

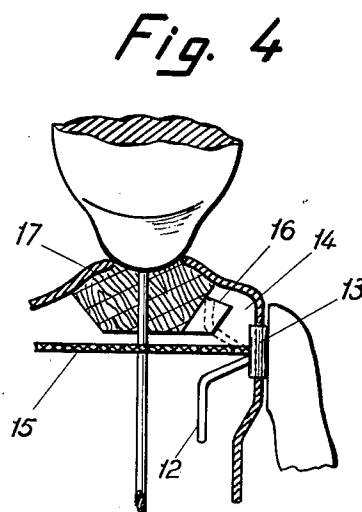
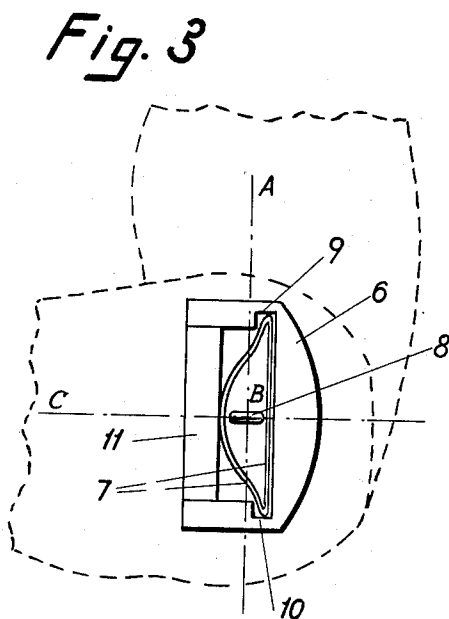
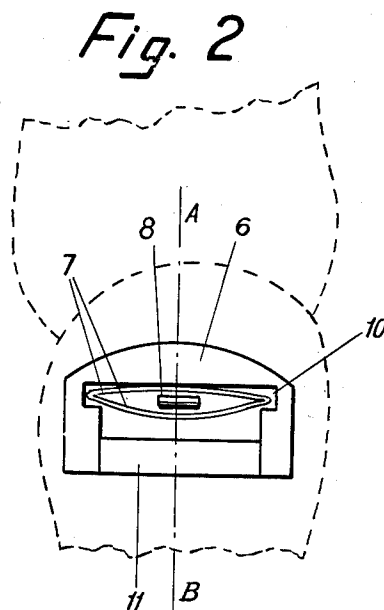
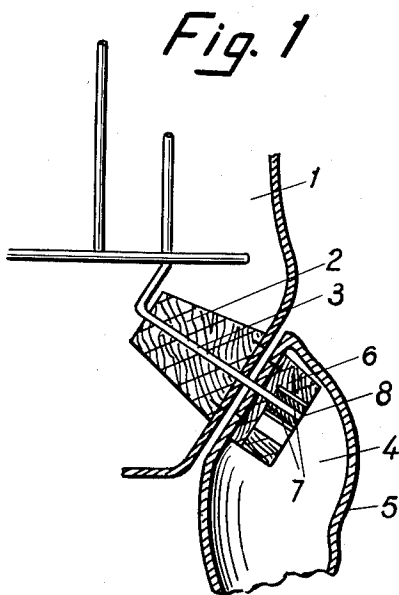
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2,723,490

DOLL JOINT

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2,723,490

DOLL JOINT

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2 Claims. (Cl. 46—173)

The present invention relates to improvements upon the mechanisms of walking dolls.

An object of the invention is to provide a construction of a joint whereby a doll will simulate walking when conducted by hand.

A further object of the invention is to provide a construction wherein rods connected to the legs will cause a wire cross-piece to oscillate which is connected by a vertical rod to the lower part of the neck so that a walking motion by the doll will simultaneously bring about an oscillation of the head.

A further object of the invention is to provide a construction for the leg joints which is completely invisible from the exterior and which ensures a movement suitable for walking which can also due to its resiliency, hold the leg when in a sitting position.

