No. 718,662. PATENTED JAN. 20, 1903.

C. E. SHAFFER.

TOY FIGURE.

APPLICATION FILED JULY 1, 1902.

NO MODEL.

Fig. 1.

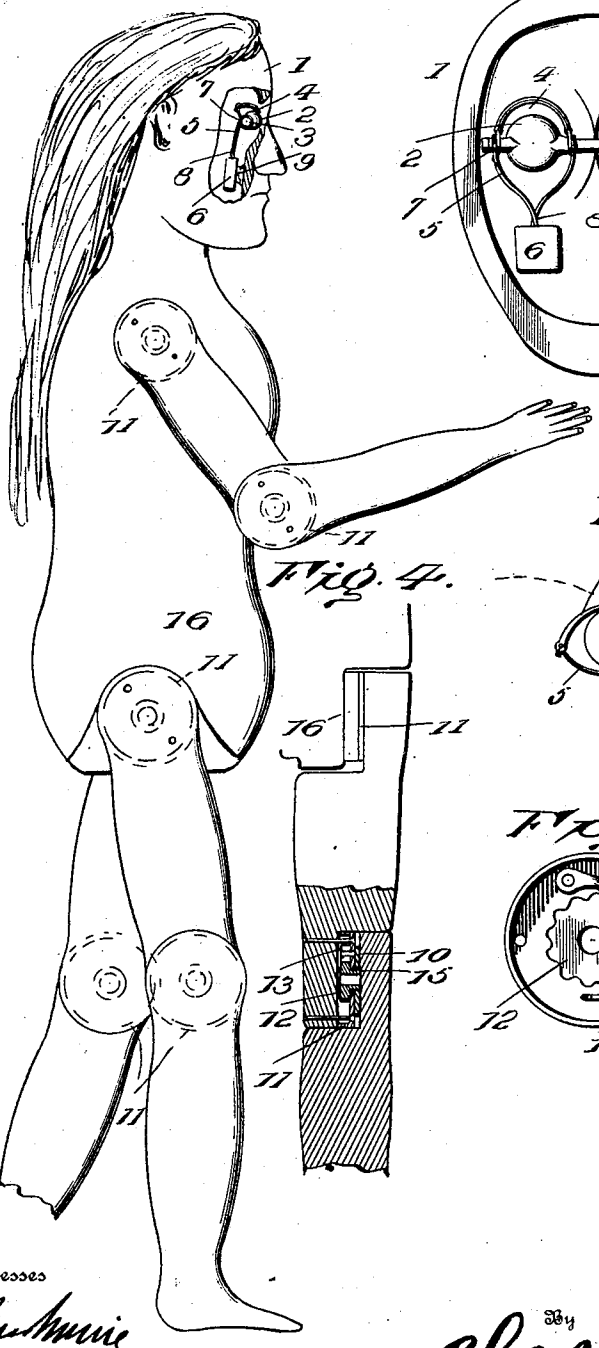


Fig. 2.

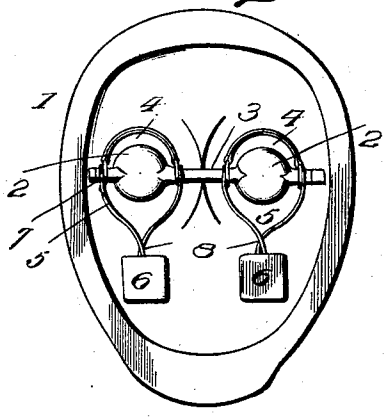


Fig. 3.

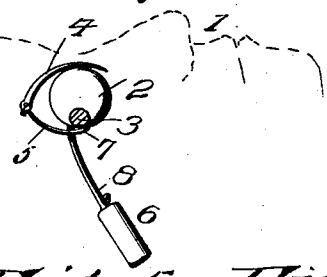
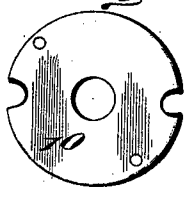


Fig. 4.

Fig. 5.

Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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TOY FIGURE.

SPECIFICATION forming part of Letters Patent No. 718,662, dated January 20, 1903.

Application filed July 1, 1902. Serial No. 114,009. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SHAFFER, a citizen of the United States, residing at Hallton, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Toy Figures, of which the following is a specification.

This invention belongs to the variety of toys designed to represent figures, such as men and animals, having the limbs or members jointed, so as to assume different postures, and having the eyes movable to simulate sleep when the figure is placed in a recumbent or horizontal position.

