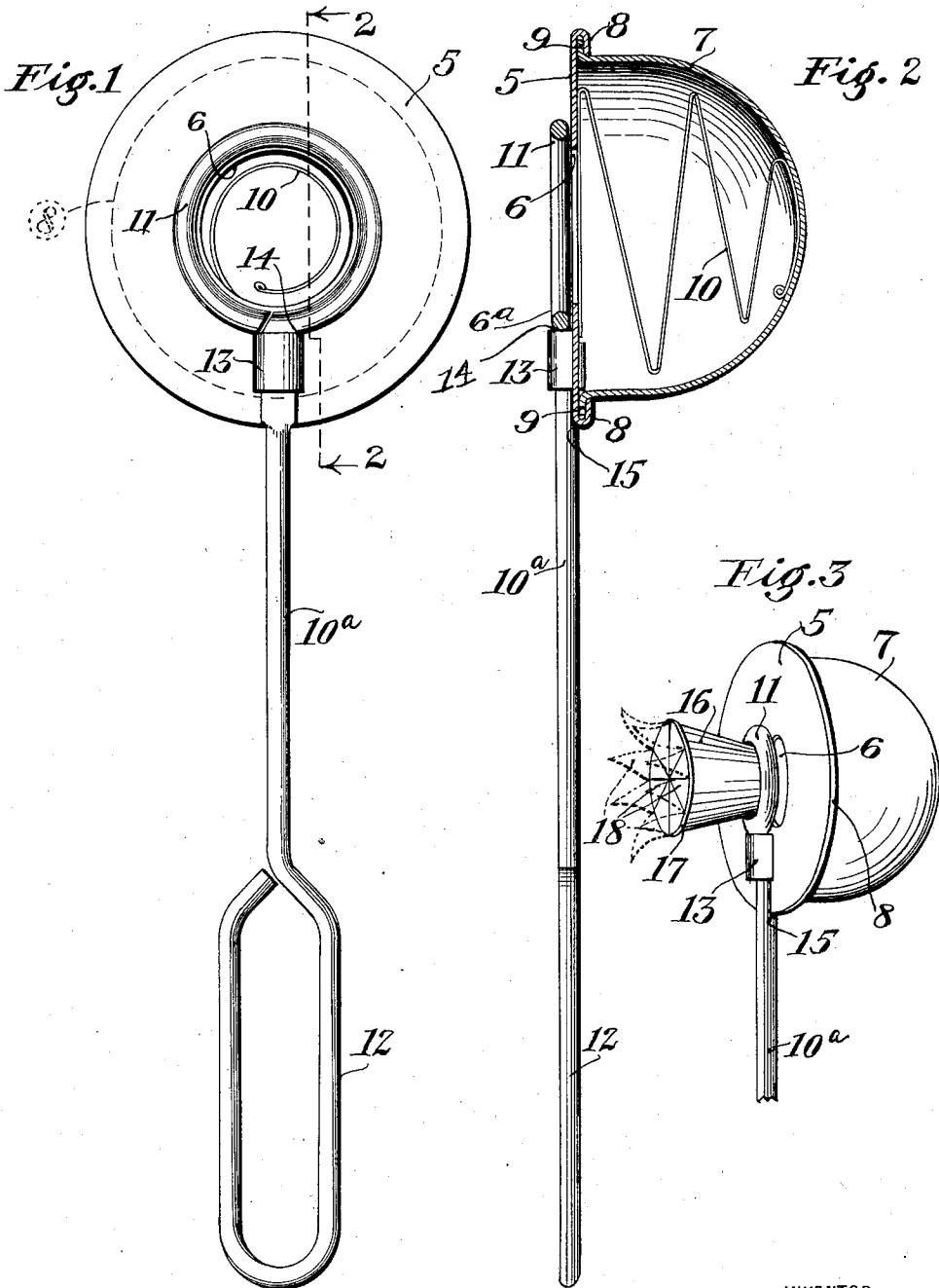


J. H. BEVINGTON.
SOUNDING TOY.
APPLICATION FILED APR. 13, 1911.

1,043,796.

