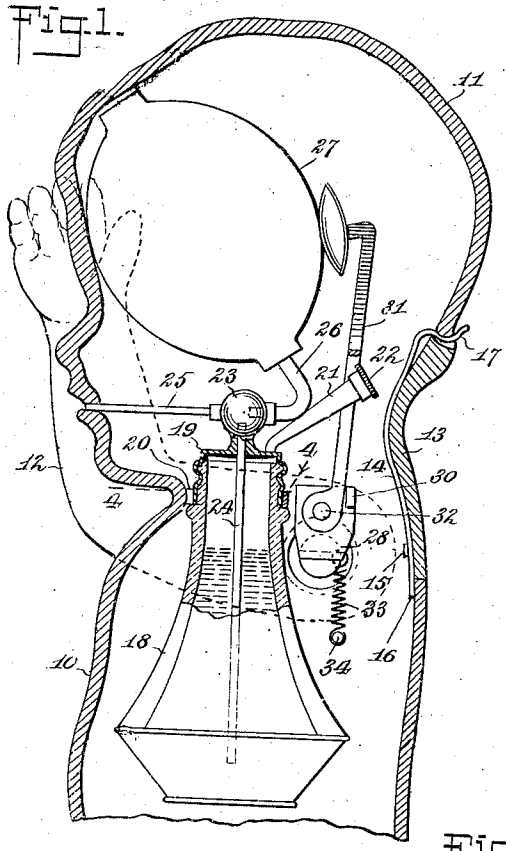


Fig. 2.

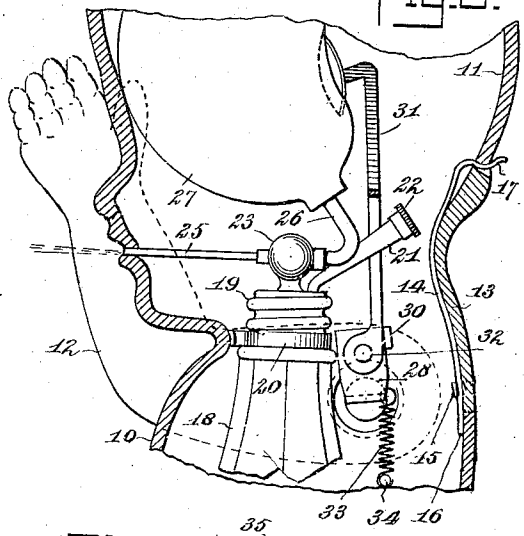


Fig. 5.

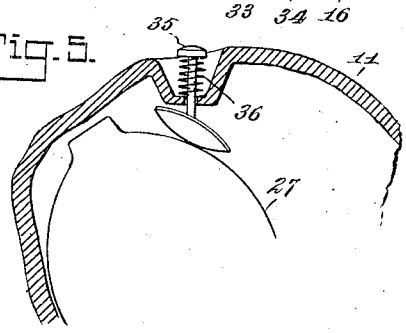


Fig. 4.

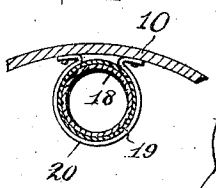
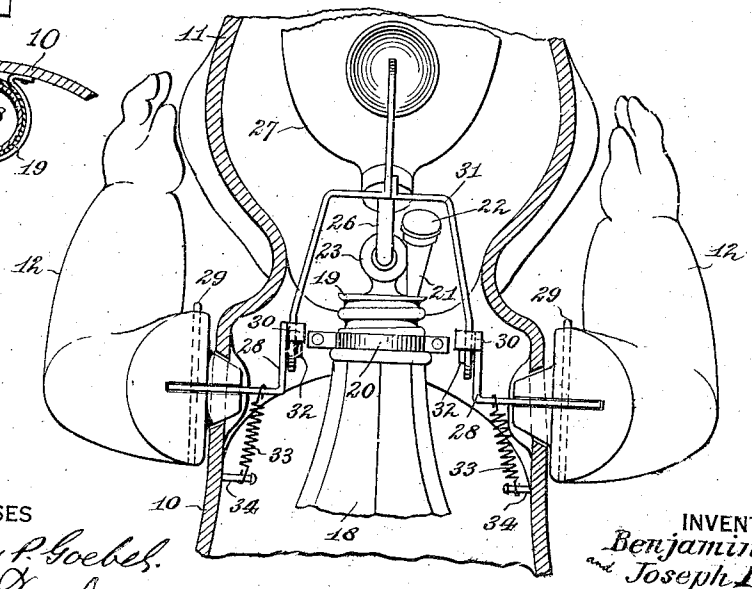


Fig. 3.



