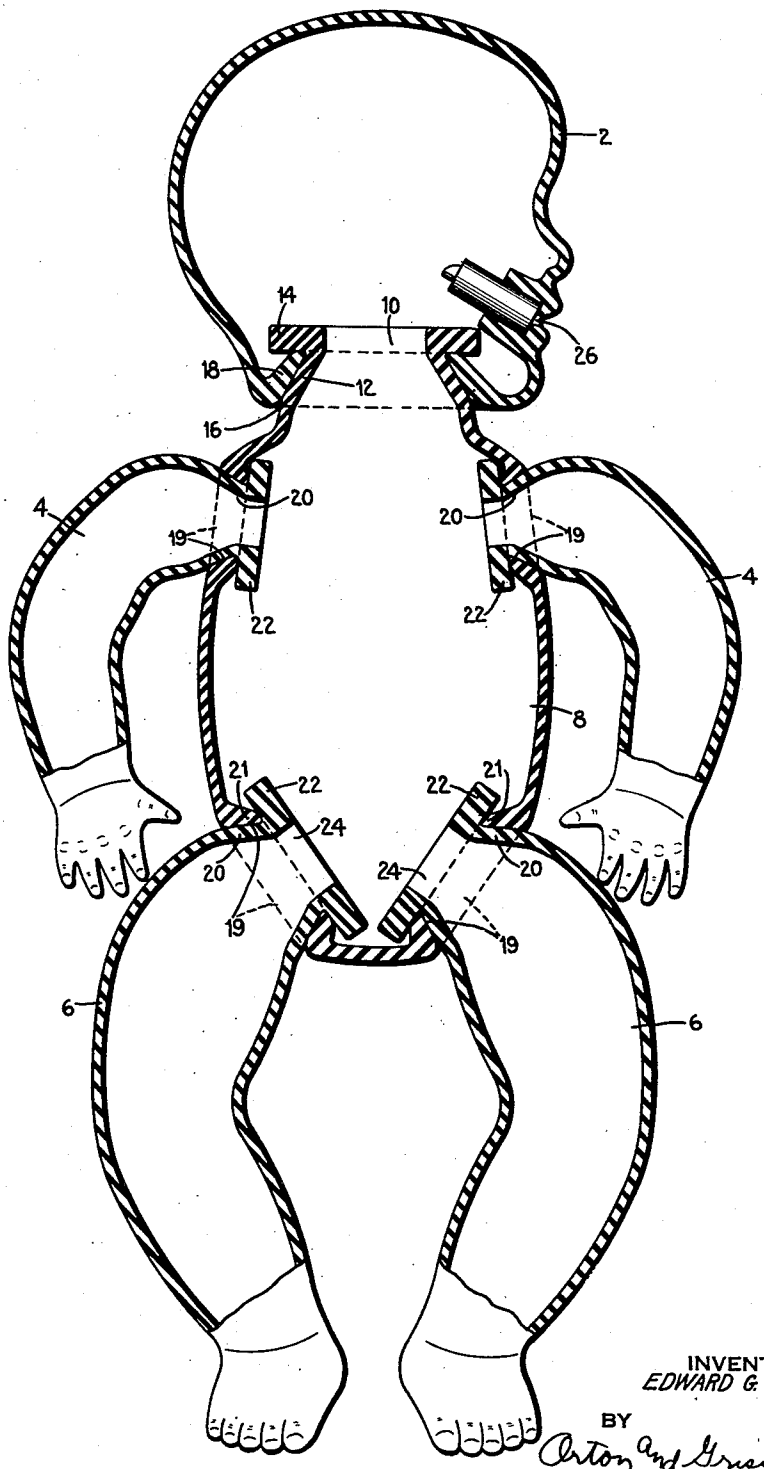
Nov. 9, 1937. E. G. SCHAEFFER 2,098,925

DOLL

Filed June 25, 1936



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Patented Nov. 9, 1937

2,098,925

UNITED STATES PATENT OFFICE

2,098,925

DOLL

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Application June 25, 1936, Serial No. 87,135

2 Claims. (Cl. 46—117)

This invention relates to dolls and more particularly to dolls of the speaking type, that is, dolls which may be caused to produce a sound, such as of crying or speaking, when a portion of the doll is pressed.

One object of the present invention is a doll in which the sound is emitted in a natural manner. Accordingly, the doll of this invention is so constructed and arranged that the noise or sound emerges from the doll's mouth.

Another object of the invention is a doll in which a sound is caused to be created whenever a portion of the doll's anatomy is pressed, for instance, when an arm, a leg, a foot or the like is pressed. Accordingly, the body and limbs of the doll are formed as non-collapsible hollow bodies, the walls of which are of resilient material.

The invention also seeks a doll in which the sound is created by means responsive to pressure or a flow of air in the doll. To this end, communicating connections are preferably provided between each limb and the body and between the body and the head. A communicating connection with the outside is provided at the mouth, in which communicating connection the sound producing means is located.

It is also an object of the invention to provide a doll of the character described having natural characteristics. Accordingly, the joints between the limbs and the body and the head afford a swiveling movement therebetween to simulate corresponding movements of the human body.

A further object of the invention is a joint for a limb or a head, in a doll, permitting the various parts of the doll to be readily assembled and affording the advantages hereinbefore outlined.

