July 14, 1931. M. J. NAPIER 1,814,055

TOY AND SECURING MEANS THEREFOR

Filed Oct. 4, 1930

Fig. 1.

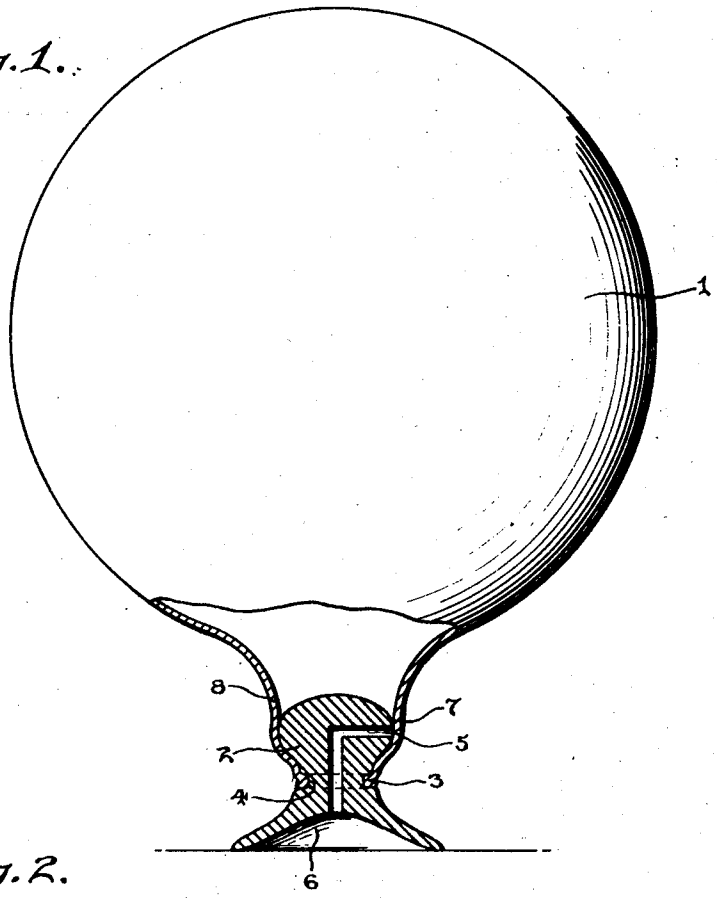


Fig. 2.

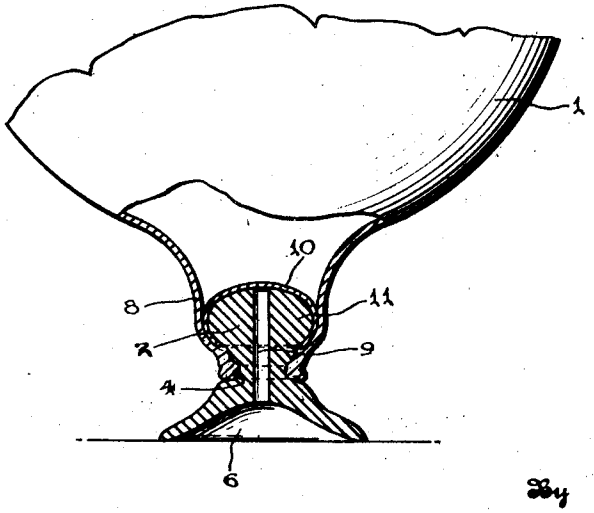
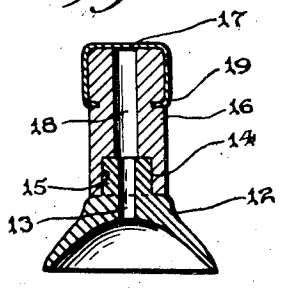


Fig. 3.



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UNITED STATES PATENT OFFICE

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TOY AND SECURING MEANS THEREFOR

Application filed October 4, 1930. Serial No. 486,452.

My invention relates to toy and securing means therefor and it has particular relation to toy balloons or similar inflatable articles and vacuum cup securing means wherein at least a portion of the inflating means for the article is formed in or carried by the securing means.

It is desirable to produce toy balloons, either of the usual shape or shaped to simulate various different animals or articles that may be inflated and immediately secured to any desired support.

An object of my invention is to provide a vacuum cup support having an inflating passage therethrough.

Another object of the invention is to provide a vacuum cup support having an inflating passage formed therein and a valve disposed in closing relation to the passage.

Another object of my invention is to provide a vacuum cup support for an inflatable object having an inflating passage so formed therein that such an object mounted thereon in inflated condition seals the passage.

Another object of my invention is to provide at attachment for a balloon which is formed to comprise both a filling nozzle and a vacuum cup support for the balloon.

