May 16, 1939. S. WEISS 2,158,445

MUSICAL TOY

Filed June 2, 1938

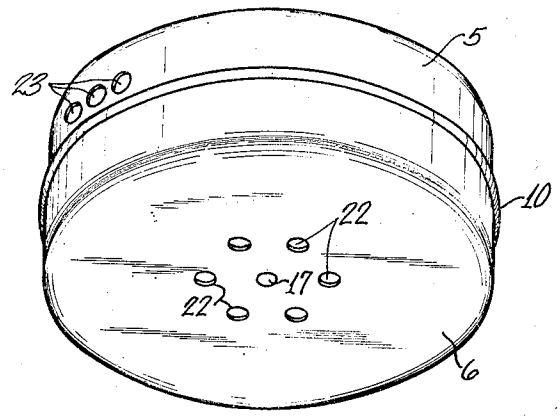


FIG. 1.

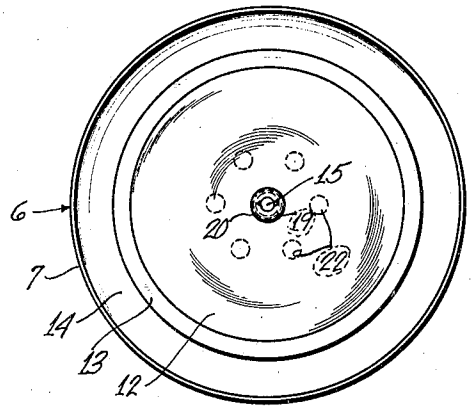


FIG. 2.

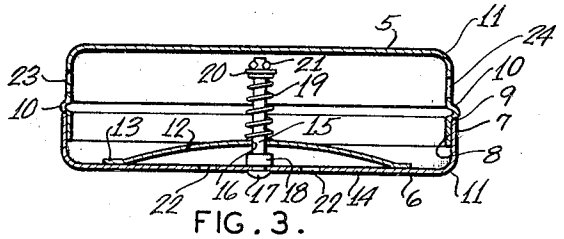


FIG. 3.

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Patented May 16, 1939 2,158,445

UNITED STATES PATENT OFFICE

2,158,445

MUSICAL TOY

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Application June 2, 1938, Serial No. 211,355

8 Claims. (Cl. 46—182)

My invention relates to toys and more particularly to a rude musical instrument of the kazoo type, the object of the invention being to provide an improved article of this character which is simple and economical of manufacture and so constructed as to preclude any possibility of injury to the user.

Other objects and advantages will appear from the following detailed description and accompanying drawing of a presently preferred embodiment of the invention.

Fig. 1 of the drawing is a perspective view, Fig. 2 a plan view with the cover section removed, and Fig. 3 is a sectional view of the article of my invention.

Referring now by characters of reference to the drawing, my improved device comprises a hollow body member or envelope of discoidal form, made up of complemental upper and lower sections 5 and 6, respectively, thin sheet metal being preferably used in the fabrication thereof. The annular side wall 7 of the lower section overlaps and tightly embraces the corresponding wall 8 of the upper section whereby the parts are held together in assembled relation. The marginal edge 9 of the lower section abuts an annular bead or shoulder 10 formed on wall portion 8, such bead serving in part to protect the user of the article by preventing his lips and tongue from contacting the edge 9. As a further protection to the user, the corner portions of the body member are well rounded as indicated at 11.

Disposed centrally within the body member is a concavo-convex disc or diaphragm 12, preferably formed of thin sheet metal, having a peripheral flange 13 which is adapted to vibrate against the bottom wall 14 of the body member. The diaphragm is positioned by means of a post 15 which extends from the bottom wall 14, to which it is fixedly secured, through a central aperture 16 formed in the diaphragm, the size of the aperture being such as to permit the diaphragm to vibrate without undue interference from the post. Securement of post 15 to the bottom wall 14 may be accomplished in any suitable manner, as in the present example, by forming a rivet head 17 on an outer extension of the post which acts in conjunction with a shoulder 18.

