

No. 743,570.

PATENTED NOV. 10, 1903.

E. S. SAVAGE.
TOY.

APPLICATION FILED JAN. 8, 1903.

NO MODEL.

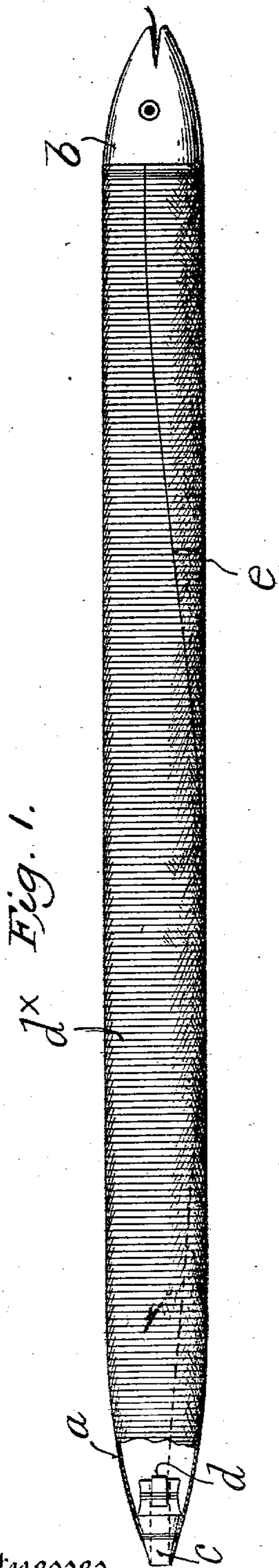
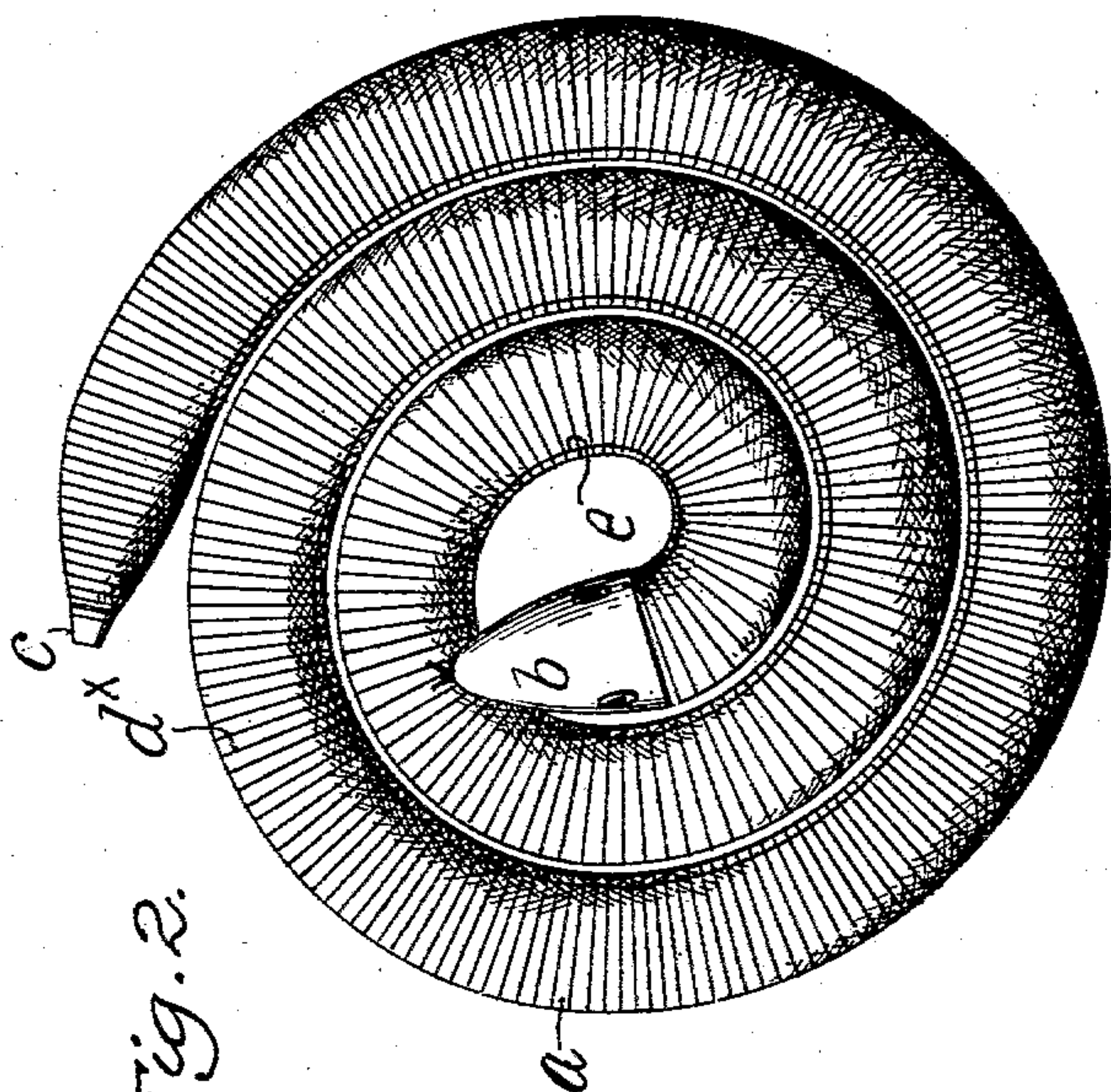
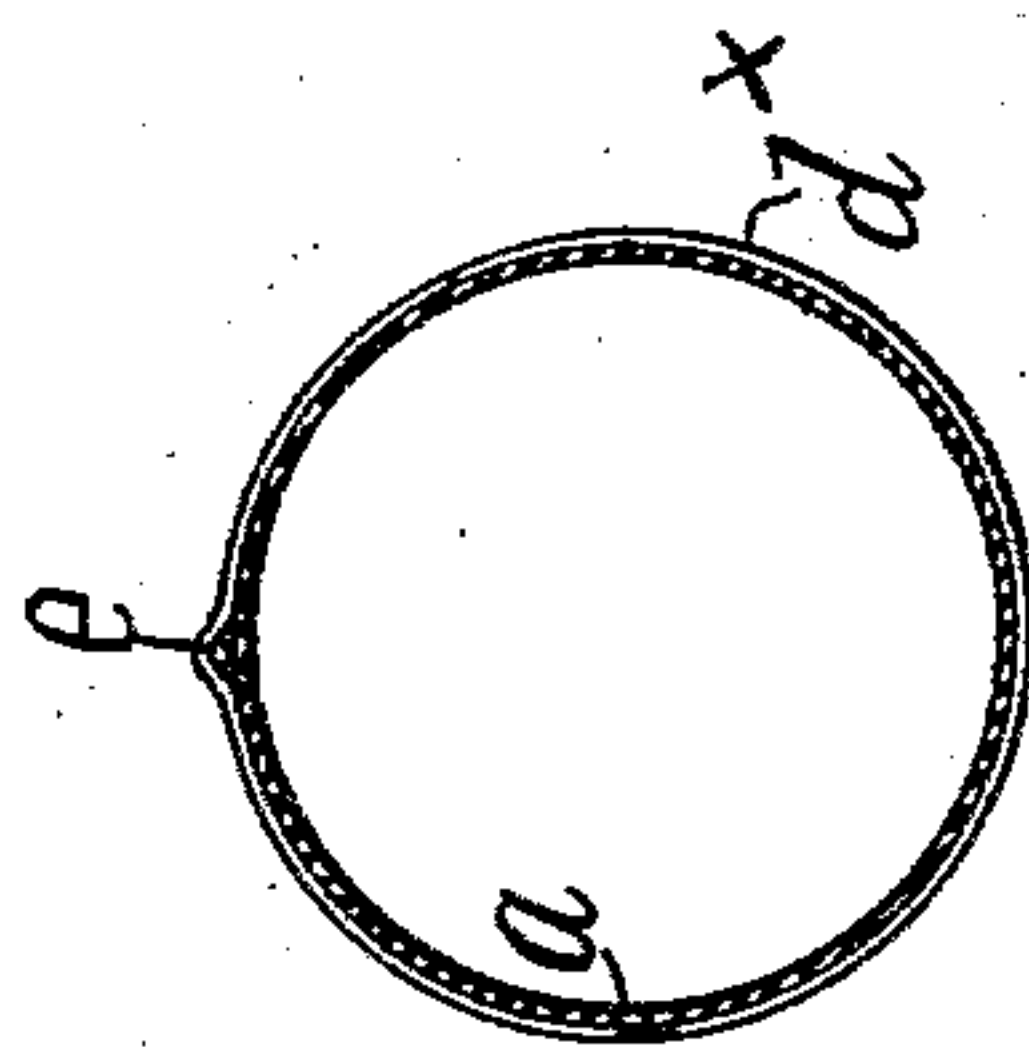