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ATOMIZER

Filed April 13, 1928 2 Sheets-Sheet 2

Fig. 6.

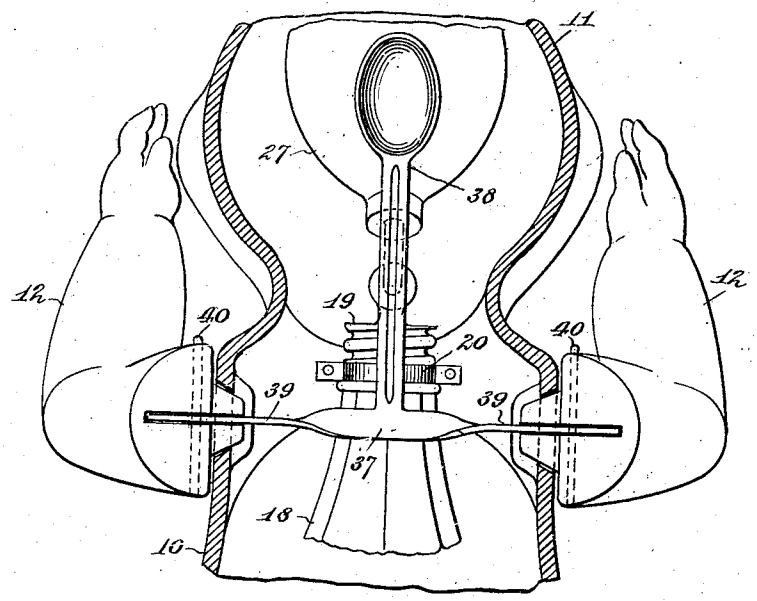
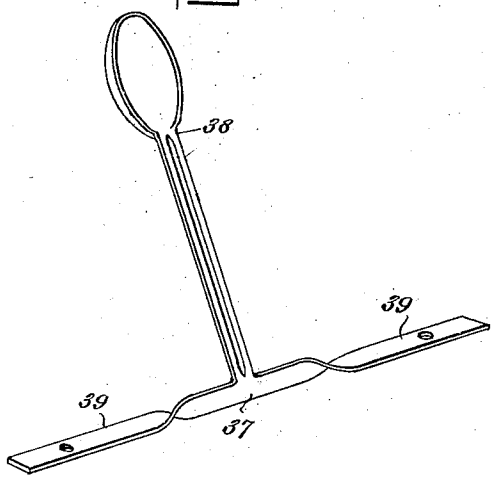


Fig. 7.



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UNITED STATES PATENT OFFICE

BENJAMIN BERKO AND JOSEPH BREWER, OF NEW YORK, N. Y.

ATOMIZER

Application filed April 13, 1928. Serial No. 269,785.

This invention relates to an atomizer.

One of the objects of the invention is the provision of an atomizer having an outward artistic and ornamental appearance in simulation of some natural or life-like object.

Another object of the invention is to provide an atomizer of the indicated character, in the form of a doll having one or more movable appendages, such as the arms and legs constituting parts of the doll, which may be manipulated to cause atomization of the perfume or other liquid used, the spray issuing from one or more orifices in portions of the doll, such as mouth, eyes, or nose.

With the foregoing and other objects in view, the invention resides in the particular provision, construction, relative disposition, and operation of the parts, hereinafter fully described, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of an atomizer constructed in accordance with the invention, the movable parts being shown in their normal positions.

Fig. 2 is a view similar to Fig. 1, and showing the movable parts in action.

Fig. 3 is a vertical sectional view taken in a plane at a right angle to the plane of the section of Fig. 1, and looking forwardly.

Fig. 4 is a detail sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 shows a modified form of air bulb actuating means.

Fig. 6 is a view similar to Fig. 3, showing a further modified form of air bulb actuating means.

Fig. 7 is a perspective view of the air bulb actuator shown in Fig. 6.

Generally stated, the atomizer comprises a figure or doll constructed in simulation of a natural object, atomizing means, and means adapted to actuate the atomizing means to cause a spray of perfume or other liquid used, to issue from one or more orifices in the figure or doll.

In the present instance the figure or doll 10 is in simulation of a baby including the head 11, and movable arms 12. The figure or doll 10 in the form of a baby, is shown by way of example only, and it is to be understood that figures or dolls simulating other objects such as animals and others may be used. The doll 10 is of hollow construction and includes a removable section 13 at the rear which is held in place in any suitable manner, it being held in place in the present instance by a spring member 14 attached to the inside of the section 13 as at 15. One end of the member 14 projects beyond the lower edge of the section 13, and is engageable with the contiguous portion of the doll body as at 16, and the opposite end 17 of the member 14 is curved and extends laterally outward through a space formed between the section 13 and a portion of the head 11. The said end 17 is engageable with the portion of the head and may be manipulated or flexed for the purpose of removing the section 13.

