May 27, 1930. I. A. ROMMER 1,760,002

METHOD OF ATTACHING DOLLS' EYES TO DOLLS' HEADS

Filed June 21, 1928 2 Sheets-Sheet 1

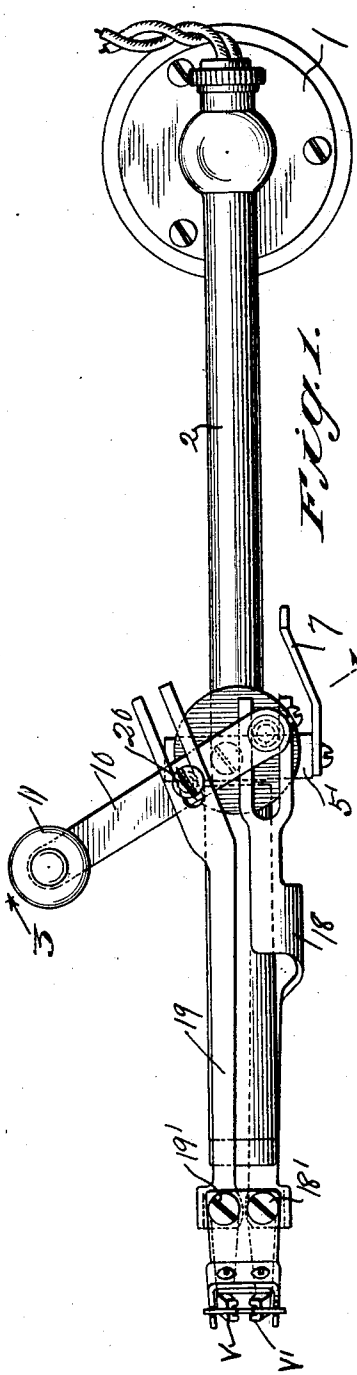


Fig. 1.

