Feb. 21, 1950 I. STOKES 2,498,141

DOLL

Filed July 8, 1946 2 Sheets-Sheet 1

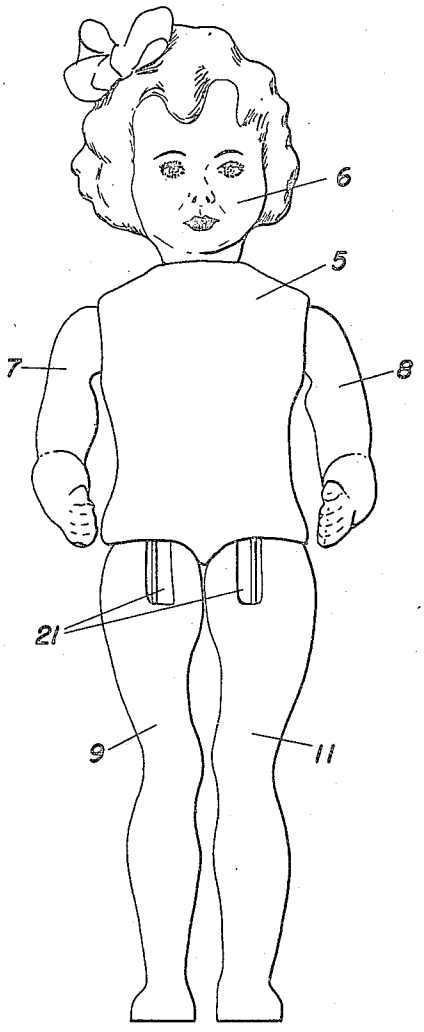


Fig 1

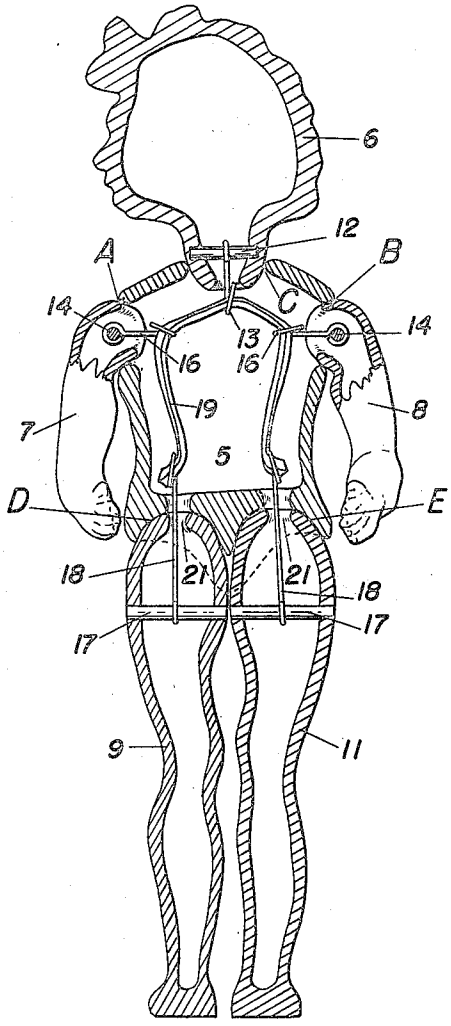


Fig 2

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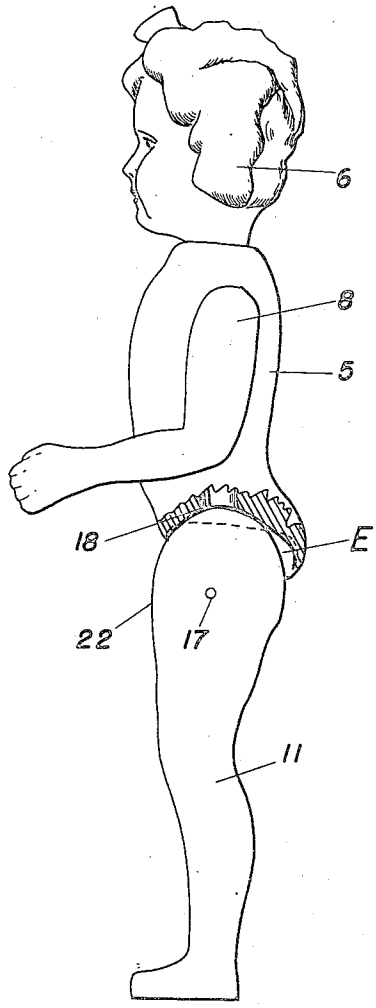


