Dec. 7, 1926. 1,610,156

R. E. RILEY ET AL

METHOD OF MANUFACTURING INFLATABLE TOYS

Original Filed March 9, 1926

Fig. 1.

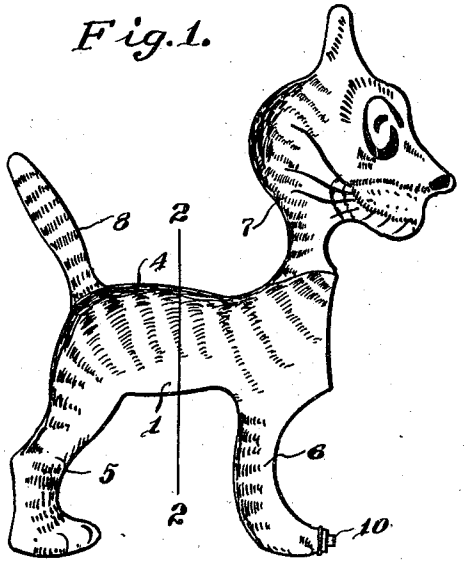

Fig. 2

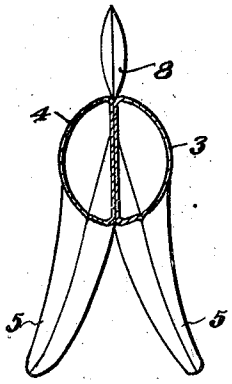

Fig. 4.

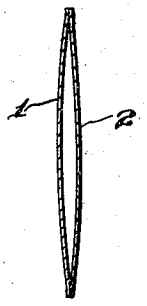

Fig. 3.



Fig. 8.

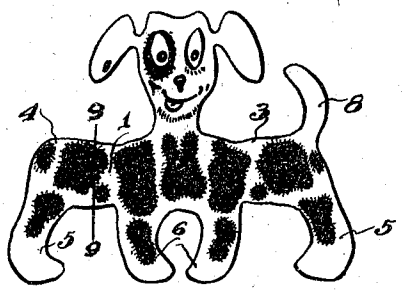

Fig. 6.

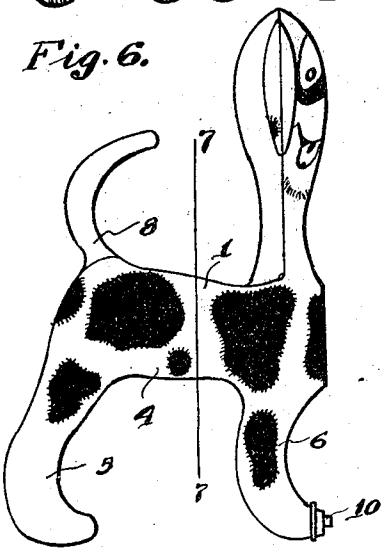

Fig. 7.

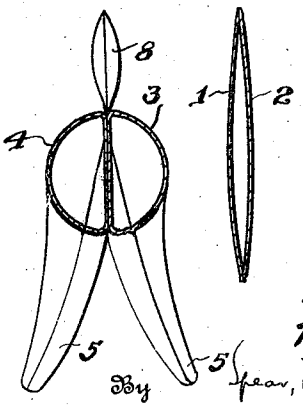

Fig. 9.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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METHOD OF MANUFACTURING INFLATABLE TOYS.

Original application filed March 9, 1926. Serial No. 93,426. Divided and this application filed June 11, 1926. Serial No. 115,342.

Our present invention relates to methods of manufacturing inflatable toys.

The principal object of our invention is the provision of an inflatable toy made preferably from sheets of unvulcanized rubber and later vulcanized, which will have four legs simulating a quadruped, these legs to be in their natural position. Obviously the invention is not limited to the production of quadrupeds, as bipeds may likewise be produced.

In such toys it has long been a problem as to what method of manufacture to follow so that the legs will occupy their normal and natural position and at the same time not involve a complicated and expensive method or intricate and costly machinery.

To this end our invention comprises generally superimposing upon each other, two sheets of unvulcanized rubber or other suitable material, cutting these sheets to the shape desired either before or after superimposing them, seaming the edges so as to form a single inflatable compartment which will include the simulation, in a quadruped, of a head, two bodies and two sets of limbs. After seaming and vulcanizing the sheets, one body is then folded upon the other so that they and the two sets of limbs register, and then they are cemented or otherwise secured to hold the two bodies in this position.

