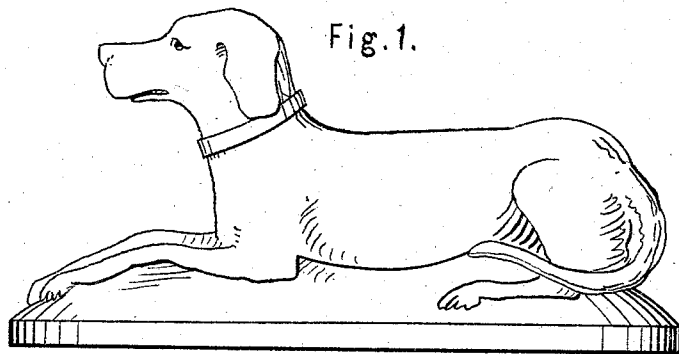
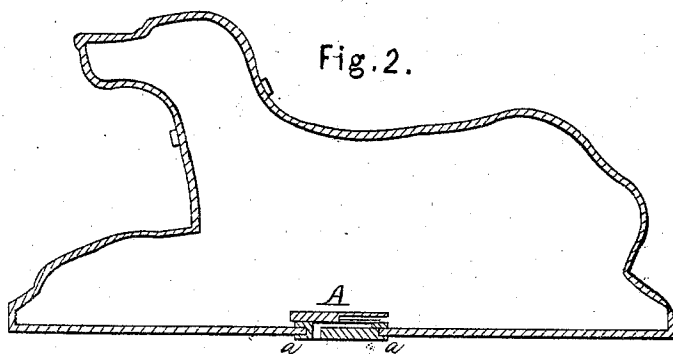
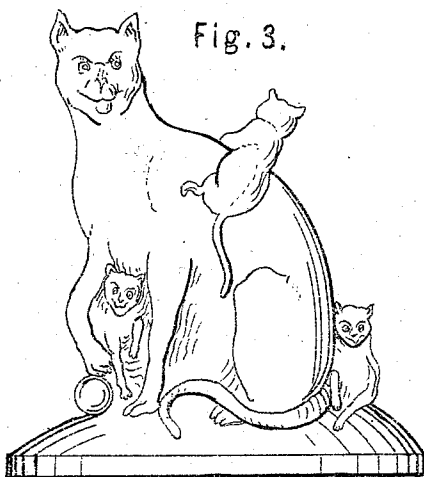
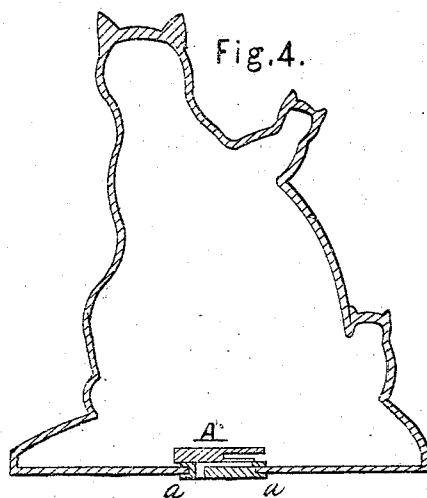


L. P. Porter
Elastic Toys.

2. Sheet 75.
Sheet 1.

No 23,001

Patented Feb. 15. 1859.



L. P. Porter.
Elastic Toys.

2. Sheets.
Sheet. 2.

No 23,001.

Patented Feb. 15. 1859.

Fig. 6.



Fig. 5.

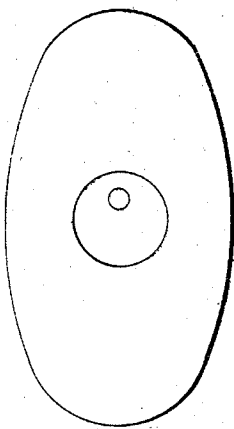
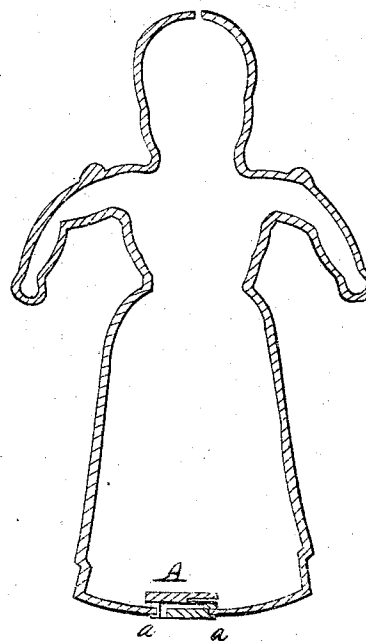


Fig. 7.



UNITED STATES PATENT OFFICE.

LUCIUS P. PORTER, OF NEW YORK, N. Y., ASSIGNOR TO NEW YORK RUBBER COMPANY, OF SAME PLACE.

ELASTIC TOY.

Specification of Letters Patent No. 23,001, dated February 15, 1859.

To all whom it may concern:

Be it known that I, LUCIUS P. PORTER, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Speaking Toys, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification, and in which—

Figures 1, 2, 3, 4, 6, and 7 represent outside views and sectional elevations of my improved toy representing different figures or bodies; and Fig. 5 shows an inverted plan of the pedestal portion of such toy.

