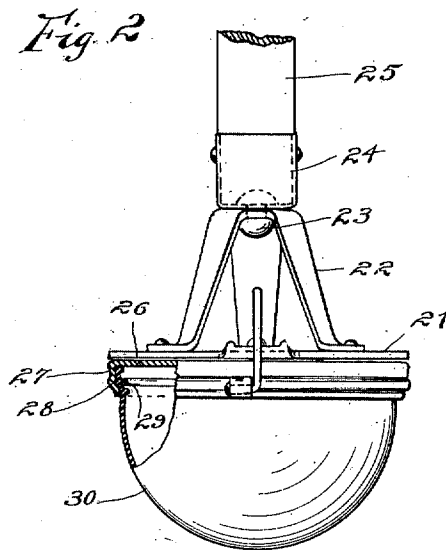
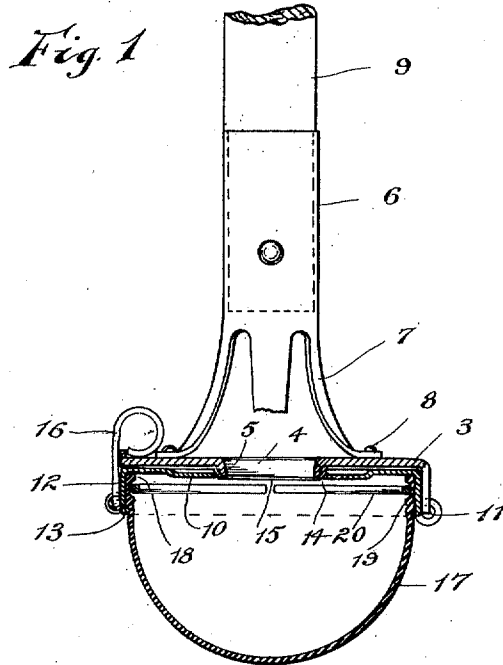


M. WEISS.
SOUND PRODUCING DEVICE.
APPLICATION FILED APR. 16, 1910

985,310.

Patented Feb. 28, 1911.



Witnesses:

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SOUND-PRODUCING DEVICE.

985,310.

Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed April 16, 1910. Serial No. 555,820.

To all whom it may concern:

Be it known that I, MAX WEISS, 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 Sound-Producing Devices, of which the following is a specification.

This invention relates more particularly to noise-producing devices, toys, or the like, in which the noise or sound is made by compressing air and causing the compressed air to rupture a piece of paper or other similar frangible material. Its objects are to improve the construction of such devices, to provide means for securely fastening the collapsible air-compressing member to one of the paper-holding members, to provide means for forming a substantially air-tight closure when the paper is inserted, and any such other features as will appear from the following description.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 represents a side view of a cane or stick with the noise-making device secured to the end thereof, parts being shown in section; and Fig. 2 is a similar view, showing a slightly modified form of construction.

As indicated in these drawings, 3 represents an annular ring, preferably made of metal, having a central opening 4 therethrough. A downwardly projecting rim or bead 5 is formed around the periphery of the hole 4 for purposes which will presently appear. This ring 3 is provided with a suitable handle or other means for operating the device, for instance, as shown in Fig. 1, a ferrule 6 is formed with projections 7 which are securely fastened to the ring, as by means of rivets 8, and a cane or stick 9 is inserted in the ferrule, thus providing a convenient means for operating the device.

A second annular ring 10 is hinged at 11 to the first-named ring and is provided with a downwardly projecting flange 12, this flange preferably having an inwardly turned bead or rim 13 at its lower edge. The ring 10 is provided with a central hole or opening 14, which is preferably slightly larger than the outer periphery of the downwardly projecting bead 5. This arrangement is such that when a piece of paper or other suitable fabric 15 is placed on the ring 10 and the

ring 3 pressed thereagainst, the bead or rim 5 will press the paper slightly through the opening 14 and clamp it securely between said rim and the walls of said opening, thereby stretching the paper tight and making a substantially air-tight joint or closure. The two rings are held together by means of a clamp 16. The air-compressing member 17, which is preferably made of rubber, has its upper end fitting closely against the lower side of the ring 10 and within the flange 12. It is provided, on the inner side, at the upper end, with inwardly projecting beads or ribs 18 and 19. In order to hold this upper end closely in engagement with the flange 12, an expansible spring ring 20 is inserted between these beads, thereby pressing the walls of the compression member tightly against the inner face of the flange 12, where it is held by friction as well as by the holding action of the inwardly projecting bead or edge 13 on said flange. It will be readily understood that when the upper end of this compressible member 17 is to be inserted in position, the ring 20 is first placed between the beads 18 and 19 and is then sprung together sufficiently to allow the end to be pushed in over the bead 13, then the expansion of the ring 20 will hold the member in position as above described.

In operation, the lower flanged ring 10, with the air-compressing member, is swung downwardly on the hinge 11 and the piece of paper or other suitable fabric inserted in position over the hole 14; then the rings are clamped together by means of the clamp 16, and when the collapsible member 17 is struck forcibly against some sufficiently non-yielding object, the air will be compressed, causing the rupture of the paper and resulting in a loud noise.

In the modified form of construction shown in Fig. 2, the annular ring 21 is provided with a three-pronged attachment 22 which is riveted, by means of a rivet 23, to a ferrule 24 adapted to engage with the end of the stick or cane 25. With this arrangement, the parts may be made somewhat lighter, and are more easily formed than with the construction shown in Fig. 1. In this instance, the ring 26 is provided with an inwardly tapered flange 27 having an internal groove 28 so that the spring ring 29, within the upper end of the collapsible

member 30, may force the walls of said member into such groove, thereby forming a tight connection between the flange and the collapsible member.

5 Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. Paper or fabric holding means, in a device of the character set forth, comprising
10 an annular ring having a projecting rim around the periphery of the central opening, a second ring having its central opening adapted to pass over said rim, and means for holding said rings together.

15 2. In a device of the character set forth, the combination of a ring having a projecting bead around its central opening, a second ring taking over said bead, and means for holding said rings together, the arrange-
20 ment being such that a piece of paper inserted between said rings will be tightly stretched over said projecting bead and securely held in position.

3. In a device of the character set forth,
25 the combination of a ring having a flange, a collapsible member engaging with the inner face of said flange, said collapsible member being provided with inwardly projecting beads, and an expansible ring between said

beads for holding the walls of said member 30 against said flange.

4. The combination of a cane or stick, an annular ring secured to the end of said stick, the inner edge of said ring being turned laterally to form a projecting rim, a second 35 ring hinged to said first-named ring and having its central opening adapted to pass over said rim, means for clamping said rings together, said second-named ring being provided with a flange having a rib thereon, a 40 collapsible air-compressing member engaging with the inner wall of said flange, and an expansible member for holding said collapsible member against said inner wall.

5. In a device of the character set forth, 45 the combination of a ring having a flange thereon, said flange being provided on its inner surface with means for engagement with a collapsible member, a collapsible member having its open end engaging with 50 said ring and the inner wall of said flange, and means for pressing said end outwardly against said flange.

MAX WEISS.

Witnesses:

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