Patented Nov. 12, 1912.



WITNESSES:

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SOUNDING TOY.

1,043,796.

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To all whom it may concern:

Be it known that I, JAMES H. BEVINGTON, 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 Sounding Toys, of which the following is a specification.

This invention relates to improvements in sounding toys, and more particularly to that class in which a diaphragm of paper or other similar thin material is employed in connection with a hollow body of compressible, impervious material, whereby the sudden compression of the air in the hollow body will rupture the diaphragm, and thereby cause a loud report similar to an explosion; and one of the objects of the invention is to provide an improved device of this class which will be extremely simple and durable in construction, cheap to manufacture and effective and efficient in operation.

A further object is to provide an improved device of this class having means for receiving and temporarily holding light particles, such as confetti or the like, which will be discharged and scattered by the explosion.

With these and other objects in view, the invention consists substantially in the features of novelty in construction, combination and arrangement of the several parts hereinafter more fully described and claimed and shown in the accompanying drawing, in which,—

Figure 1 is a top plan view of an improved device of this class, constructed in accordance with the principles of this invention; Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1; and Fig. 3 is a detailed perspective view of a modified form of the invention.

Referring more particularly to the drawing, in the present exemplification of the invention, the numeral 5 designates generally an annular member which is constructed of any suitable elastic sheet material, such as metal or the like, and is of any desirable size and configuration. The opening 6 in the annular member is of any desired diameter, but is of such a diameter in comparison with the diameter of the body portion of the annular member that the member will present a broad flat surface.

A hollow body 7, constructed of any suitable flexible, impervious material, such as leather or the like, is provided with an open side arranged adjacent one face of the annular member 5 and the peripheral edge 8 of the annular member is flanged over the edge 9 of the body 7, for the purpose of securing the parts together.

Arranged within the body 7 is an elastic member 10, preferably in the form of a helical spring with the smaller end resting against the bottom of the body 7, while the larger end rests against one face of the annular member 5, and this elastic member serves as a means for distending the body 7. By arranging the elastic member in the manner as above set forth, it will be manifest that when the body 7 is collapsed, the spring will also be collapsed and will be forced into a small space.

A handle 10^a, which is constructed of any suitable elastic material, such as metal or the like, is provided, and one end of this handle is shaped to form an annular portion 11, while the free end of the handle is shaped to form a gripping portion 12. The handle is secured to the exposed face of the annular member 5 so that the apertured or annular portion 11 of the handle will be disposed above the opening 6 in the annular member 5. The handle may be secured to the annular member 5 in any suitable manner preferably by means of a fastening device 13, such as a clip, staple or the like, which passes over the handle and engages the annular member 5 preferably by passing through suitable apertures in the annular member, provided for this purpose. The fastening device 13 is preferably arranged in close proximity to the shouldered portion 14 of the handle and serves as a means for holding the handle against longitudinal displacement in one direction with respect to the annular member 5, and a shoulder 15 is provided on the handle which contacts with the peripheral edge of the annular member 5 and serves as a means for holding the handle against longitudinal displacement with respect to the annular member 5, in the opposite direction. It will thus be manifest that when the handle is secured to the annular member 5 in the manner just set forth, the parts will be securely fastened. The fastening device 13 is adapt-

