

Aug. 5, 1958

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2,845,747

WHISTLE CONSTRUCTION FOR SOUNDING TOY

Filed June 10, 1955

Fig. 1

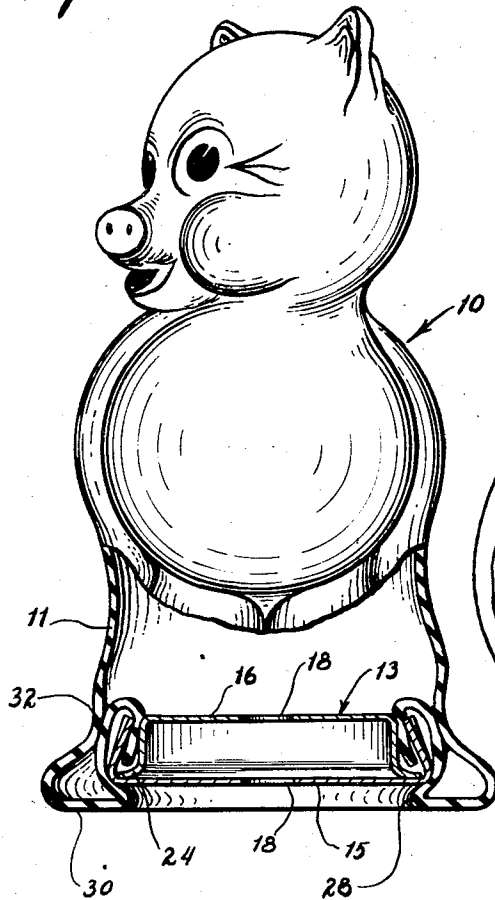


Fig. 3

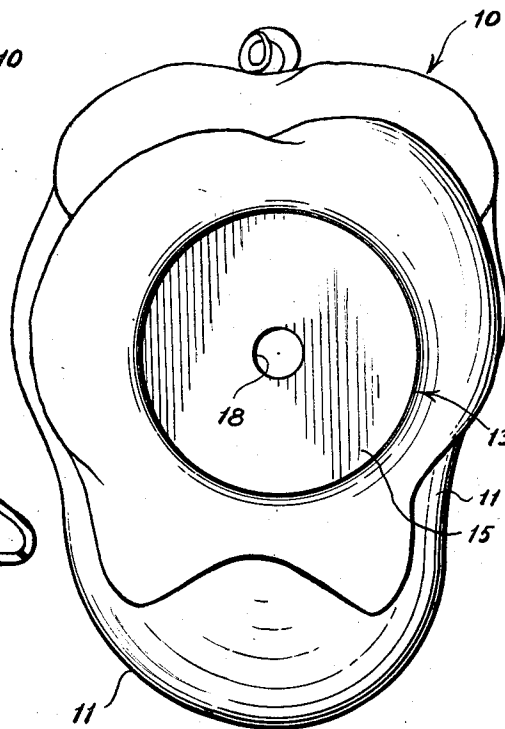
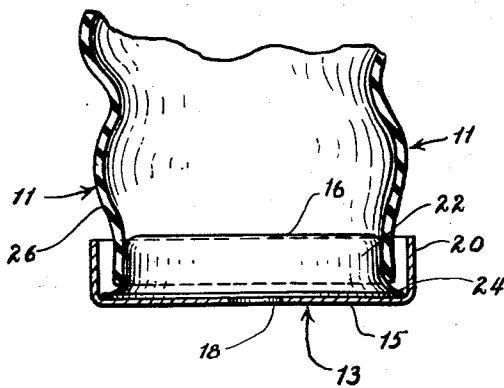


Fig. 2



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2,845,747

WHISTLE CONSTRUCTION FOR SOUNDING TOY

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Application June 10, 1955, Serial No. 514,626

3 Claims. (Cl. 46-117)

This invention relates to hollow toys which have a whistle in a wall of the toy through which air moves when the toy is squeezed and when it expands again to its original contour.

Such toys are generally made of rubber or rubber substitutes and one of the problems encountered is the connection of the whistle to the toy in such a way that it cannot become easily detached. This is particularly important because of the fact that the toys are for babies and small children who are likely to put the whistle in their mouths and swallow it accidentally if the whistle can be detached from the toy.

It is an object of this invention to provide a toy construction which connects with a whistle along edge portions of an opening which has its edges extending in the direction of the axis of the whistle at the time of the original assembly of the whistle with the toy. This permits a considerable length of the rubber, or other material from which the toy is made, to be gripped by the whistle with the result that a much stronger connection is obtained.

Another object of the invention is to provide an improved whistle construction which can be crimped over the edges of a rubber toy of the character indicated. The invention makes practical the use of larger and more noisy whistles without increasing the cost of the toy. While the size of the whistle makes it slightly more expensive, this is more than offset by the reduction in the time and expense of the assembly of the toy and whistle.

An important advantage of the invention is that it permits a simplified construction of the hollow toy itself in that the toy can be constructed with its lower end open; and this end is closed and rigidly held by its connection to a whistle. The lower portion of the toy, with the whistle attached, is then folded inwardly to provide a more rigid bottom for the toy and a portion which is heavier than the upper part for obtaining better balance of the toy. In the preferred construction, cement is used to hold in place the part of the toy which is folded back, but the construction can be such that resilience of the toy will keep the folded part in place.