The diaphragm is urged against the bottom wall 14 by a relatively weak coil spring 19 mounted on the post, a washer 20 between the upper end of the spring and a crimped or deformed portion 21 of the post serving to retain the spring and diaphragm thereon. The spring 19 should have sufficient strength to hold the diaphragm against the wall 14 when the article is used in an inverted position, yet should not unduly hamper diaphragm vibration.

The wall 14 is provided with a series of openings 22, underlying the diaphragm, and the side wall 8 of the upper body section is provided with one or more apertures 23, and a second aperture or group thereof 24, spaced circumferentially from the apertures 23.

The article is used by singing or humming into the body member with the mouth placed against the apertured portion of the side wall, either of the apertures 23 or 24 serving as the mouth portion. This causes the diaphragm to vibrate against its adjacent wall.

From the foregoing description it will appear that my invention provides an amusement device for use especially by children since it requires no skill to operate, and, being devoid of sharp corners or projections, cannot injure the clothing or person.

While I have described my invention with reference to a presently preferred embodiment, it will be understood that various changes may be made in the device herein set forth without departing from the spirit and full intendment of the invention as defined by the appended claims.

I claim:

1. A toy of the character described, comprising a closed hollow body member having an apertured wall portion for application to the mouth of the user, and a second apertured wall portion spaced from the first said wall portion, a diaphragm within the body member overlying the apertures in, and adapted to vibrate against said second wall portion, and resilient means urging the diaphragm against said second wall portion.

2. A toy of the character described, comprising a closed hollow body member, a diaphragm partitioning the interior of the body member into separate air chambers, the marginal edges of the diaphragm being free to vibrate against a wall portion of the body member, said body member having a wall opening communicating with one of said chambers and a second wall opening communicating with the other member.

3. A toy of the character described, comprising a closed hollow body member, a circular metal disc loosely mounted in the body member with its peripheral margins in contact with a wall portion thereof, said disc partitioning the interior of the body member into separate air chambers, wall openings in the body member communicating with said chambers, and resilient means associated

with said disc for urging the same against the adjacent wall of the body member.

4. In a toy of the character described, a substantially closed hollow body member, a diaphragm comprising a concavo-convex disc mounted within the body member with its peripheral margin loosely contacting a wall portion thereof, said body member having wall openings communicating with its interior at relatively opposite sides of said diaphragm.

5. In a toy of the character described, a substantially closed hollow body member, a diaphragm comprising a concavo-convex sheet metal disc loosely mounted within the body member with its periphery in contact with a wall portion thereof, a spring arranged to urge the diaphragm against the wall portion of the body member adjacent thereto, said body member having wall openings communicating with its interior at relatively opposite sides of the diaphragm.

6. In a musical toy of the character described, a substantially closed hollow body including an annular side wall and opposed end walls, said side wall having an apertured portion for application to the mouth of the user, at least one of said end walls having an aperture therein, a concavo-convex metal diaphragm in the body, the peripheral margin of said diaphragm being adapted to vibrate against the apertured end wall.

7. In a musical toy of the character described, a substantially closed hollow body including an annular side wall and an apertured end wall, the side wall having an apertured portion for application to the mouth of the user, a post extending axially inwardly from said end wall, a concavo-convex annular disc loosely mounted on said post, the periphery of said disc being adapted to vibrate against said end wall, and a spring carried by said post, adapted to urge said diaphragm against said end wall.

8. In a musical toy of the character described, a hollow discoidal body including an annular side wall and opposed end walls, a post rigidly secured to and projecting axially inwardly from one end wall, a centrally apertured concavo-convex sheet metal diaphragm in said body, said post extending loosely through the diaphragm aperture, said diaphragm having a peripheral flange adapted to vibrate against one of said end walls, a spring mounted on said post adapted to exert light pressure against said diaphragm to urge the flange thereof against the adjacent end wall, the last recited end wall having an opening facing said diaphragm, and spaced openings formed in said side wall.

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