March 13, 1928. 1,662,691

J. C. WHITE

DOLL HEAD

Filed Dec. 28, 1925

Fig. 1.

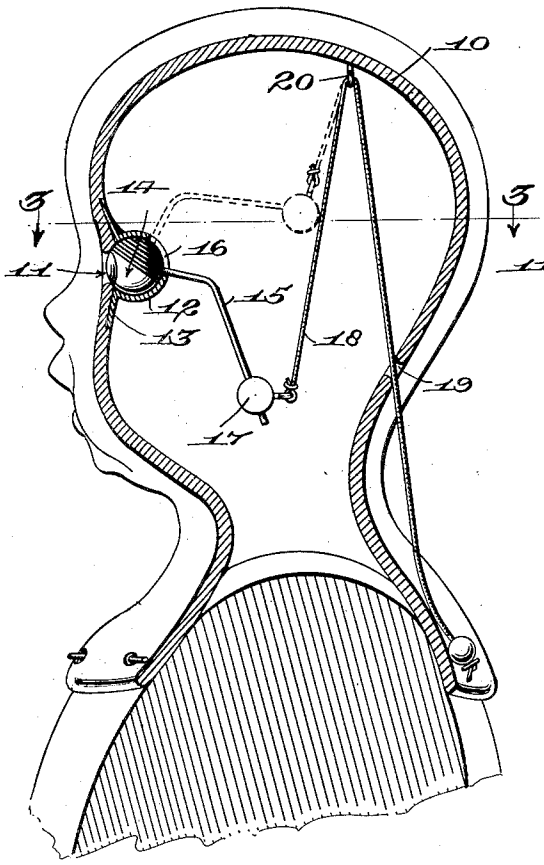


Fig. 2.

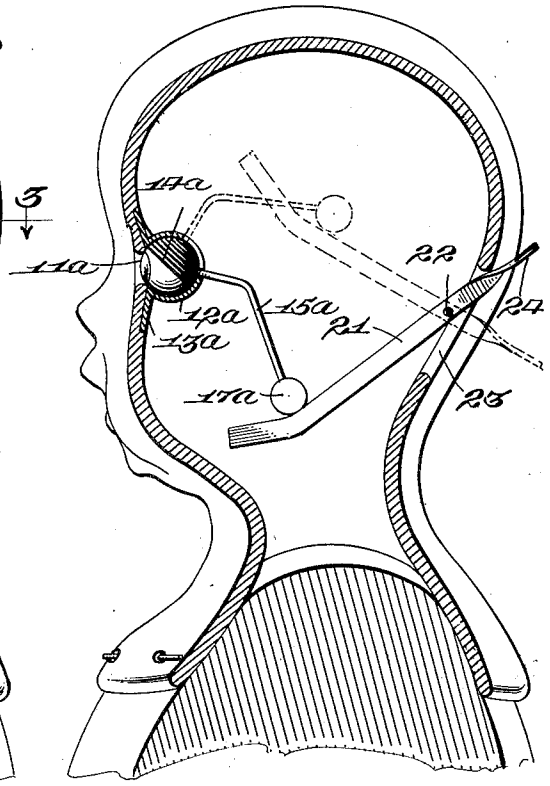
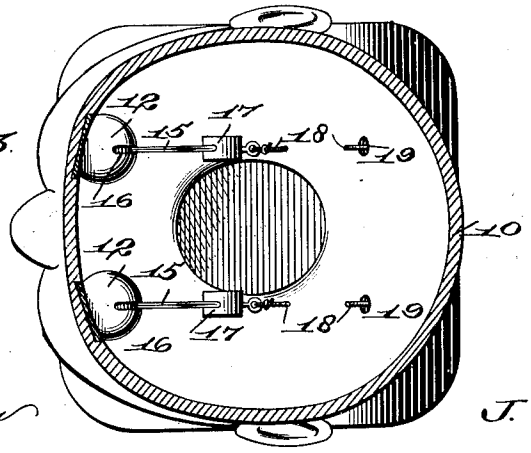


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES COLLORD WHITE, OF SEWICKLEY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO WINIFRED SCOTT WHITE AND ONE-HALF TO MARY THORN WHITE, BOTH OF SEWICKLEY, PENNSYLVANIA.

DOLL HEAD.

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My present invention relates generally to doll heads, and more particularly to a movable manually controlled eye structure and arrangement whereby in addition to the automatic movement of the eyes between the open and closed positions when the doll is held respectively in vertical and horizontal positions, the eyes may be manually manipulated to simulate winking.