Fig 3

Fig 4

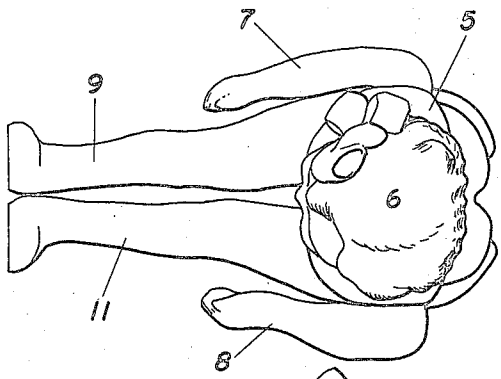
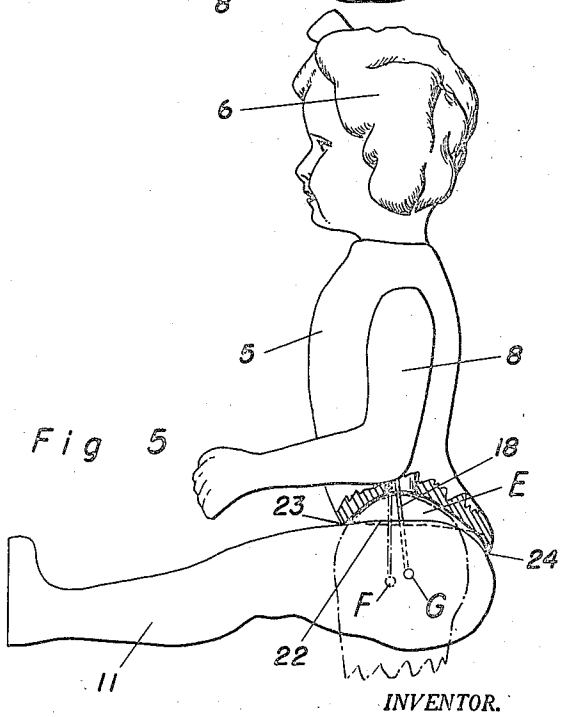


Fig 5



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UNITED STATES PATENT OFFICE

2,498,141

DOLL

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Application July 8, 1946, Serial No. 681,984

2 Claims. (Cl. 46—161)

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This invention relates to improvements in dolls, and has particular reference to a doll wherein the limbs and head may be moved to simulate the movements of a human body.

The particular object of this invention is to provide a doll wherein the legs and arms may be rotated so as to move the same in any desired direction and to have them remain so positioned.

A further object is to provide means whereby the legs when bent at right angles to the body will permit the doll to assume a sitting position with the legs in parallel relation to each other in contradistinction to the customary V spread of a sitting doll.

A further object is to provide means whereby when the doll is in sitting position it will remain so and have no tendency to tip over backward as is common with most dolls.

A further object is to produce a doll which is economical to manufacture, easy to assemble and one which may be readily repaired should the same become damaged.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a front elevation of my doll.

Fig. 2 is a vertical cross section of my doll showing the head rotated to an angle of ninety degrees and a portion of the arms in elevation.

Fig. 3 is a side elevation of my doll having a portion thereof shown in cross section.

Fig. 4 is a top plan view of Fig. 5, and

Fig. 5 is a side elevation of my doll when in sitting position, a portion thereof being in cross section.