A tail, if the object simulated has a tail, may be provided in one of the bodies to increase the realism of the imitation.

A valve may be then placed in a limb, tail, or at any other place through which the toy may be inflated or deflated, as desired.

It will be noted in the specific embodiment of this invention that the head portion forms a part or an extension of one of the bodies, that is, it rises or extends from a point other than the symmetrical center of the cut out figure. As such, when the bodies are folded, the head or the sheets of material forming the head lie in planes substantially parallel to the sheets of material forming the bodies.

The invention consists further in the novel construction, combination and arrangement of parts hereinafter described and shown in the drawings.

In these drawings:—

Figure 1 is a plan view of the completed article.

Figure 2 is a sectional view along the line 2—2 of Figure 1.

Figure 3 is a view of the article before folding.

Figure 4 is a sectional elevation along the line 4—4 of Figure 3.

Figure 5 is a detail of the valve element.

Figure 6 is a side elevation of a modified form of device.

Figure 7 is a sectional elevation along the line 7—7 of Figure 6.

Figure 8 is a view of the article of Figure 6 before folding.

Figure 9 is a sectional elevation along the line 8—8 of Figure 8.

Referring to the embodiment shown, the numeral 1 indicates a sheet of material such as unvulcanized rubber, and 2 a second sheet of the same material superposed thereon. From these sheets there is then cut a figure simulating the animal to be imitated, such as by the use of a blunt knife or die, as is well known in this art. Such cutting or dieing serves to seal the edges of the sheets so that upon vulcanization this seam becomes permanent.

It will be noted that such cut out figures comprises two substantially symmetrical bodies 3 and 4, each having its own limbs 5 and 6, and a head 7 rising from a point substantially out of the symmetrical center of the bodies 3 and 4: The sheet 2 may be ornamented in any manner depending upon the object to be imitated. In the form referred to the profile of the face will coincide with one of the edges of the head.

A tail 8 forms an extension of one of the bodies 3 to more nearly simulate the animal desired.

In order to complete the animal toy, one body 3 is now folded upon the other body 4 so that the outlines thereof and the corresponding limbs substantially coincide. Any desired material or substance, such as cement, may be utilized to secure the two bodies in such superimposed position, the limbs remaining unattached to each other.

A valve such as may comprise a cylindrical member 9 held in one of the limbs 5

as by a rubber band, is provided and closed by a plug 10 which may be removed when it is desired to inflate or deflate the toy.

It will be seen that upon inflation of the toy the two bodies appear as one, but four distinct limbs are provided which effectively simulate a quadruped in the form illustrated, the head of the animal rising from the proper place on the composite body.

This application is a division of our copending application No. 93,426, filed March 9, 1926.

Having thus described our invention, what we claim is:—

1. A method of manufacturing an inflatable toy, comprising superimposing upon each other two sheets of material, seaming the edges thereof so as to form a single inflatable compartment including a head, two bodies and two sets of limbs, vulcanizing the said article and thereafter folding the compartment so that both bodies and both sets of limbs coincide, and securing the bodies together.

2. A method of manufacturing an inflatable toy, comprising superimposing two sheets of material, simultaneously cutting a form therefrom, and seaming the edges thereof so as to form a single compartment which includes two bodies, each having a limb thereon, vulcanizing the said article and thereafter folding the compartment so that the two bodies coincide, and then securing the two bodies together.

3. A method of manufacturing an inflatable toy comprising superimposing two sheets of material, seaming the edges thereof so as to form a single compartment including two bodies and two sets of limbs, vulcanizing the said article and thereafter folding the compartment so that the two bodies and limbs coincide, securing the two bodies together, and leaving the limbs free.

4. A method of manufacturing an inflatable toy, comprising cutting from sheet material two figures, superimposing the cut out figures upon each other and seaming their edges so as to form a single inflatable compartment comprising a head, two bodies and two sets of limbs, the head extending from one of the bodies, vulcanizing the said article and thereafter folding the compartment so that the bodies coincide, and then securing the bodies together.

In testimony whereof, we have affixed our signatures.

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