ed to clamp the annular or apertured portion of the handle 10^a closely against the exposed face of the annular member 5 and the latter is of such a size as to extend for the same distance beyond the peripheral edge of the apertured portion of the handle 11. This extended or protecting surface of the annular member 5 serves as a support for the diaphragm and as a means whereby the diaphragm may be directed and properly positioned between the apertured portion 11 of the handle 10^a and the annular member 5, so that the diaphragm will extend across the opening 6 in the annular member. In order to permit the diaphragm to be thus positioned, the annular member 5 being constructed of elastic material, is adapted to be "sprung away" from the apertured extremity of the handle, and when in this position the diaphragm may be directed by the thumb over the extended surface of the annular member 5 and into position. When the diaphragm is thus positioned and the annular member 5 released, the elasticity thereof will cause the member to spring against the adjacent portion of the handle and thereby clamp the diaphragm against accidental displacement. With the diaphragm thus positioned, the body portion 7 may be quickly compressed by holding the toy in one hand by the handle and striking the body portion 7 upon the palm of the other hand or upon any other object. The force of the impact thus imparted to the body portion 7 will collapse the latter against the tension of the elastic member 10 and thereby compress the air within the body portion. This sudden compression of the air will rupture the diaphragm and cause a loud report, similar to an explosion.

Referring to the form of the invention shown in Fig. 3, there is provided a receptacle 16 of any desired size and configuration, and this receptacle is provided with an open top and bottom and is supported in any suitable manner, preferably by the handle, so that the open bottom will communicate with the opening 6 in the annular member 5. In order to hold this receptacle against displacement, it is preferably secured to the apertured or annular portion 11 of the handle in any suitable manner. This receptacle 16 is adapted to receive light particles such as confetti or the like, which latter are placed within the receptacle after the diaphragm has been positioned between the handle and the annular member, so that the diaphragm will form a closure for the bottom of the receptacle to prevent the particles from dropping into the body portion 7. It will thus be manifest that when the particles are placed within this receptacle and the diaphragm ruptured in the manner set forth, the force of the explosion or the

compressed air will discharge the particles from the receptacle and scatter them after the explosion. In order to prevent accidental displacement of these particles during manipulation of the toy and before the explosion, any suitable means may be provided for this purpose, such as a flexible member 17, which is adapted to be secured to the receptacle to extend across the top thereof, and this flexible member is cut to form a series of inwardly projecting yielding fingers 18. Obviously the flexible material is constructed of pliable material so that the fingers 18 will readily yield under the force of the explosion to permit the particles to be discharged from the receptacle.

By constructing the handle 10^a of elastic material, the toy will yield so as to prevent injury in the event a person is struck by another person in an attempt to collapse the body portion 7, and the elastic member 10 will also compactly fold or be compressed within itself so that no rigid projections will be formed.

In order that the diaphragm may be firmly gripper in position, the annular or apertured portion 11 of the handle 10^a is provided with a flat face 6^a adjacent the face of the annular member 5.

What is claimed as new is:

1. In a device of the class described, the combination of an annular member constructed of elastic sheet material, a hollow collapsible member having an open portion secured to the annular member with the opening registering with the opening in the annular member, a handle provided with an annular portion, and means securing the handle to the exposed face of the annular member with the opening in the handle registering with the opening in the annular member, the said annular member extending for some distance beyond the periphery of the annular portion of the handle to form an extended support for holding the diaphragm and a guide for directing the diaphragm between the said member and the annular portion of the handle.

2. In a device of the class described, the combination of an annular member constructed of elastic sheet material, a hollow collapsible member having an open portion secured to the annular member with the opening registering with the opening in the annular member, a handle provided with an annular portion, and means securing the handle to the exposed face of the annular member with the opening in the handle registering with the opening in the annular member, the said annular member extending for some distance beyond the periphery of the annular portion of the handle to form an extended support and guide for the diaphragm, said annular member being adapt-

ed to be sprung away from the adjacent portion of the handle to permit the diaphragm to be inserted and gripped therebetween.

3. In a device of the class described, the combination of an annular member constructed of elastic sheet material, a hollow collapsible member having an open portion secured to the annular member with the opening registering with the opening in the annular member, a handle provided with an annular portion, means securing the handle to the exposed face of the annular member with the opening in the handle registering with the opening in the annular member, the said annular member extending for some distance beyond the periphery of the annular portion of the handle to form an extended support for holding the diaphragm and a guide for directing the diaphragm between the said member and the annular portion of the handle, and an elastic element housed within the said compressible member for distending the latter.