The improvement is directed chiefly to the joint between the parts of the members and between the latter and the trunk or body and to the means coöperating with the eyes of the figure for representing sleep.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a toy figure with a part of the head broken away. Fig. 2 is a view looking from the rear of the head, showing the eyelid-operating device. Fig. 3 is a section showing the position of the parts when the figure is lying down. Fig. 4 is a rear view of one of the limb-joints. Fig. 5 is a face view of one of the joint members. Fig. 6 is a similar view of the other member.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The toy illustrated represents the human form, the arms and legs having their parts jointed to each other and to the body or trunk. The toy may be constructed of wood or any material commonly employed in the manufacture of articles of the type aforesaid. The head 1 is hollow, and the eye-sockets are provided with fixed eyeballs 2, secured to a rod or bar 3, fitted within the head and attached thereto in any convenient and substantial way. The rod or bar 3 and the attached eyeballs 2 are fixed and are insertible through an opening in the crown of the head. An eyelid 4 coöperates with each eyeball and is of concavo-convex form and is constructed so as to extend in front of the eyeballs and conceal the same when the figure is in a recumbent or approximately horizontal position, thereby producing the effect of sleep. A frame 5 is pivotally mounted upon the rod or bar 3, and its upper end carries the eyelid 4, and its lower end is weighted, as shown at 6, the side members of the frame being provided with eyes 7, through which the part 3 passes. This frame 5 is preferably formed of a length of wire doubled upon itself and having its end portions twisted together to form a stem 8, to which the weight 6 is applied. The eyes 7 are formed by coils in the folded end portions of the wire. The upper portion of the frame is secured to the eyelid in any substantial way, preferably by having parts of the eyelid clenched thereon. The side portions of the pivoted frame embrace the eyeball, and the latter constitutes a stop to prevent endwise movement of the frame on the rod or bar 3, whereby contact of the eyelid with the head of the figure is prevented and the eyelid caused to move free, so as to cover the eye when the figure assumes an approximately horizontal position and to uncover the eye when the figure is turned into an upright position. A cushion 9 is located within the head adjacent to the mouth for the weight 6 to strike against, thereby obviating noise and preventing jar to the parts. It is to be understood that each eye of the figure is similarly equipped, and by having the eyelids independent of each other any disarrangement of one will not affect the working of the other. It is also noted that by having the eyeballs and the eyelids mounted upon the rod or bar 3 the parts may be properly adjusted preliminary to placing the parts within the head of the figure and securing them in place.

The joints at the elbow, shoulder, knee, and thigh are substantially alike. Hence a detailed description of one only will be given. The parts are jointed in the accustomed way, slight changes being contemplated to adapt the invention to the particular location and

which will readily suggest themselves to the skilled artisan.

The joint proper comprises two members 10 and 11, which are attached to the respective parts of the figure by rivets, pins, or fastenings of any character. One of the parts, as 10, is a plate, and the other part 11 is a barrel or casing, so as to inclose the working parts, consisting of the toothed wheel 12, ratchet 13, and spring 14. The toothed wheel 12 is connected with the plate or member 10 by means of a hub 15, so as to turn therewith, and its teeth are rounded to admit of the ratchet 13 riding thereon upon application of sufficient force to relatively turn the parts 10 and 11. The ratchet 13 is pivoted to the part 11 and is held in contact with the teeth of the wheel 12 by means of a spring 14, which is likewise secured to the member 11. The open side of the barrel or casing is preferably closed by the part to which the member 11 is secured. It is immaterial to which of the parts of the figure the member 11 is attached, although it is preferred to have it connected to the trunk or body 16 and the member 10 to the limb. The spring 14 is of sufficient tension to hold the members of the limbs and the limbs themselves in an adjusted position; but upon applying sufficient force to overcome the tension of the spring 14 the ratchet 13 will ride upon the teeth of the part 12 and admit of turning the limb or part thereof into any desired position within the range of adjustment of said parts.

Having thus described the invention, what is claimed as new is—

1. In a toy figure, and in combination with the head provided with eye-sockets, a rod secured within the head, and eyeballs applied to said rod, a frame for each eyeball composed of wire doubled upon itself and having its side portions provided with coils mounted upon the rod and embracing the eyeball, the end portions of the wire being brought together and intertwisted, a weight applied to the lower portion of the pivoted frame, and an eyelid comprising separated parts which are clenched upon the upper portion of the pivoted frame, substantially as set forth.

2. In a toy figure, a joint comprising two members secured to the respective parts of the toy, a toothed wheel connected with one of the members, and a spring-actuated ratchet applied to the other member and adapted to coöperate with the toothed wheel, substantially as set forth.

3. In a toy figure comprising movable parts, a joint for said parts comprising members secured thereto, one of the members being a barrel or casing, a toothed wheel connected with the other member, and a spring-actuated ratchet connected with the barrel member and adapted to coöperate with the toothed wheel for holding the parts in an adjusted position, substantially as set forth.

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

CHARLES E. SHAFFER. [L. S.]

Witnesses:
S. F. ANDERSON,
J. J. FOULWOOD.