

H. METZGER.
TOY.

APPLICATION FILED NOV. 8, 1902.

NO MODEL.

Fig. 1.

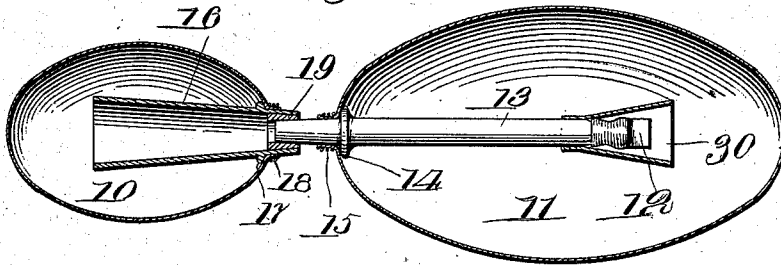


Fig. 2.

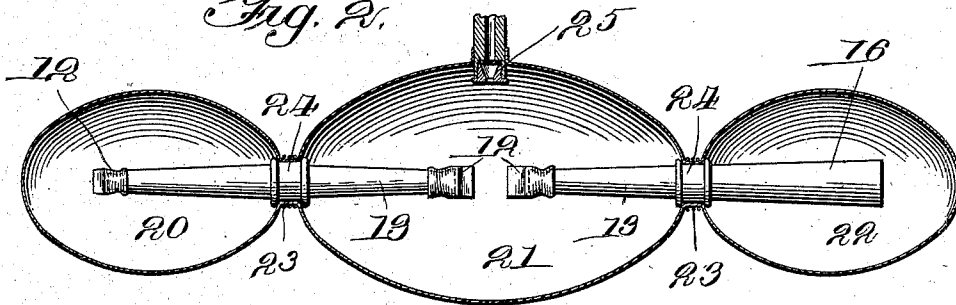
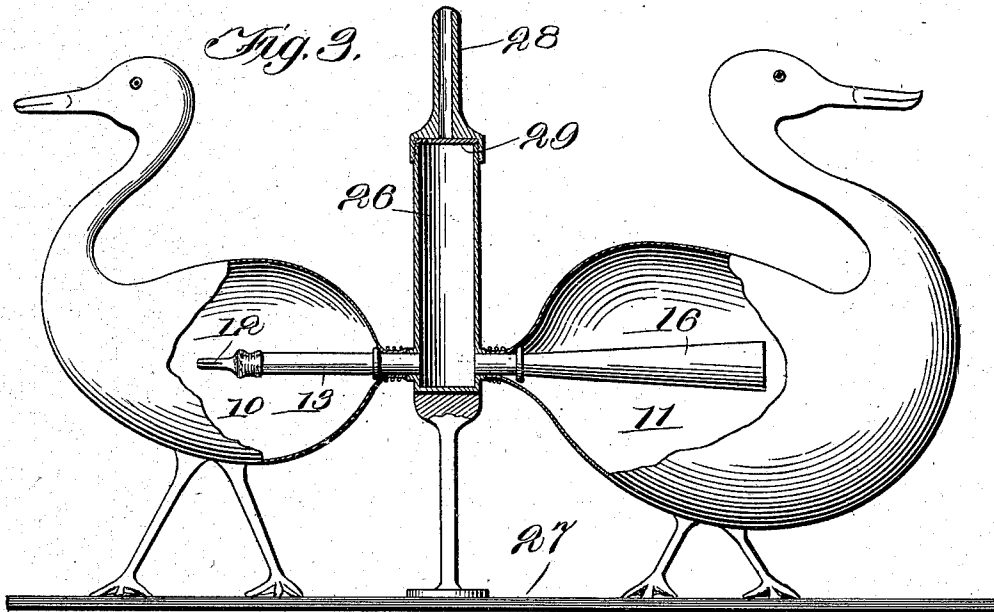


Fig. 3.



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UNITED STATES PATENT OFFICE.

HERMANN METZGER, OF CHICAGO, ILLINOIS.

TOY.