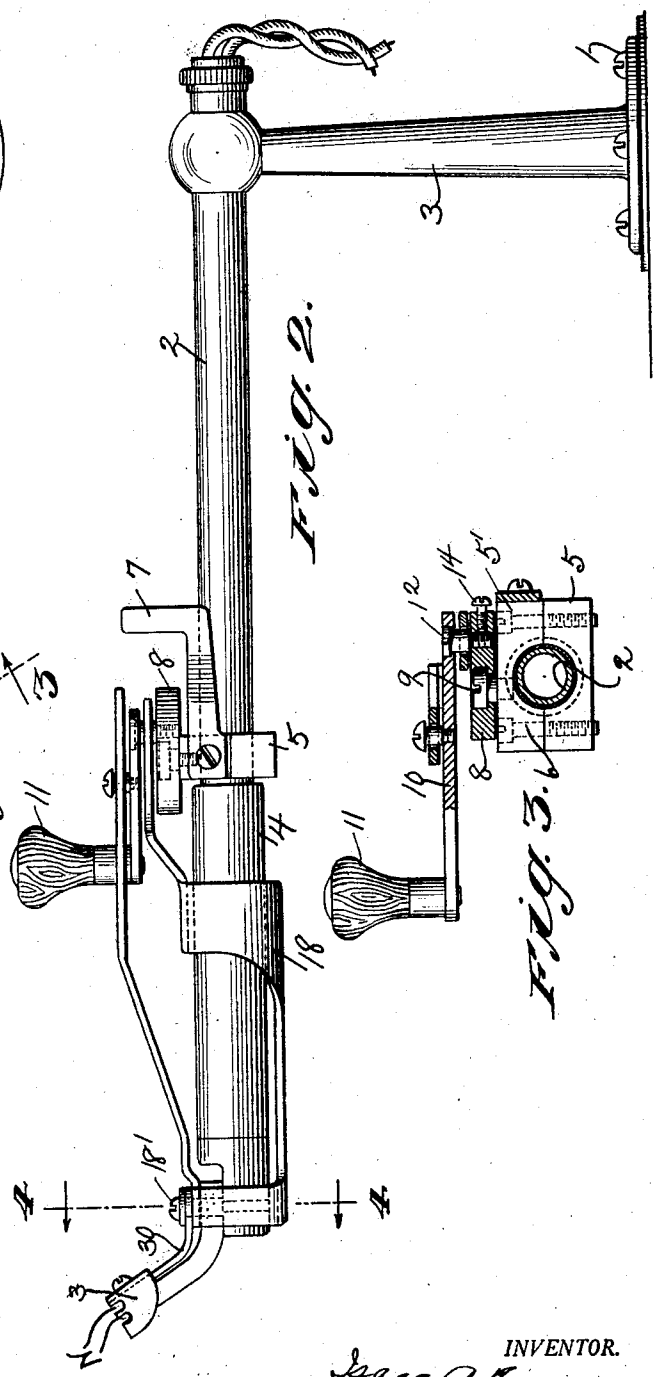


Fig. 2.

Fig. 3.

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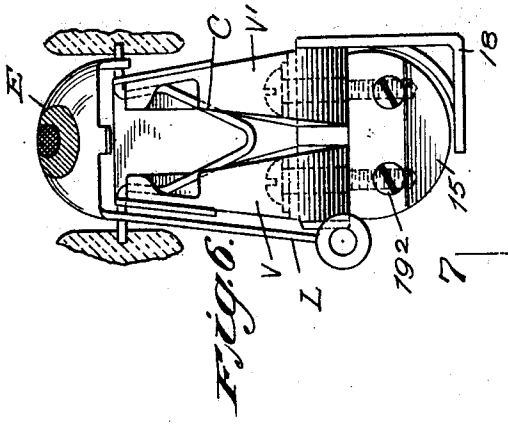


Fig. 6.

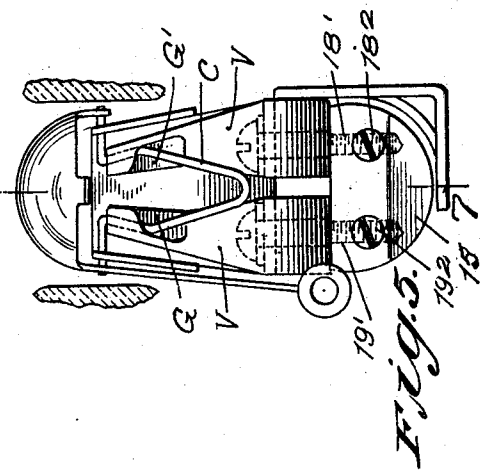


Fig. 5.

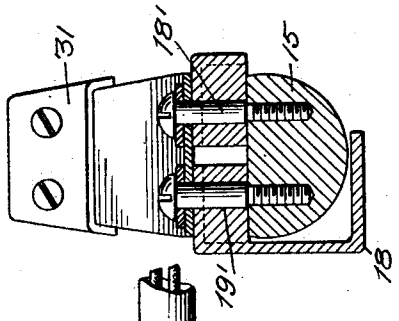


Fig. 4.

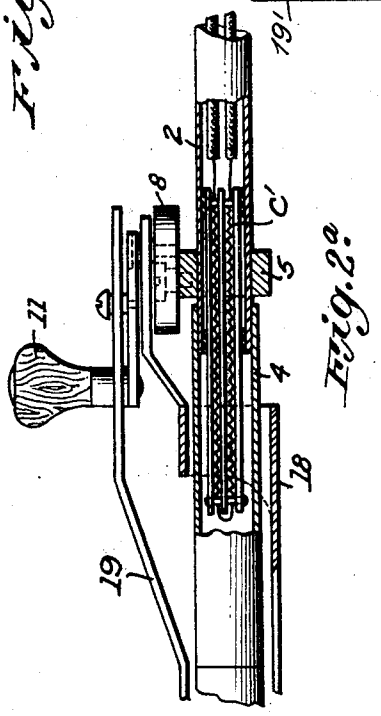


Fig. 2a.

