F. F. BRUCKER.

TOY BALLOON.

APPLICATION FILED MAY 27, 1914.

1,111,642. Patented Sept. 22, 1914.

Fig. 1.

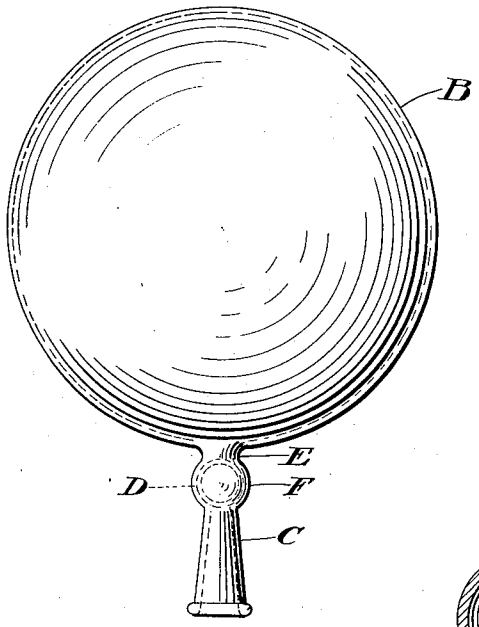


Fig. 2.

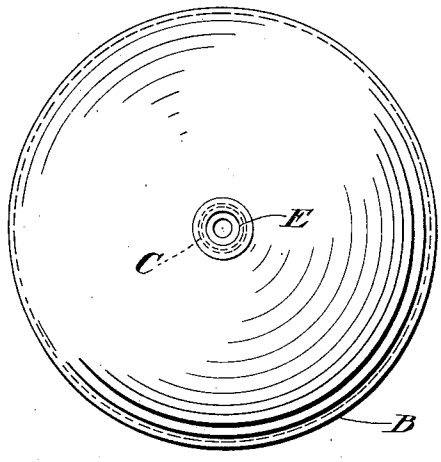


Fig. 4.

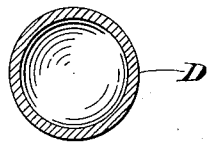


Fig. 3.

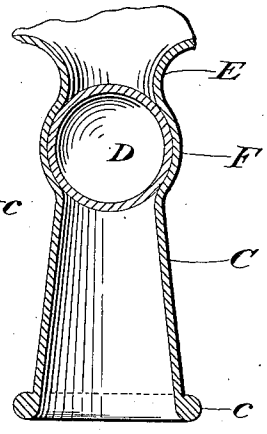
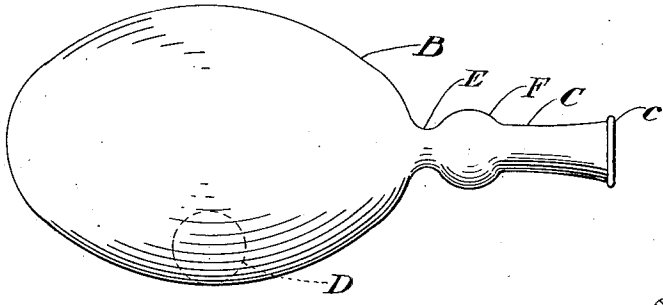


Fig. 5.



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UNITED STATES PATENT OFFICE.

FERDINAND F. BRUCKER, OF AKRON, OHIO, ASSIGNOR TO THE MILLER RUBBER COMPANY, OF AKRON, OHIO.

TOY BALLOON.

1,111,642. Specification of Letters Patent. Patented Sept. 22, 1914.

Application filed May 27, 1914. Serial No. 841,289.

To all whom it may concern:

Be it known that I, FERDINAND FRANCIS BRUCKER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Toy Balloons, of which the following is a specification.

The present invention relates to toy balloons, and relates more specifically to that type of balloon which is inflated by blowing air in through a mouth piece and can be readily deflated at will by allowing the air to escape through the same.

The principal object of the invention consists in providing a toy balloon of the type above described with an improved form of valve for maintaining the air within the balloon when the latter is in its inflated condition.

A further object consists in making the balloon and mouth piece out of a single integral piece of material and forming the valve as a separate member loosely carried within the body of the balloon adapted to lodge in a valve seat in the neck or mouth piece.