SPECIFICATION forming part of Letters Patent No. 723,292, dated March 24, 1903.

Application filed November 8, 1902. Serial No. 130,525. (No model.)

To all whom it may concern:

Be it known that I, HERMANN METZGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Toys, of which the following is a specification.

This invention relates to novel improvements in toys, and has for its object, primarily, to produce an amusing and entertaining toy of simple and inexpensive construction which can be made to move and utter a sound at the same time.

The invention also has in view to provide an inflatable toy which will remain constantly inflated, even while being manipulated to produce sounds and in which the air is repeatedly used for making the sounds.

The invention also has other objects in view, which will appear hereinafter in the detailed description thereof and the accompanying drawings, which illustrate the manner in which the invention may be embodied.

Referring to the drawings, Figure 1 is a sectional view of a simple embodiment of the invention, showing two inflated bodies which are detachably connected together. Fig. 2 shows three inflated bodies connected together. Fig. 3 shows two inflated bodies in the form of fowls.

Like numerals of reference indicate corresponding parts in the several figures of the drawings, and referring particularly to Fig. 1, 10 11 designate two inflatable bodies, preferably made of rubber, but which can be made of any other material suitable for the purpose. In one of the bodies I provide a reed 12, which may be of the kind covered by Letters Patent of the United States No. 500,287, granted to me on June 27, 1893, or of other suitable character. This reed is carried by a tube 13, which projects through an opening in the body, said tube being provided with a shoulder 14, and the body and tube being fastened together by a cord 15, wound thereon. In the other body I preferably provide a trumpet 16, which projects at one end through an opening in the body and is provided with a shoulder 17 and is fastened

to the body by a cord-winding 18, as just described. The projecting end of the tube 13 is adapted to be removably fitted in the projecting end of the trumpet, and in order to make a tight joint I provide a tapered socket-piece 19 within the end of the trumpet to receive the tapered end of the tube. By this construction the two bodies can be separated by simply pulling the tube out of the trumpet, and I do this when it is desired to inflate the body 11. The body containing the tube is the one inflated by using the projecting end of the tube as a mouthpiece and blowing in through the tube. The reed 12 acts as a valve to permit the entrance of air, but is immediately closed by the high pressure within the body to prevent the escape of air, so that the end of the tube can be secured in the end of the trumpet. While the reed acts as a valve to enable the body to be inflated and the bodies are connected together as described, it does not prevent leakage, and consequently the air in the inflated body will slowly leak into the other body and inflate it. If this other body is made in the form of a fowl or animal, it will inflate and come to life, so to speak, slowly, thus providing pleasant amusement and entertainment, especially for children. If it is desired, however, to inflate the other body 10 quickly after the body 11 is inflated, this can be done after the bodies are connected by compressing the body 10 to force some of the air which will always be inside thereof into the other body 11, thereby opening the reed-valve, and when the pressure on the body 10 is released sufficient air will rush from the body 11 into the body 10 to inflate the latter. Both of the bodies 10 11 may be made in the form of fowls, dolls, or animals; or one body can be so made and the other simply an inflatable bulb, and it is apparent also that the trumpet could be put in the body 11 and the reed in the body 10, if desired, or the trumpet could be dispensed with and a reed used in each of the bodies, as hereinafter described in connection with Fig. 2, so that sounds of different character might be produced. It is also apparent that a number of these bodies

can be connected together and the air caused to flow from one to the other.

In Fig. 2 I have shown three bodies 20, 21, and 22 connected together, and as many more may be added as desired. In the embodiment illustrated in Fig. 2 the body 20 is provided with one reed, the body 21 with two reeds, and the body 22 with a trumpet; but this construction is not arbitrary, and a trumpet could be substituted for the reed in the body 20, a reed could be substituted for the trumpet in the body 22, or trumpets could be arranged in the body 21 and reeds in the bodies 20 and 22 on the other ends of the tubes 13. These three bodies are all shown to be formed out of a single bulb by fastening the bulb with cords 23 on the collars 24 on the tubes; but of course they may be made separate and fastened to the tubes in any suitable manner. An inlet-valve 25 of suitable construction is shown connected with the body 21; but of course it can be connected with any of the bodies and at any suitable place, for after one of the bodies is inflated the others can be inflated from the air contained in the already-inflated body by simply producing a flow of air through the reed-valve or in some other manner causing the valve to open temporarily to permit air to flow from the inflated to the deflated body until the pressure is equalized. By providing a number of these bodies, all connected together, with the reeds constructed to produce a different sound, the toy will prove to be very comical and amusing.