Squeaking or speaking toys have been variously constructed. By this remark, I do not refer to the forms which they have been made to assume, for the forms may be nearly or fully as varied as there are objects in the universe. Neither do I refer to the character of sound which they have been caused to make, nor yet the appliances or mere shape or position of the appliances for producing the sound, in all of which respects I in no ways restrict my invention. But, in speaking of the various constructions of squeaking toys prior to my invention, I allude to, for instance, two well known modes in particular, but which if analyzed will be found to be substantially similar to each other. In one of these, the object which the toy is designed to represent is usually seated on a stand formed of an upper and lower board united at their edges by leather or its equivalent and constituting together a pair of bellows which on being compressed is made to elicit a sound by the air it displaces acting on a reed or other musical contrivance arranged in connection with the bellows or object seated on them. In such, the object forming the toy proper is usually made rigid to serve as a handle for compressing the bellows or bellow stand to the toy. In another of these, the "bellows" is not situated as a pedestal to or on the exterior of the toy, but nevertheless is equally a distinct and additional contrivance to the toy, it being separately arranged, with its reed and so forth, in the stuffed interior of the toy and so that by compressing the soft covering of the toy, a like positive and direct or rigid working of the bellows, as a separate mechanical contrivance, is produced.

My invention dispenses with the bellows as a separate or additional mechanical con-

trivance to the toy, in any form or shape whatever; and it consists, firstly, in combining with a hollow toy made of india rubber, or gutta percha, or the two combined, or either of their compounds, a reed or other sonorous contrivance acting by the force of a current of air, in such manner that on compressing the toy proper, the same is made to act as a pair of bellows on the reed, and the toy automatically and rapidly made to resume its original proportions on releasing pressure therefrom by reason of its elastic build and without, or necessarily so, the aid of stuffing or interior springs, but the interior of the toy serving as a capacious wind chest to secure the full and perfect action of the reed. And my invention, secondly consists in a novel mode of attaching and securing the reed or other sonorous contrivance in or to said elastic hollow toy, by which economy is produced in the manufacture, leakage and derangement avoided or repair facilitated, and the durability of the toy in its speaking or squeaking capacity largely increased.

The toy proper I propose to make according to a method already patented on the 28 March, 1854, to E. D. S. Goodyear, for making hollow toys out of caoutchouc, or its compounds, in the sheet, by expanding the sheet of rubber in molds through the agency of steam acting inside the sheet, and which it is not necessary here to further describe. These toys are light, durable and cheap, and they may be made to assume with the greatest accuracy almost any shape, and while admitting of curious contortions by their ready capability of extreme compression, they never fail to resume, and that rapidly, their original figure on relieving them from mechanical pressure of the fingers. At the same time, they are not too susceptible of great compression, so that, in the mere handling of the toy, no contortion need be produced unless pressure is purposely applied. I take or make such an elastic hollow toy whatever be the process of its manufacture of sufficient capacity to form a good wind-chest and its elastic sides of a moderate thickness. Its shape may be as represented in the accompanying drawing, or it may represent any other figure, with suitable provision however which should be seen to in the design of its form and manufacture, for receiving and hold-

ing, in intimate connection, a reed (A) or other sonorous contrivance eliciting a sound by the passage of air through it, and made to speak by the compression with the fingers, or hand, of the elastic toy, whether the same be effected by the discharge of air through or past the reed from the interior of the toy in its compression or by the entry of air through or past the reed on the expansion of the figure in resuming its original proportions. In this way I give to the india rubber or other elastic hollow toy, which is a distinct article of manufacture as compared with rigid or mere stuffed toys, a peculiarity that greatly enhances its value and power of amusement, by causing it to speak or squeak; and this I effect at but a trifling additional expense, without the aid of separate bellows and their liability to derangement, and with a power of utterance, by reason of the capacious wind-chest which the interior of the toy presents, that greatly exceeds or that may greatly exceed other speaking toys; and so I produce a new and really useful article of manufacture to wit: a speaking or squeaking "india rubber" toy of the character mentioned; a cheap, light and soft, speaking or crying toy of durable character, not liable to fracture on falling, and that in itself forms the bellows without the aid of any extraneous contrivance. The "bellows" in all previous speaking arrangements have been very liable to breaking or derangement in case of a fall, and a young child cannot be prevented from inflicting more or less rough usage on its playthings.

It is not very material in what part of the toy the reed or whistle be arranged. Where the toy is provided with a pedestal or base forming part of it and made hollow in communication with the interior of the body, then the reed may be situated in the lower surface of the base, which is the arrangement shown in the accompanying drawing. But whatever the position of the speaking

device be I prefer to attach and secure it as follows: I cut a disk from the rubber so as to leave a hole of suitable configuration and size to receive within it tightly a frame (a) grooved on its edges or periphery and containing the reed or sounding appliance. The rubber being stretched so as to allow of the entry of the reed-frame in part into the interior of the pedestal or toy, it is permitted to collapse when the edges of the opening are in line with the groove in the reed frame, and said edges of the rubber-opening filling the groove in the frame, a close joint is established between the latter and the toy proper, and the reed frame locked in its place. This mode of attaching and securing the speaking device to or in the toy, is an exceedingly cheap, perfect and expeditious one, dispenses with a separate jointing strip and is equally or more secure, while it gives every facility for detachment, without destroying parts, when repair or replacement of the reed or its equivalent is needed.

What I claim as my invention is:

1. The combination of a reed or other speaking device, with a hollow elastic toy made of caoutchouc, or gutta percha, or their compounds, for acting together, the former by the latter, substantially as specified.

2. And I further claim the manner herein described of securing the reed frame to the toy by grooving the frame on its edges or periphery and inserting it in a hole in the toy so as to be clasped in the groove by the edges of the elastic material in which the receiving aperture is made.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

LUCIUS P. PORTER.

Witnesses:

JOHN MACKENZIE,
A. BLEAK.