(No Model.)

G. H. HOWARD.

DOLL.

No. 268,020. Patented Nov. 28, 1882.

Fig. 1.

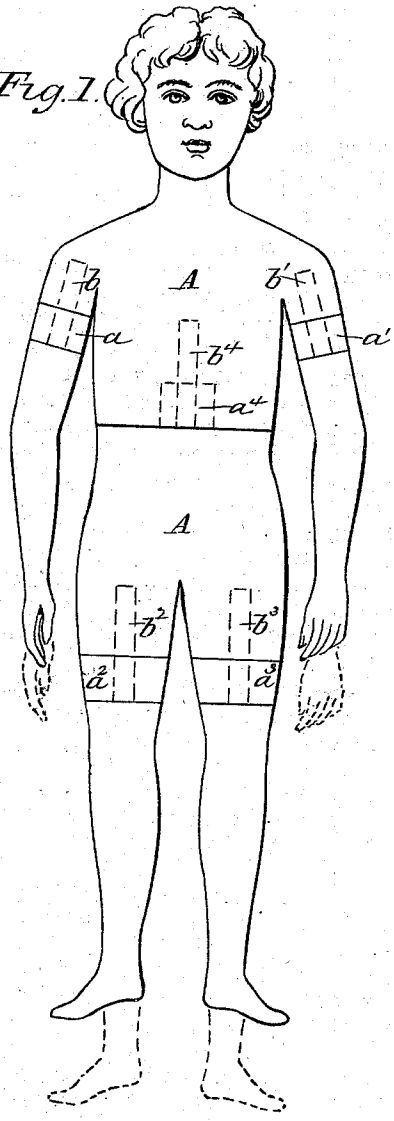
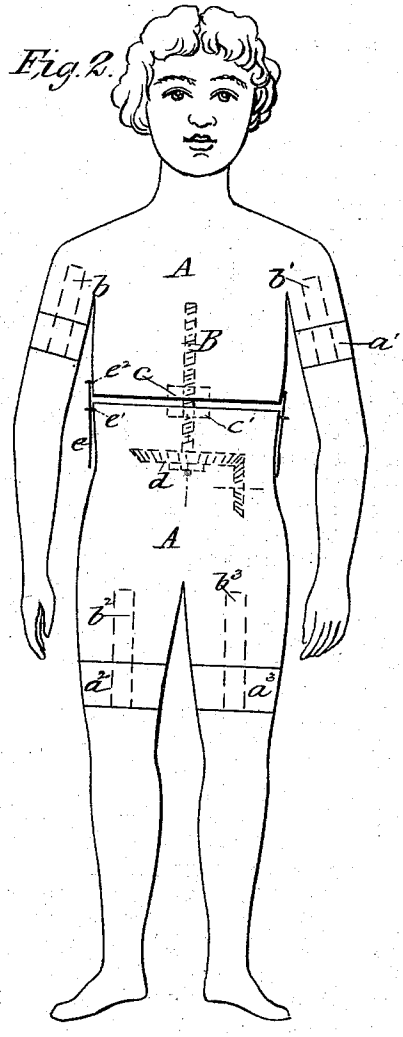


Fig. 2.



Witnesses:
F. C. Reintemann
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UNITED STATES PATENT OFFICE.

GEORGE H. HOWARD, OF WASHINGTON, DISTRICT OF COLUMBIA.

DOLL.

SPECIFICATION forming part of Letters Patent No. 268,020, dated November 28, 1882.

Application filed April 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. HOWARD, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Dolls, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is designed to increase the value of dolls as means of amusement for children.

To this end the invention consists in making the doll extensible, whereby the idea of growth, as of a child, may be carried into effect.

The improved doll may be constructed in any suitable manner, giving extensibility to the body or body and members.

In the accompanying drawings, Figure 1 represents in full lines a doll not extended, the dotted lines showing it extended to indicate growth. Fig. 2 shows a doll provided with mechanism which causes its automatic extension.

Referring to Fig. 1, A is the body or trunk of the doll. At any part of the trunk and at any convenient part of the arms (as below the shoulder) and of the lower limbs (as at the thigh) is inserted a tube, (as at a a' a^2 a^3 a^4,) preferably of rubber, each of which tubes forms a socket for a pin attached to a separate member of the doll. Thus the pin b is attached to the head, while the pins b' b^2 b^3 b^4 are united to and form parts of the right and left arm and lower-limb sections, respectively. The pins are of a size to allow them to be held tightly within the rubber tubes, but to permit of their being slipped in or out in extending the dimensions of the doll. If preferred, the tubes may all be attached to the trunk proper and the arms and lower limbs be provided with pins, and attached as a whole to the trunk. The pins may also be fixed to the trunk and the tubes to the members or movable parts. The trunk may also be made extensible. I do not confine this part of my invention to the use of flexible tubes and socket-pins adapted to fit therein, nor to the use in any manner of tubes and pins, its scope reaching broadly to a sectional or extensible doll.

The second part of my invention consists in constructing the trunk in two sections and applying thereto a clock-movement, which effects the automatic elongation of the body of the doll. This preferably consists in the mechanism shown in Fig. 2. B is a screw, connecting the two sections of the trunk, which screw has as its nut the plate c inserted in one of the trunk-sections, and has one or more fixed bearings in the other section, as at c'. To the lower end of the screw a gear-wheel, d, is secured, which forms the great wheel of the movement. This is very slowly driven by an ordinary system of wheels. (Not here shown.) The movement is inclosed within a section of the trunk in a manner common with mechanical toys. Sliding connections between the two parts of the trunk are provided in the pins e, secured at e^2 and slipping in the staples e'. The line to be occupied in the automatic extension of the doll-body may be made to suit the option of the manufacturer. The automatic features here described may be used in connection with the means for extending the arms and lower limbs described as of the first part of my invention or alone, as may be preferred.

I have made certain improvements on the invention herein described, consisting in a rack and pinion and other means of extending the doll in length, and which enable it to be readily collapsed or shortened on disengaging the mechanism, which improvements will form the subject of another application.

I claim—

1. As a new article of manufacture, a sectional or extensible doll, substantially as hereinbefore described.

2. A doll having as parts of its trunk and members extensible joints, substantially as hereinbefore set forth.

3. A doll having combined with its trunk and members flexible tubes and pins adapted to fit therein, forming together extensible joints, substantially as hereinbefore set forth.

4. A doll formed in sections and provided with a clock-movement for automatically giving it extension, substantially as hereinbefore set forth.

5. A doll having its trunk formed in two sections united by a screw, having a nut in one section and a fixed bearing in the other, said screw being driven by clock-work, substantially as hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. HOWARD.

Witnesses:

W. T. COLE,

CHARLES P. WEBSTER.