Fig. 3 shows an embodiment of the invention of substantially the same character as illustrated in Fig. 1, except that the bodies 10 11 are made in the form of fowls and that the reed is arranged in the body 10 and the trumpet in the body 11. The trumpet and tube are fastened to a hollow support 26, which is mounted on a base 27, on which the fowls are adapted to stand when inflated. The support is provided at its upper end with a mouth-piece 28 and a valve 29. The bodies shown in Fig. 3 are inflated in the same manner as previously described in connection with Fig. 1.

After the bodies have been inflated in the construction shown in Figs. 1, 2, and 3 sounds can be produced by compressing either of the bodies to produce a flow of air from the body containing the reed to the body containing the trumpet. In the bodies 20 and 21 of Fig. 2 the sounds will be produced by the reed in the body which is being deflated; but it will be heard as coming from the other body, the sound being produced by the air passing inward through the reed. These reeds may be varied in construction to produce sounds of different kinds, and they may be inclosed within a protector 30 to prevent contact with the body when deflated. It will be observed that the same air is repeatedly utilized for producing the sound; for when pressure is applied to one body to force the air into an-

other it will return later until the pressure in the two bodies is equalized. Thus the toy when once inflated can be used indefinitely or until the air has leaked out, and in this respect the invention differs essentially from those toys which only produce a sound while being inflated or deflated and which require constant and repeated inflation.

As explained in my former patent hereinbefore referred to the reeds may be constructed to produce sounds of many different kinds and similar to the cry or call of almost every bird or animal, and a sound will be produced by the air traveling through the reed in either direction when the opening in the reed is of a size which will cause the moving air to produce a vibration.

My improved toy is capable of many variations and adaptations, and those I have shown and described simply illustrate a few of its many uses. Any number of reeds can be arranged in a figure to produce a suitable number of sounds which may vary in tone to correspond with the particular figure or to be comically inconsistent therewith. In this way a toy of very amusing and entertaining character will be produced, and this is particularly due to the fact that parts of the toy can be made to move at the same time that sounds are being produced.

The toy can be manufactured very cheaply, and at the same time it is of a substantial character, for the reason that in the embodiment shown in Figs. 1 to 3 one inflation will last for a long time, because the air is used repeatedly in the production of sounds and only escapes from the bodies by leakage. The trumpets are provided to increase the volume of sound; but they can be omitted, if desired. When the trumpets are employed, they constitute for all practical purposes a continuation of the tube 13, and may therefore be considered as a part of the tube 13, whether the tube and trumpet are made in one part, Fig. 2, or in two parts, Fig. 1.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A toy comprising two inflatable bodies, a tube entering and connecting said bodies so that air may pass from one to the other, and a reed at one or both ends of said tube.

2. A toy comprising two inflatable bodies, a tube divided in two parts, one part being arranged in each body and adapted to be connected together to connect the bodies, and a reed on one or both ends of the tube within said bodies.

3. A toy comprising two inflatable bodies, a tube arranged within and connecting said bodies, a reed within one body on the end of the tube, and a trumpet in the other body at the end of the tube.

4. A toy comprising two inflatable bodies, a tube connecting said bodies with one end in

each body, a reed at one end of the tube, and means connected with the tube between the bodies whereby they may be inflated.

5 A toy comprising two inflatable bodies, a connection between said bodies, means whereby said bodies may be inflated and adapted to be closed after one or both of the bodies are inflated, and a reed arranged in one or both

of the bodies on the end of said connection and adapted to produce a sound when the air in one body is caused to flow into the other.

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