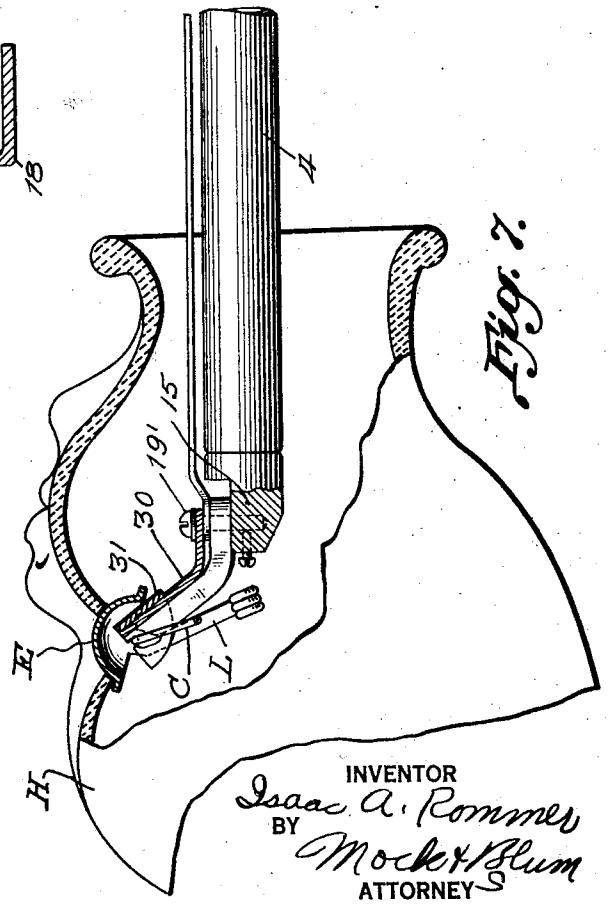


Fig. 7.

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UNITED STATES PATENT OFFICE

ISAAC A. ROMMER, OF BROOKLYN, NEW YORK, ASSIGNOR TO IDEAL NOVELTY & TOY CO., OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK

METHOD OF ATTACHING DOLLS' EYES TO DOLLS' HEADS

Application filed June 21, 1928. Serial No. 287,056.

My invention relates to a new and improved method of attaching dolls' eyes to dolls' heads.

One of the objects of my invention is to provide a method by means of which an eye can be movably connected to the socket portion of a doll's head.

Another object of my invention is to provide a method which will eliminate the necessity of drilling holes in the eyeball socket portion of a doll's head, in order to movably connect the eye of the doll into position.

Other objects of my invention will be to simplify the mounting of a doll's eye of the type shown in my application Serial No. 218,653.

Other objects of my invention will be set forth in the following description and drawing which illustrate a preferred embodiment thereof, it being understood that the above general statement of the objects of my invention is intended merely to generally explain the same and not to limit it in any manner.

Fig. 1 is a top view of one of the mechanisms used for practicing my invention.

Fig. 2 is a side elevation of this mechanism. Fig. 2ª is a detail view showing the heating coil.

Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view on the line 4—4 of Fig. 2.

Fig. 5 is a detail view partially in section illustrating one step in the operation of the mechanism.

Fig. 6 is a view similar to Fig. 5 showing how the support for the doll's eye is connected to the head of the doll.

Fig. 7 is a sectional view on the line 7—7 of Fig. 5.

The mechanism comprises a base portion 1 which can be connected by screws to any suitable table or support. A hollow tube 2 is mounted upon an upright 3. An electric heating element of any suitable type C′ is located within the tube 2 in order to heat the mechanical parts located therein, and which will be later more fully described. The tube 2 has an enlarged extension 4 and blocks 5 and 5′ are clamped to the front end of the tube 2 by means of ordinary screws 6. The upper block 5′ is provided with a finger hold 7 suitably secured thereto. A disk 8 is eccentrically pivoted to the upper block 5′ by means of the screw 9. An operating handle 10 having a head 11 is connected to the disk 8 by means of a screw 12 which is held in position by means of a lateral set screw 14. The front of the tube extension 4 is provided with a reduced head 15, as clearly shown in Figs. 4 and 7. Vise levers 18 and 19 are pivotally mounted upon the extension 15 by means of screws 18′ and 19′. As shown in Fig. 1 the lever 19 is upwardly inclined and it is provided with a free forked end through which a screw 20 passes, said screw 20 being connected to the lever 10. Hence, when the lever 10 is turned, the vise lever 19 is oscillated around the screw 19′. As shown more particularly in Figs. 5 and 7, the pivot screws 18′ and 19′ are held in position within the member 15 by means of set screws 18² and 19². As shown in Figs. 1 and 5, the levers 18 and 19 are provided with upwardly bent vise members V and V′. The tops of these vise members V and V′ have their adjacent surfaces provided with grooves G and G′, as clearly shown in Fig. 5.