More especially my invention aims to provide an arrangement wherein manually manipulated means extend to the exterior of the head by virtue of the manual manipulation of which either of the eyes may be shifted to simulate winking independent of the other, without impairing the adaptability of the eyes to automatically shift by gravity between the open and closed positions.

In the accompanying drawing which illustrates my present invention and forms part of this specification:—

Figure 1 is a vertical sectional view through a doll's head, constructed in accordance with my invention;

Figure 2 is a similar view illustrating a slightly modified arrangement, and,

Figure 3 is a horizontal sectional view taken on the line 3—3 of Figure 1.

Referring now to these figures, my invention has to do with doll heads of the hollow type generally indicated at 10 in Figure 1, provided at the front with the eye openings 11. As proposed by my invention there is formed within the head opposite each eye opening, an eye socket 12, which for convenience may be flanged as at 13, the flange being partially embedded in the material of which the head 10 is formed so as to permanently retain the socket 12 in place. Within each socket is an eye 14, and from each eye a stem 15 projects through a vertical slot 16 in the socket 12, so that the eye 14 is constrained to oscillate in a vertical plane only.

Each stem 15 has a weight 17 at its free end within the head 10 and as thus far described, the eyes are obviously adapted for independent movement automatically between the open and closed positions, depending upon the position in which the head is held. When the head is held upright the eyes are open, but when the head is turned to a horizontal position the eyes are closed. The slot 16 of each eye socket limits the swing of the respective stem 15, and in this way the oscillatory movements of the respective eye 14. In accordance with my invention shown in Fig. 1, there is attached to the free end of each of the stems 15 one end of a flexible connection 18, the opposite end of which projects exteriorly of the head 10 through a rear opening 19 and the intermediate portion of which has guided movement through a guide eye 20 fixed within the upper portion of the head so that a pull upon the free exteriorly projecting end of the flexible cord or other connection 18 serves to raise the stem 15 of the respective eye with the head 10 in upright position. It will be noted, however, that the parts remain in condition to promptly resume their normal position when the manual means or cord 18 are released. In this way either or both eyes may be manipulated from the exterior of the head to simulate winking.

In the form shown in Figure 2, the various parts, including the head 10^a and its eye openings 11^a, as well as the eye sockets 12^a with their flanges 13^a and the eyes 14^a with their stems 15^a and weights 17^a, are all the same as previously described in connection with Figures 1 and 3. Instead, however, of the flexible connection 18 secured at one end to the free end of the stem 15 of each eye, I propose according to the structure of Fig. 2, that the stem 15^a of each eye may be manually controlled be means of a lever 21, fulcrumed as at 22 adjacent to the rear portion of the head, the inner end of each lever being below the weight 17^a of the respective stem 15^a, and the outer end of each lever projecting rearwardly and exteriorly of the head through a rear vertically slotted opening 23 of the latter. Thus the outer end 24 of each lever constitutes a finger engaging portion by means of which the lever may be rocked to the position shown in dotted lines in Fig. 2, whereby its inner end will engage the respective weight 17^a and raise the latter so as to rock the respective eye 14^a to the closed position with the doll head held vertically. It is obvious that this form of my invention also leaves the eye and its automatic controlling parts free to function as they normally do when the doll head is moved from vertical to horizontal position and vice versa.

Figure 3 is a horizontal section through Figure 1, which plainly shows the inde-

pendence of the manual manipulating parts as applied to the eyes, whereby the latter may be independently moved to simulate winking.

It is obvious from the foregoing that my invention provides a simple inexpensive arrangement to accomplish the foregoing as well as one which will add to the attractiveness of a doll as a whole and will add but slightly to the ordinary cost thereof.

I claim:—

1. A doll head of hollow form having eye openings at the front thereof, sockets within the head opposite said openings and having flanges fixed to the head to firmly hold the sockets in position, each of said sockets having a vertical slot, an eye within each socket, a controlling arm projecting from each eye through the slot of its respective socket and having its free end provided with a weight within the head, the movement of each controlling arm being limited by the slot of the socket through which it passes and connections for manually and separately shifting the eyes independent of said controlling arms.

2. A doll head of hollow form having eye sockets, eyes independently movable in said sockets, and each provided with a weighted controlling arm within the head arranged to shift the eye by gravity in accordance with the position of the head, and manual means for separately shifting each of the eyes independent of the gravity controlling arms, said means being engageable with the said controlling arms at a point within the head and said head having openings at the rear thereof through which the said manual controlling means project exteriorly of the head, for the purpose described.

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