With the above and other objects in view which will become apparent from the detailed description below and as set forth in the claims, a preferred embodiment of the invention is shown in the drawings in which:

Figure 1 is a cross-sectional view of a leg joint.

Figure 2 is a side elevational view of the joint with portions of the doll indicated by dotted lines.

Figure 3 is a view similar to that of Figure 2 showing the position that the parts will occupy when the doll is in sitting position, and

Figure 4 is a cross-sectional view of a joint as applied to a doll arm which will allow the walking thereof to be more easily performed.

Located at the inside of the hollow body 1 of the doll is a guide block 2 of wood or any other material, preferably of cone shape. Extending through a bore in the block 2 is a rod 3 which extends towards the outside into a recess 4 of the leg 5.

Within the recess 4 and fixed to the wall of the leg is a block 6 formed of wood or any other material constituting a bearing for the rod 3.

The block 6 at its inward side is provided with a recess extending transversely of the bore in the block 6. Located within the recess is a pair of leaf springs 7 and extending between the springs 7 is the flattened end 8 of the rod 3 as more particularly shown in Figures 2 and 3. The leaf springs 7 have their ends disposed in the grooves 9 and 10 communicating with the recess. A bottom plate 11 closes the recess.

The joint is therefore located within the hollow elements of the doll.

In Figure 4 a construction is shown whereby the arm of the doll may be lifted and a clamping takes place by means of the pintle 12 which is keyed in the gudgeon 13 provided on the arm. The pintle 12 extends into the body 14 where it may be put under tension by the rubber piece 15. A salient or tail 16 fixed to the seat block of the head 17 serves as a stop for the pintle 12.

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The operation of the above construction is as follows: With respect to a leg construction such as shown in Figures 1 and 2 when the body is in vertical position suitable for walking the axis of the body and of the leg may be considered to be a prolongation along the line A—B shown in Figure 2. In this case the flat end 8 of the rod which constitutes the articulation is parallel to the leaf springs and any oscillatory movement of the leg is transmitted to the rod 3. Furthermore when any rotary movement is prevented as for instance through the connection with the head of the doll, then the flat end 8 will move with relation to the springs so as to occupy the position as shown in Figure 3. The leg will then be held in such position wherein the axis of the body of the doll is along the line A—B while the axis of the leg is disposed along the line B—C.

For simulating walking the arm of the doll is immobilized upon being lifted so that by this movement the member 12 strikes against the salient 16 which is carried by the seating piece for the head. Such immobilization insures the position of the arm and facilitates the movements which simulate walking.

The invention within its essentiality may be carried into practice in other variations of embodiment that in detail may differ from that indicated solely by way of example for the description. Thus, the same may be designed in any shape and size and in the manufacture thereof may be utilized the materials most suitable for the attainment of the intended purpose: all that being comprehended within the scope and spirit of the claims.

Having now described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim as new and desire to secure by Letters Patent is:

1. A joint for a hollow doll comprising a guide block located within the body of said doll having a bore extending therethrough, said body having an opening aligned with said bore, a block secured to the inner surface of a hollow leg to be attached to said body having a bore therein and a recess extending transversely to said last named bore, said leg having an opening therein aligned with said last named bore, a rod extending through said bores and said openings forming an axis of oscillation for said leg with respect to said body, a leaf spring secured in said recess having one end thereof immobilized and a flattened portion upon said rod cooperating with said spring whereby said leg may simulate a walking movement or be fixed in sitting position.

2. A joint for a hollow doll comprising a guide block located within the body of said doll having a bore extending therethrough, said body having an opening aligned with said bore, a block secured to the inner surface of a hollow leg to be attached to said body having a bore therein and a recess extending transversely to said last named bore, said leg having an opening therein aligned with said last named bore, a rod extending through said bores and said openings forming an axis of oscillation for said leg with respect to said body, a pair of leaf springs disposed in said recess, each having one end thereof immobilized and a flat portion upon said rod located between said springs whereby said leg may simulate a walking movement or be fixed in sitting position.

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