With these and other objects in view, the invention consists in a balloon constructed as hereinafter more fully described in the following specification, illustrated in the accompanying drawing and more specifically pointed out in the appended claims.

In the drawings Figure 1 is an elevation showing the balloon inflated; Fig. 2 is a bottom plan view of same; Fig. 3 is an enlarged sectional detail view showing the ball valve lodged in its valve seat; Fig. 4 is a sectional detail of the ball valve; Fig. 5 is an elevation showing balloon deflated.

Referring to the drawings, the balloon comprises a hollow body B made of thin rubber of pure quality and extreme elasticity which will permit of its being inflated and expanded to many times its normal size. The balloon B in its normal deflated condition is preferably of elliptical form, and is provided with a tubular neck or mouth piece C extending from one end, and in substantial alinement with its longer axis. A small rubber ball D of larger diameter than the restriction E at the opening between the body of the balloon B and its neck C, where the balloon is deflated, is confined within the body of the balloon and acts as a valve to regulate either the influx or egress of air through the mouth piece or neck C. An enlarged portion F forms a pocket in the neck C just beyond the constriction E and is normally of the same diameter as the valve ball D for which it serves as a valve seating. From the enlarged portion F the neck or mouth piece C terminates in a tubular portion faced by an annular elastic ring *c* which tends to hold the end of the mouth piece open.

When the balloon is inflated the body B enlarges and the neck C shortens until the constriction E between the pocket F and the main body portion B becomes sufficiently enlarged to allow the ball D to drop into the pocket F. The constriction E then serves to hold the ball firmly within the pocket F until it is dislodged by blowing in at the mouth piece, whereupon the balloon is quickly and easily deflated. This form of valve enables the deflation of the balloon to take place quickly and completely, as after the rubber ball D has once been dislodged from the pocket F there is opened at once a passage unrestricted by any valve mechanism. Should the ball not easily dislodge itself by blowing in the mouth piece, it is only necessary to grasp the neck of the balloon at the point *e* and by pinching the neck of the balloon with the thumb and finger and pushing toward the center of the body portion of the balloon the small ball will be injected into the body portion, allowing the air to escape freely.

The rubber ball coöperating with the pocket in the mouth piece not only forms a most efficacious form of air valve which will prevent the inflation of the balloon beyond a point of safety, but affords novel features of attraction, not usually found in a toy balloon of this type. For example, by inflating the balloon and holding the neck closed with the fingers of the right hand and whirling the balloon until the small ball whirls around on the inside a noise is made similar to the buzzing of a bee. Also the toy may afford considerable amusement by holding the balloon in the right hand with the opening closed with the fingers, and trying to toss the ball up and down within the balloon until it lodges in the pocket of the neck.

The ball D may be formed of any suitable material, and may be solid or hollow, as desired.

It will be understood that I do not wish to limit myself to the precise details of construction herein disclosed, but wish to avail myself of all modifications that will properly fall within the scope of the invention.

Having thus described my invention what I claim is:

1. A toy balloon formed of a single piece of elastic material and provided with a valve member loosely carried therein, substantially as described.

2. A toy balloon having a tubular neck portion integral therewith and a separate valve member confined within the balloon, substantially as described.

3. A toy balloon of thin rubber having a tubular neck or mouth piece formed integral therewith, and self-closing valve means loosely inclosed within said balloon, substantially as described.

4. A toy balloon of thin rubber having a tubular neck or mouth piece formed integral therewith and a ball valve loosely carried within said balloon adapted to close said mouth piece when the balloon is inflated, substantially as described.

5. A toy balloon of thin rubber having a tubular neck or mouth piece integral therewith, a hollow ball valve loosely contained within said balloon, a pocket formed in said neck portion adapted to receive the ball valve when the balloon is inflated, substantially as described.

6. A toy balloon of thin rubber having a tubular mouth piece integral therewith, a hollow rubber ball valve loosely carried within said balloon, a constriction formed at the junction of the balloon and the mouth piece, and an enlarged pocket in the mouth piece adjacent said constriction, substantially as described.

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

FERDINAND F. BRUCKER.

Witnesses:

R. T. GRIFFITH,

C. A. WOLF.