A further object of my invention is the provision of a vacuum cup formed for simple attachment to a conventional balloon valve to serve as an inflating nozzle and a support for the balloon.

For better understanding of my invention reference may now be had to the accompanying drawings, forming a part of disclosure, wherein:

Figure 1 is an elevational view of a balloon and support therefor embodying certain features of my invention, a portion being broken away to illustrate underlying portions in section.

Figure 2 is a similar view of a modified form of the invention; and

Figure 3 is a sectional view illustrating the manner of application of my invention to conventional balloon valves.

In the embodiment of the invention illustrated in Figure 1 of the accompanying drawings, a conventional toy balloon 1 is operatively mounted upon a combined inflating nozzle and support 2 by engagement of the portions 3 thereof within a groove 4 formed on the support.

Preferably, and as shown, the support 2 is constructed wholly of rubber or other material having similar characteristics molded in the desired form with a passage 5 extending from the cup-shaped bottom 6 to a point 7 at the side of the support which is always covered by the neck 8 of the balloon.

It is to be noted that the shape of the bottom 6 makes possible the attachment of the balloon, and its support 2 to practically any desired surface by means of a vacuum created in the cup. The creation of the desired vacuum is augmented by the valve action of the neck 8 of the balloon with respect to the passage 5. When the bottom 6 is flattened against a supporting surface air from the cup is permitted to pass out through the passage 5, but no air can pass into the passage and cup.

The embodiment of the invention illustrated in Figure 2 of the drawings differs from that described above in that the desired valve action is obtained in a different manner. A passage 9 extends from the cup 6 directly through the support 2 and a thin rubber balloon-like member 10 is positioned over the end 11 of the support 2 in gripping relation thereto. The balloon 1 is positioned over the member 10 in the same manner as shown in Figure 1. Since the member 10 is shorter than the neck 8 of the balloon air entering through the passage 9 passes first between the support 2 and the member 10 and then between the latter and the neck 8 into the balloon. The member 10, however, acts as a valve preventing passage of air from the balloon 1 to the cup 6.

In the embodiment of the invention illustrated in Figure 3 of the drawings a vacuum supporting member 12 having an air passage 13 formed therethrough is shaped, as indicated at 14, to fit within a recess 15 formed in a conventional balloon valve 16. As shown, the valve 16 has a thin rubber strip 17 passing over the end of an air passage 18

formed therein and has its ends secured, as indicated at 19, to the valve.

Obviously a strip, such as shown at 17, could be utilized in lieu of the member 10 in the construction shown in Figure 2. In this event the ends of the strip would be secured by the neck 8 of the balloon and air would be admitted directly to the interior of balloon.

I regard the provision of a vacuum cup with a valve to expedite the production of a vacuum in the cup as an important feature of my invention. This feature is involved in all of the embodiments of the invention herein described.

Although I have illustrated only certain forms which my invention may assume, and have described those forms in detail, it will be apparent to those skilled in the art that the invention is not so limited but that various minor modifications may be made therein without departing from the spirit of my invention or from the scope of the appended claims.

I claim:

1. A support for an inflatable article comprising a portion formed for insertion within the article, and a vacuum cup attaching portion, wherein the support is formed with an air passage extending from the cup of the attaching portion to the exterior of the portion formed for insertion in the article.

2. A support comprising a portion formed for insertion within an inflatable article and a vacuum cup attaching portion wherein the support has an air passage extending from the cup-shaped portion to the exterior of the first mentioned portion and so disposed as to be closed by the article.

3. An inflating nozzle for an inflatable article comprising a body formed for partial insertion within the article and with a flexible cup-shaped attaching portion and having a passage extending from the cup-shaped portion through the body.

4. An inflating nozzle for an inflatable article comprising a body formed with a flexible cup-shaped attaching portion and having a passage extending from the cup-shaped portion through the body and valve means associated with the passage.

5. An inflating nozzle for a balloon comprising a portion shaped for insertion within the neck of a balloon and a flexible vacuum cup attaching portion, a passage extending from the cup through the first named portion and a balloon-like member fitting over a part of the first-named portion.

6. An inflating nozzle for a balloon comprising a portion shaped for insertion within the neck of a balloon, and a flexible cup-shaped portion, a passage extending from the cup-shaped portion through the first named portion, and a flexible strip disposed in closing relation to the end of the passage remote from the cup-shaped portion.

7. An inflating nozzle for a balloon comprising a tubular valve for insertion into a balloon, a flexible cup-shaped member attached to the valve and having a passage therethrough in communication with the interior of the valve.

In testimony whereof, I affix my signature.

MELVIN J. NAPIER.