The atomizing means includes a receptacle or bottle 18 which contains the perfume or other liquid. The upper open end of the receptacle or bottle 18 has a threaded neck adapted to be screwed in a cap 19 fixedly secured in place by a band or the like 20 attached to a portion of the doll. The cap 19 is provided with a filling tube 21 having a removable cap 22. Arranged on the cap 19 is a head 23 of hollow construction having an aspirator tube 24 depending therefrom into the bottle 18, a nozzle 25 communicating with the interior of the head, and an air tube 26 extending into the head adjacent to and above the upper end of the tube 24, the opposite end of the tube 26 having connected therewith a rubber air bulb 27 having the usual vent. The bulb 27 is arranged in the head 11 of the doll and normally is in contact with a portion thereof. In the present instance the nozzle 25 extends into an orifice of the mouth of the doll head. The atomizing means just described is of a well known form, and any other atomizing means suitable and adapted to be arranged in the figure or doll may be used.

The means for actuating the air bulb 27 for producing atomization of the perfume or other liquid in the bottle 18 may be diversely formulated. As shown in Figs. 1, 2 and 3, the said means includes bracket members 28 respectively connected with the arms 12, each

being held in place by a pin or the like 29. Each bracket member 28 has a lug 30. An actuator 31 has pivotal connection as at 32 with the bracket members 28, and is adapted to act on the air bulb 27. A spring 33 is employed in conjunction with each bracket member 28, one end of the spring being connected with the bracket member, and the opposite end thereof being connected with a pin or the like 34 on the body of the doll. It will now be apparent that when either one of the arms 12 is moved or rocked forwardly and downwardly, movement will be imparted to the related bracket member 28, causing its lug 30 to bear against a portion of the actuator 31, the latter squeezing or pressing the bulb 27. This will cause air to pass out of the tube 26 across the upper end of the tube 24 creating suction action in the tube 24. This will cause a spray of the perfume or other liquid to be discharged from the nozzle 25. When the arm 12 is released, the spring 33 will return the parts to the normal positions.

If desired the air bulb 27 may be actuated by an actuator 35 under the influence of a spring 36 carried by the head 11 of the doll, as shown in Fig. 5.

In Figs. 6 and 7 are shown a modified form of actuator 37, which operates the bulb 27, and which is connected with the arms 12. The said actuator is stamped, bent and formed from a single piece of material to provide a reinforced spoon-shaped member 38, and members 39 disposed at right angles with respect to the member 38, in alignment with each other. The members 39 are respectively extended in slots in the arms, and are held therein by pins or the like 40. Either of the arms 12 may be moved or rocked to impart movement to the actuator 37 for the intended purpose.

It will be apparent that the section of the doll may be readily removed for refilling the bottle 18, and also affords access to the interior when assembling some of the parts.

It is to be understood that the invention is not restricted to the precise arrangement of parts shown and described, as details of construction may be modified and rearranged without departing from the spirit of the invention, the scope of which is limited only by the terms of the appended claims.

We claim:

1. An atomizer comprising a hollow doll having external movable members, atomizing means within the doll and associated therewith so as to discharge a liquid spray through an orifice in the doll when operated, and means adapted to be operated by the movement of each one of said members to operate said atomizing means.

2. An atomizer comprising a hollow figure having external movable members, atomizing means within the figure and associated therewith to discharge a liquid spray through an orifice in the figure, said atomizing means including an air bulb; and means adapted to be operated by the movement of each one of said members independently of the other member to exert pressure on said bulb to expel air therefrom to produce the liquid spray.

3. An atomizer comprising a hollow figure including an external member fitted to the body thereof for movement, atomizing means including an air bulb arranged within said figure, said atomizing means being so associated with the figure as to discharge a liquid spray through an orifice in said figure when the bulb is actuated, and means rigidly connected with said external member which actuates said bulb on movement of said external member.

4. An atomizer comprising a hollow figure including an external member fitted to the body thereof for movement, atomizing means including an air bulb arranged within said figure, said atomizing means being so associated with the figure as to discharge a liquid spray through an orifice in said figure when the bulb is actuated, a pressure member pivotally connected with said external member, a lug rigidly connected with said external member and positioned to act on said pressure member by the movement of said external member to cause the pressure member to actuate said bulb, and means for returning the external member to a normal position.

Signed at New York city in the county of Bronx and State of New York this 5th day of April, A. D. 1928.

BENJAMIN BERKO.
JOSEPH BREWER.