Other objects, features and advantages of the invention will appear or be pointed out as the description proceeds.

In the drawing, forming a part hereof, in which like reference characters indicate corresponding parts in all the views:

Figure 1 is a front view, partly broken away and in section, showing a hollow toy assembled with the whistle of this invention;

Figure 2 is a sectional view showing the lower portion of the toy of Figure 1 prior to the attachment of the whistle to the toy; and

Figure 3 is an enlarged bottom view of the toy shown in Figure 1.

Figure 1 shows a hollow toy 10, shaped to resemble an animal, having side walls 11. The walls 11 are of

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rubber, or similar material, and are preferably resilient enough to resume their original shape after the toy is squeezed to expel air from the toy. There is an opening in the bottom of the toy 10 for receiving a whistle 13, which is preferably made of metal. This whistle preferably comprises two parts, including an outer portion 15 and an inner portion 16, each of which has a center opening 18.

The outer portion 15 has an upwardly extending side wall 20 which is originally substantially cylindrical in shape, as shown in Figure 2. The inner portion 16 of the whistle has a side wall 22 and a radially extending flange 24 at the lower end of the side wall. This flange 24 rests on the bottom of the outer portion 15 and has a diameter almost as great as the inside diameter of the flange 20 so as to properly position the upper portion 16 in the lower portion 15 prior to assembly of the whistle with the toy.

The lower end of the walls 11 originally extend downwardly as a sleeve to surround the side wall 22 of the whistle, as shown in Figure 2. The toy is pushed down until the lower ends of the side walls 11 cover substantially the entire length of the side 22 of the upper portion 16 of the whistle.

In order to secure the parts of the whistle together and to attach the whistle to the toy, the side wall 20 of the outer portion 15 of the whistle is bent inwardly and crimped to clamp the lower ends of the side walls 11 tightly against the side 22 of the inner portion of the whistle. This relation of the parts is clearly shown in Figure 1. This operation is performed with the outer portion 15 of the whistle entirely outside of the toy and in position for convenient access by the crimping tool.

After the whistle has been secured to the lower ends of the side walls 11, the whistle is pushed upwardly into the toy. The side walls 11 break into a fold in the region indicated by the reference character 26. The dimensions of the toy, as originally molded, are such that the side wall is somewhat stretched by the upward movement of the whistle and contracts under the whistle to form a lip 28. Beyond the lip 28 the side wall of the toy is substantially flat and provides a bottom 30 for resting on any support on which the toy may be placed. Beyond the bottom 30, the walls of the toy curve upwardly, and preferably inwardly, so as to contact the inner fold on opposite sides of the whistle. A layer of cement 32 placed on the side wall of the toy before the assembly operation, secures the fold to the side wall so that the sides of the toy remain in the positions shown in Figure 1.

It will be understood that Figure 1 shows the narrowest section through the toy and that the side walls 11 forward and behind the fold 26 need not have a reverse curve which brings them back into contact with the fold. This will depend upon the particular shape of the toy and the animal which it represents.

If the side wall is molded of sufficiently thick material and in such a way that the resilience of the material firmly holds the parts in the relation shown in Figure 1, then the cement 32 is unnecessary.

The preferred construction has been illustrated and described, but changes and modifications can be made and some features can be used in different combinations without departing from the invention as defined in the claims.

What is claimed is:

1. A hollow toy made of resilient and self-sustaining material and having a bottom opening through which air flows from and to the hollow interior of the toy with changes in the volume of the toy resulting from distortion and regaining of its shape, the material immediately adjacent to the edges of the opening extend-

ing upwardly from said edges as an inner ring of material and to a fold from which the material extends downwardly forming an intermediate ring outside the inner ring and which extends some distance below the inner ring, the material extending outwardly beyond the lower end of the intermediate ring to form a portion of a bottom of the toy, the material outward from the bottom extending upwardly again and comprising a lower part of the side wall of the toy; and a whistle secured to the toy in position to span the bottom opening, said whistle having an inner cup with its open side facing downwardly and a peripheral wall of the cup in contact with the inside of the inner ring, the whistle also having an outer cup with its open side facing upwardly and a peripheral wall of the outer cup between the inner and intermediate rings, the inner ring being securely clamped between the peripheral walls of the cups.

2. The hollow toy described in claim 1, and in which the inner ring, intermediate ring, and bottom of the toy are of one piece construction with the side wall of the toy.

3. The hollow toy described in claim 1, and in which there is a flange at the lower end of the inner cup hav-

ing a diameter substantially equal to the diameter of the outer cup for centering the inner cup in the outer cup, and the inner ring fits snugly over the outside surface of the inner cup and is clamped against that surface by the side of the outer cup, the clamping side of the outer cup converging toward the inner cup in an upward direction to effect the clamping of the ring against the inner cup and also to hold the two cups of the whistle in assembled relation with each other as well as with the toy.

References Cited in the file of this patent

UNITED STATES PATENTS

1,604,775	Grubman	Oct. 26, 1926
1,607,991	Konoff	Nov. 23, 1926
2,279,799	Stanford	Apr. 14, 1942
2,317,255	Crowell	Apr. 20, 1943
2,485,142	Duncan	Oct. 18, 1949
2,616,217	Wild	Nov. 4, 1952

FOREIGN PATENTS

1,054,484	France	Oct. 7, 1953
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