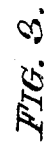
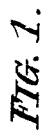


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Attorneys.

UNITED STATES PATENT OFFICE.

JOHN BERG, OF CHICAGO, ILLINOIS.

SOUNDING TOY.

942,162.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that I, JOHN BERG, a citizen of the United States, and resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sounding Toys; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to improvements in sound-producing toys; and it consists, essentially in the novel and peculiar combination of parts, and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

The object of this invention is the production of a toy which when struck upon an object will produce a loud report similar to that produced by fire-crackers, or torpedoes when exploding, but which shall be perfectly harmless and in which the ammunition employed shall be practically without cost and everywhere available. It shall also include, when desired, a whistle, horn or other instrument producing a, more or less, musical sound, the device being eminently suitable for children and others for celebrating our national holiday, July 4th, and for other similar occasions where noise-producing instruments are in vogue.

In the drawings already referred to, Figure 1 is an elevation of my sound-producing toy. Fig. 2 is a plan of the same. Fig. 3 is a longitudinal sectional elevation of a portion of the device drawn on line *x x* of Fig. 2. Fig. 4 is a plan of the upper member of the report, or sound-producing device detached. Fig. 5 is a plan of the intermediary member thereof. Fig. 6 is a sectional view, slightly enlarged, of portions of the device shown in Fig. 3.

A in these drawings designates a hemispherical resilient body, made preferably from rubber, and of sufficient thickness to recover its shape after it has been compressed by being struck. This body A is cemented or otherwise secured, as for instance, by wiring 12, to an annular band, B, comprising a rim 13 having an inwardly projecting flange 14 thereby producing an

opening 15 the object of which will hereinafter more fully appear.

C designates an annulus which I shall hereinafter term the intermediary member. It comprises an annular rim 16 having upper and lower laterally-projecting flanges 17, 18, the outer diameter of which is approximately the same as the outer diameter of the lower annular member B.

D indicates the upper annular member. It is cup-shaped, or similar to the cover of a can or box, there being in its, as it were, bottom 19, an annular opening 20, corresponding in diameter to the inner diameter of the intermediary C. Its downwardly-projecting rim 21 has an internal diameter equaling the outer diameter of the lateral flange 17 on the intermediary C, so that this rim and the flange form a die and punch as will hereinafter more fully appear.

E is a clasp hinged to the rim 13 of the lower member B and reaching over the top-surface of the upper member D. Its object is to securely hold the various members of the report or noise-producing elements of this device in proper juxtaposition.

F is an elastic bow, it being a piece of wire of suitable diameter formed into U-shape. Of the, approximately parallel, members 22, 23 of this wire bow, the outer end of the member 22 is suitably secured to the top-member D, while the lower member 23 is fastened to the lower member B. To this lower member 23, and near its outer end there is secured a blade-spring 24, with one end, the other end of which is fastened to the intermediary C, the arrangement of these three members B, C, D being such that when they are in proper juxtaposition their center-lines are in coincidence.

G designates the handle for this device, by which it is manipulated. This handle may be of any desired contour as long as it may be conveniently grasped by the hand, or it may, and I prefer that it shall be a noise-producing instrument, such as a whistle or a horn, &c., and in the drawings I have shown two horns 25, 26, jointed to a single mouthpiece 27, said mouthpiece having suitable reeds, not shown, to produce the musical sound desired. The bow F is suitably fastened at its apex as well as with one of its members, to one of these horns the other member of said bow being free to change its contour when the members D, C and B are

brought into juxtaposition. Normally, these three members B, C, D, stand a suitable distance apart, as shown in Fig. 1, so that a sheet of paper 27, may be placed into the
 5 space between the members D and C, and another sheet 28, located in the space between the members C and B.

H designates a clamp. It is hook-shaped and movably located upon the member 23
 10 of the bow and adapted to engage the member 22 thereof by its hook 29.

In operation, the two sheets or pieces of paper, which may be pieces torn from a newspaper &c., are located in position as described. Then, the three members B, C, D, are pushed into juxtaposition, one above the other, and the clasp E caused to engage the upper member D and the clamp H to engage the member 22 of the bow F. In this
 20 position the device is locked and is ready for a "shot", that is to say to produce a report similar to that of a pistol being fired, or a toy-torpedo being exploded, by striking the hemispherical shell A which causes
 25 the latter to collapse and the air confined therein to be compressed until the pressure in said shell causes the rupture of the paper-disks 27, 28 and thereby produce the desired result. As soon as air enters the hemi-
 30 spherical shell A after the rupture of the paper-disks, the said shell will resume its normal inflated condition ready for the next shot.

It will now be observed that this device
 35 answers all the purposes of noise-producers, such as toy-pistols, revolvers, toy torpedoes, fire-crackers &c., without their inherent dangers of injury to the persons using the same. It will also be observed that this device is
 40 operative without the use of the intermediary C by employing but one piece of paper between the upper member D and the lower member B, and I desire it understood that I do not wish to confine myself to the em-
 45 ployment of this intermediary C, although I prefer its use for the reason that when two paper-disks are employed the volume of sound when they are ruptured, is materially increased.

I have heretofore mentioned that the rim
 50 21 of the upper member D serves, in conjunction with the flange 17 of the intermediary C, as a punch and die so that when the piece of paper 27 is placed between the parts
 55 D, C, and these parts are pushed together, the surplus paper will be sheared off so that but a circular disk will be located in the annular space 30 of the upper member D. It will be further observed that, when the
 60 members B, C, and D are in juxtaposition,

the paper 28 is tightly clamped between the opposing surfaces of their flanges 14 and 18, and the paper 27 tightly clamped between the opposing surfaces of the flange 17 and the inner surface of the bottom 19, so that
 65 the interior spaces of these members as well as the hemispherical shell are hermetically, or approximately hermetically sealed and air prevented from escaping therefrom.

Having thus fully described this inven-
 70 tion, I claim as new, and desire to secure by Letters Patent of the United States—

1. A toy, comprising a handle; a bow-shaped part to which said handle is affixed; an upper, cup-shaped, member having an
 75 opening in its bottom; a lower annular member having an inwardly-projecting flange; a resilient bag secured to said lower annular member, and suitable clamping-
 80 members adapted to hold the upper and lower members in proper juxtaposition said upper member being secured to one, and the lower member being fastened to the other, member of said bow-shaped part.

2. A toy, comprising a handle, said handle
 85 being an instrument adapted to emit a sound when blown into, a U-shaped part attached to said handle; an upper, cup-shaped, member, there being an opening in the bottom of
 90 said cup-shaped member; a lower annular member having a flange; a resilient, hemispherical shell secured to said lower annular member, and suitable clamping-devices
 95 adapted to hold the upper and lower members in proper juxtaposition, said members being secured to the U-shaped part, as described.

3. A toy, comprising a handle; a bow-shaped part to which said handle is at-
 100 tached; an upper, cup-shaped, member having an opening in its bottom; a lower, annular member having an inwardly-projecting flange; an intermediary member flexibly
 105 suspended between the upper and lower members, a clasp, hinged to said lower member and adapted to engage the said upper member, said upper and lower members being secured to said bow-shaped part, there
 110 being a clamp on one member of said bow-shaped part adapted for engagement with the other member of said bow-shaped part.

In testimony that I claim the foregoing as my invention I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN BERG.

Attest:

MICHAEL J. STARK,
 A. C. PETERSON.