4. In a device of the class described, the combination of an annular member constructed of elastic sheet material, a hollow collapsible member having an opening and secured to the member with the opening communicating with the opening in the annular member, a handle having an annular extremity resting against the said annular member, and a fastening device engaging over the handle adjacent said extremity and also engaging the annular member for clamping the said extremity against the annular member, there being a shoulder on the handle engaging the peripheral edge of the annular member, said member being adapted for clamping the said extremity of the handle to permit a diaphragm to be inserted and gripped therebetween.

5. In a device of the class described, the combination of an annular member constructed of elastic sheet material, a hollow collapsible member having an opening and secured to the annular member with the opening communicating with the opening in the annular member, an extended flexible handle having an annular extremity resting against said annular member, and a fastening device engaging over the handle adjacent said extremity and also engaging the annular member for clamping the said extremity against the annular member, means on the handle engaging the edge of the annular member, said member being adapted to be sprung away from the said extremity of the handle to permit a diaphragm to be inserted and gripped therebetween, the said annular member extending for some distance beyond the periphery of the annular portion of the handle to form a guide for the diaphragm.

6. In a device of the class described, the combination of an annular member con-

structed of elastic sheet material, a substantially semi-cylindrical and hollow collapsible member arranged with its edge adjacent the peripheral edge of the annular member, said peripheral edge being flanged over the edge of the hollow member for securing the two together, a handle having an apertured portion disposed adjacent the face of the annular member and with the aperture registering with the opening in the annular member, and means engaging the handle and annular member for fastening the two parts together and in close proximity, said annular member extending for some distance beyond the edge of the apertured portion of the handle and adapted to be sprung away from the handle for receiving and clamping a diaphragm therebetween.

7. The combination of a compressible hollow body having an opening therethrough and over which opening a thin diaphragm is to be applied, a perforated device for holding the diaphragm in place, and means for holding light particles to be scattered by the force of the explosion caused by the rupture of the diaphragm.

8. The combination of a compressible hollow body having an opening therethrough and over which opening a thin diaphragm is to be applied, a perforated device for holding the diaphragm in place, and a receptacle for holding light particles to be scattered by the force of the explosion caused by the sudden compression of the hollow body.

9. The combination of a compressible hollow body having an opening therethrough and over which opening a thin diaphragm is to be applied, a perforated device for holding the diaphragm in place, and an open receptacle supported by the perforated device and having communication with the perforation therein.

10. The combination of a compressible hollow body having an opening therethrough and over which opening a thin diaphragm is to be applied, a perforated device for holding the diaphragm in place, an open receptacle supported by the perforated device and having communication with the opening therein, said receptacle being adapted to receive light particles to be scattered by the force of the explosion, and means for preventing accidental displacement of said particles.

11. The combination of a collapsible hollow body having an opening therethrough and over which opening a thin diaphragm is to be applied, a perforated device for holding the diaphragm in place, an open receptacle having communication with the opening in the perforated device, said receptacle being adapted to receive light particles to be scattered by the force of the explosion, and a yieldable closure for the recep-

tacle for holding the said particles against accidental displacement.

12. A thin metal lower member having a central aperture therethrough, a heavier top
5 member similarly apertured to register therewith, said members affording a space therebetween to permit the insertion of a thin sheet such as paper, a collapsible member affording an air chamber and surrounding
10 said aperture, in the lower member, a spring holding said collapsible member nor-

mally extended, and a handle secured to the device to permit a blow to be struck therewith.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 8th day of April A. D. 1911.

JAMES H. BEVINGTON.

Witnesses:

J. H. JOCHUM, Jr.,

CHARLES H. SEEM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