The ordinary doll having hinged legs and arms relies entirely upon a ball and socket arrangement for maintaining the legs and the arms in various positions, and particularly this socket arrangement between the body and the leg portions is such that when the doll is in sitting position, that is with the legs at right angles to the body, then the center of gravity of the doll's body is to one side of dead center of the pivotal connection and to the rear of the pivotal connection with relation to the feet which causes an overbalancing condition, and these dolls therefore will not readily retain a sitting position but must be propped in such position.

Also, this ball and socket arrangement is such that the legs of the doll instead of lying parallel to the body when not in a sitting position are

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spread V-shaped which is not a natural position.

I have therefore devised a doll wherein the legs may be bent at right angles to the body and in so doing the pivotal point is shifted with respect to the body so that the body is advanced along the leg sections toward the feet, and consequently the overbalancing effect above described has been overcome.

In the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates the body or torso, to which are connected a head section 6, arms 7 and 8 and legs 9 and 11.

The manner of connecting the head, arms and legs is as follows:

A pin 12 extends through the neck section of the head and has a hook 13 depending therefrom. Each arm is provided with a similar pin 14 and a hook 16 extending therefrom. Each leg is provided with a pin 17 and a hook 18. These hooks all extend through openings in the body 5 and are engaged by a rubber band 19 which has its ends pinched by the ends of the hooks 18 and has the loop portion engaging the hooks 16 and 13, and when so reeved it is understood that this band is under tension, with the result that the arms 7 and 8 and the head 6 are all pulled into their respective sockets, as shown at A, B and C, and that the legs 9 and 11 are pulled into their respective sockets, as shown at D and E.

Slots 21 are formed in each of the legs so as to permit the hooks 18 to move therein as the legs are pivoted with respect to the body.

By viewing Fig. 3 it will be noted that the upper end of the leg section 11 fits the front and upper contour of the socket E, and by viewing Fig. 5 it will be noted that the relatively flat portion 22 of the leg spans the socket opening E when the leg is bent at right angles to the body 5, and that the body only contacts the leg at the points 23 and 24 and that the connecting or pivotal point represented by the pin 17 has moved from the point F to the point G; or, in other words, the body has shifted forwardly along the flat portion 22 of the leg, and therefore the center of gravity of the body is forward of the point G and counteracts any tendency for the doll to tip over backward; also, this arrangement permits the legs to pivot on a parallel axis so that there is no tendency for the legs to spread as is common to all sitting dolls.

It will be seen from Figs. 2 and 3 that the leg sockets in the body are relatively narrow laterally and relatively broad from front to rear,

Also, it will be seen that these leg sockets have rear walls which extend well below the corresponding front walls. Furthermore, the rear portion of each socket, as shown in Figs. 3 and 5, is of greater length and its curvature from front to back is of greater radius than the corresponding front portion. By reason of this construction the legs move backwardly in passing from standing to sitting position and the relatively narrow sockets hold the legs from spreading. It will likewise be noted that this construction effects shifting of the leg pivot point from F to G.

It will thus be seen that I have provided a doll which has all of the advantages above set forth.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a doll, a body having leg sockets, each of said sockets being relatively narrow laterally and relatively wide from front to back, said sockets each having a rear wall extending below the front wall, the rear portion of each socket being of greater length than the forward portion and having a greater radius of curvature from front to back than the corresponding length and radius of curvature of the forward socket portion, legs each fitting closely in said sockets laterally and fitting loosely from front to back, and elastic means to hold said legs in said sockets.

2. In a doll, a body having leg sockets, each of said sockets being relatively narrow laterally and relatively wide from front to back, said sockets each having a rear wall extending below the front wall, the rear portion of each socket being of greater length than the forward portion and having a greater radius of curvature from front to back than the corresponding length and radius of curvature of the forward socket portion, legs each fitting closely in said sockets laterally and fitting loosely from front to back, and elastic means to hold said legs in said sockets, said elastic means normally urging the legs into the forward portion of the socket.

IZETTA STOKES.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
681,974	Purvis	Sept. 3, 1901
715,106	Meinecke	Dec. 2, 1902
818,842	Meier	Apr. 24, 1906
1,212,099	Nicholson	Jan. 9, 1917