These and other objects of the invention and the means for their attainment will be more apparent from the following detailed description, taken in connection with the accompanying drawing showing, in transverse vertical section, a doll of this invention, the head being turned at an angle of 90° with respect to its natural position, to simplify illustration.

While the doll is illustrated in the drawing as formed with a one-piece hollow head 2, arms 4, legs 6 and body 8, it will be obvious, as the description proceeds, that the limbs 4 and 6 may be jointed at the elbows and knees, respectively, and if desired, also at the wrists and ankles with joints substantially similar to those illustrated at the shoulders and hips whereby all natural movement may be effected. The limbs, head and body preferably comprise flexible, resilient or elastic material such as vulcanized rubber molded to the desired form and hollow as illustrated, although the head or any other portion may be either rigid or flexible as desired, and it is possible to use rigid material for either the body 8 or for the limbs and still create a sound from the mouth when any portion of the doll, which is flexible, is pressed.

The body 8 is provided at the neck portion with an opening 10 which serves not only for the removal of the core when the body is moulded but also as a communicating connection between the head 2 and the body 8. The opening 10 is defined by an extended and preferably tapered neck portion 12, preferably circular in cross-section, and shown as terminating in an outwardly directed or lateral flange portion or perforated button 14. The frusto-conical extension 12 of the neck portion serves as a bearing or frusto-conical bearing surface and as one element of the swiveling connection with the head. It is disposed within an opening 16 in the bottom of the head which is defined by an inwardly and upwardly directed flange or cooperating bearing surface 18 which is preferably tapered or frusto-conical in form. The flange 18 becomes progressively thinner toward the inside of the head, i. e., toward its end so that the head may be buttoned over the flange 14 and the cooperating surfaces 12 and 18 serve as a swiveling connection by which the head may be rotated on its vertical axis.

The limbs 4 and 6 are also preferably formed as one-piece hollow members, conveniently of soft vulcanized rubber, the one extremity of each of which being adapted to enter an opening in the body 8, as shown. Each of these limbs is formed with a tapering portion 20 having, outwardly, a frusto-conical bearing surface adapted to cooperate with the surface on the body defining the opening 19. As with the neck portion, the tapering portion 20 has a lateral flange 22. The opening 19 is of progressively decreasing diameter, preferably circular or frusto-conical in shape and is defined in part by an inwardly extending surface or rim 21, which is also progressively reduced in diameter toward the edge, as shown, to provide that degree of flexibility desirable to permit it to be buttoned over the flange 22 on the inner end of the portion 20.

Each of the hollow limbs 4, 6 are provided with the openings 24 which serve, not only for the removal of the core, but also as a communicating connection between the contractible interior of the arm and the interior of the body.

The limbs, the body and the head being all in communicating connection and at least certain of these portions being flexible and resilient, compression of any portion of the parts creates a pressure which may be utilized to create a flow of air through the opening **26** or passage in the mouth of the doll leading to the exterior atmosphere. This opening is defined, inwardly of the mouth, as a hollow boss or hollow annular cylinder **28** in which may be inserted the sound producing instrumentality. Such an instrumentality is conveniently one having one or more reeds caused to vibrate by the passage of air through the mouth opening in either direction.

The creation of the sound will be apparent from the foregoing description. Suffice it to say, that whenever any portion of the doll, such as a leg **6**, is squeezed, air is forced out of the mouth portion causing the reed or reeds or other sound creating instrumentalities to make a sound. A very natural effect is thus produced because if a foot, for instance, is squeezed, a natural cry may be caused to come from the mouth.

Various modifications will occur to those skilled in the art in the composition, configuration and disposition of the component elements going to make up the invention as a whole as well as in the selection and utilization of features of the invention for specific purposes and no limitation is intended by the phraseology of the foregoing description or illustrations in the accompanying drawing, except as indicated in the appended claims.

What is claimed is:

1. A hollow non-collapsible doll molded from resilient material of which the interior of the body, head, arms and legs, are in free open intercommunication with each other through movable joints and coact to form a single air reservoir of the capacity of the entire doll, said doll having substantially its entire exposed surface formed of thin walled molded rubber and thus capable of being squeezed at any portion thereof to place the body of contained air therein under pressure different from the external atmospheric pressure, the head being fashioned to provide a constricted opening at the mouth, and an air pressure actuated sound producing device mounted in the head with its rear end exposed to the pressure in the air reservoir and outer end supported by the face portion and concealed from view back of the mouth and disposed to discharge sound through the mouth whereby squeezing any part of the doll will cause sound to emanate from the doll's mouth.

2. A doll comprising a hollow non-collapsible body portion of molded resilient material formed with an opening for communicating connections with a limb portion, a hollow limb portion of resilient material attached to the body portion by a movable joint and formed with a wide open passage forming an opening for communicating connection with the body portion, a hollow head including a mouth with a passage through the mouth and formed with a mounting means in the face portion in the rear of the mouth, a wide open communicating connection between the body portion and the head, and sound producing means in the mounting means and exposed to both the interior of the head and to the passage and so disposed as to be operable upon movement of air through the mouth caused by compressing the limb portion.

EDWARD G. SCHAEFFER.