Fig. 3.



Witnesses
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Edward J. Savage,
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UNITED STATES PATENT OFFICE.

EDWARD S. SAVAGE, OF BROOKLYN, NEW YORK.

TOY.

SPECIFICATION forming part of Letters Patent No. 743,570, dated November 10, 1903.

Application filed January 8, 1903. Serial No. 138,205. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. SAVAGE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Toys, of which the following is a specification.

This invention relates to toys made of elastic material, as soft rubber, and means for controlling such expansion and the action of the toy, the object being to simulate more or less the action of reptiles, worms, and such like and to produce mechanically contortions, twistings, &c., in elongated soft-rubber toys.

To these ends the invention consists of improvements in the method of making toys and in the toy itself, as hereinafter described, and more particularly pointed out in the appended claims.

In the practice of the invention I take or make a tube of soft rubber, secure it on a shape or former, and then wind it with thread or cord, which is passed through a cement or a solution of rubber immediately before it is wound on the tube, thus securing the cord to the rubber tube in a permanent manner. I also put a cord on the tube to extend, generally speaking, lengthwise of the same, securing it thereto in the same way or as hereinafter set forth. This longitudinal cord may be under or outside of the cord wound about the tube. In the former case the longitudinal cord may be held in place by the cord wound about the tube. After removal from the shape or former the ends of the tube are closed in any suitable or desired way, provision being made by a suitable valve for the inflation of the toy as desired and for the slow leakage of the air therefrom, during which inflation and discharge the toy goes through contortions, twistings, and other motions. It is not essential that the cord wound on the tube shall extend through the entire length thereof nor that the longitudinal cord or tie shall so extend. By omitting the first in part a bulb is provided by means of which the remainder of the tube may be actuated by squeezing the said bulb and by relaxing the pressure thereon when the whole is partly inflated.

The invention is illustrated in the accom-

panying drawings, forming part hereof, in which—

Figure 1 is a side view, partly broken away, of a toy in which the invention is embodied; Fig. 2 illustrates a position that a proper embodiment of the invention may assume when inflated, and Fig. 3 is a cross-sectional view.

In the drawings, the reference *a* designates a soft-rubber or other elastic tube, the thickness of the walls of which is, generally speaking, about that of the walls of toy balloons sold on the market, though, of course, such thickness may be varied as desired.

The reference *b* marks a closure or head for one end of the tube, and *c* designates a tube secured within the other end of the tube *a*.

The reference *d* marks a valve for covering the inner end of the tube *c* and for permitting the quick inflation and the slow deflation of the toy, or the deflation may be arranged for otherwise. A cord or thread *d*^x is wound around the tube *a* to provide strength to resist bursting pressure, said cord being passed through a suitable cement or a solution of rubber just previous to its coming into contact with the tube *a*. The cord and tube are thus united. A thread or cord *e* is laid upon the tube *a* and may be secured thereto in a similar manner throughout its length or merely at its ends, or the ends of the cord *e* may be caught under the cord *d*^x where the latter is wound on the tube *a* and the head *b* and tube *c* to secure these parts together. The cord *e* may be under or over the cord *d*^x, though it is preferred to have it pass under that cord and also to secure it in place by a cement or a solution of rubber.

It is not essential that the cord *d*^x be wound evenly on the tube *a*; nor is it essential that such cord be wound thereon throughout its entire length. If the cord *d*^x is omitted at one end of the toy, the tube at such place may be used as a bulb to inflate and deflate the remainder by merely squeezing it and relaxing the pressure thereon; nor need the confining-cord *d*^x be continuous, for it may consist of sections, and it may consist of a series of rings rather than of a winding in the nature of a helix; also, the cord *e* may be disposed in various ways with relation to the longitudinal axis of the toy.

The tube *a* may be of varying diameters or

otherwise disposed in order to simulate one or another sort of natural-history subjects.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

5 1. A toy consisting of an expansible body of soft rubber in closed tubular or other hollow form provided with an inlet-valve and separated circumferential ribs of relatively inelastic material on said body portion, sub-
10 stantially as described.

2. A toy consisting of an expansible body of elastic material in closed tubular or other hollow form and provided with an inlet-valve and an open winding of cord or thread at-
15 tached to said body, substantially as described.

3. A toy consisting of an expansible body of elastic material in closed tubular or other hollow form and provided with an inlet-valve,
20 separated circumferential ribs of relatively

inelastic material on said body portion, and a longitudinally-disposed flexible cord or rib attached to said body portion, substantially as described.

4. A toy consisting of an expansible body 25 of elastic material in closed tubular or other hollow form and provided with an inlet-valve, an open winding of cord or thread attached to said body portion, and a flexible cord or thread extending lengthwise of and attached 30 to said body portion, substantially as described.

Signed at New York, in the county of New York and State of New York, this 7th day of January, A. D. 1903.

EDWARD S. SAVAGE.

Witnesses:

GUS. C. HENNING,
R. W. BARKLEY.