The eyeball member E is made of any suitable metal and it is provided with four depending lugs, two of which are perforated so that a V-shaped connecting member C, made of any suitable resilient wire, can have its lateral ends pass through the holes in the perforated lugs.

Heretofore in connecting devices of this type to a doll's head it has been necessary to drill holes in the inner temple portion of the doll's head and in a projection provided at the top of the nose portion of the doll's head, to then hold the connecting member C by means of a pair of pliers while compressing the same, and then manipulate the pilers until the lateral ends of the connecting member C could be sprung into the holes provided therefor. According to my invention, the heating element heats the levers 18 and 19 including the vise members V and V′, so that when the connecting member C is clamped between said vise members, the lateral edges of said

connecting member C are heated to such an extent that they can readily penetrate the composition of which the doll's head H is made. That is, this composition can soften under the influence of heat.

As shown in Fig. 2 the lever 18 is provided with an extension which passes above the disk 8 and this extension is forked so that the screw 12 passes through the same. Hence, when the lever 10 is turned, it turns the vise levers 18 and 19 in opposite directions so as to cause the vise members V and V′ to approach each other or to move apart.

In order to mount a doll's eyeballs in proper position, it is merely necessary to mount the same upon the connecting member C and to then manipulate the lever 10 so that the vise members V and V′ are moved towards each other to compress the connecting member C. While the eyeball is thus held in proper position above the vise members V and V′, the doll's head is moved into proper position, as shown in Fig. 7, and the lever 10 is then manipulated to cause the vise members V and V′ to move in opposite directions. This permits the heated lateral ends of the connecting member C to press against the adjacent inner portions of the doll's head. The resilience of the connecting member C and the temperature of the points thereof is sufficient to cause said points to be forced into the adjacent walls of the doll's head so that a firm bearing is secured for the connecting member C whereby it can be freely turned within the doll's head. It is preferable that there should be a slight space between the outer wall of the eyeball member E, and the adjacent surface of the socket portion of the head H, in order to permit the eyeball E to freely turn.

As shown in Figs. 2 and 7, the vise members V and V′ move under a cover 30 which has a U-shaped extension 31. The cover 30 is kept in position by means of the screws 18, and 19′.

As shown in Fig. 7 the eyeball member E is provided with a depending bar L which is preferably integral therewith.

I have shown a preferred embodiment of my invention, but it is clear that numerous changes and omissions could be made without departing from its spirit.

As shown in Figs. 1 and 2, the member 31 is provided with two notches N at one side thereof, and with a single similar notch at the other side thereof. This enables the members C to be located at different angles to the longitudinal axis of the device. Hence, when a pair of eyeball members E are inserted in a doll's head, the legs of one of said members C can be made to assume the position shown in Fig. 1, and the legs of the other member C can be slightly inclined so as to provide a natural effect in the two eyeball members corresponding to a single head.

I claim:—

1. A method of pivotally connecting an eyeball member of a doll's head to the said head, said eyeball member having perforated lugs, which consists in passing the ends of a springy connecting member through said perforated lugs, and releasing said ends to permit them to press against the adjacent inner portion of the doll's head while said ends are at a temperature sufficient to cause them to enter the said head.

2. A method of pivotally connecting an eyeball member of a doll's head to the said head, said eyeball member having perforated lugs, which consists in passing the ends of a resilient connecting member through the said perforated lugs and permitting the said resilient connecting member to expand from a compressed condition therof while said ends are at a temperature sufficiently high to cause them to penetrate the material of the said doll's head.

3. A method of movably connecting an eyeball member to a doll's head which consists in applying a resilient bearing member for said eyeball member to the doll's head under heat and pressure while said bearing member is in a compressed condition so as to cause the ends of said bearing member to penetrate the material of the said head.

In testimony whereof I affix my signature.

ISAAC A. ROMMER.