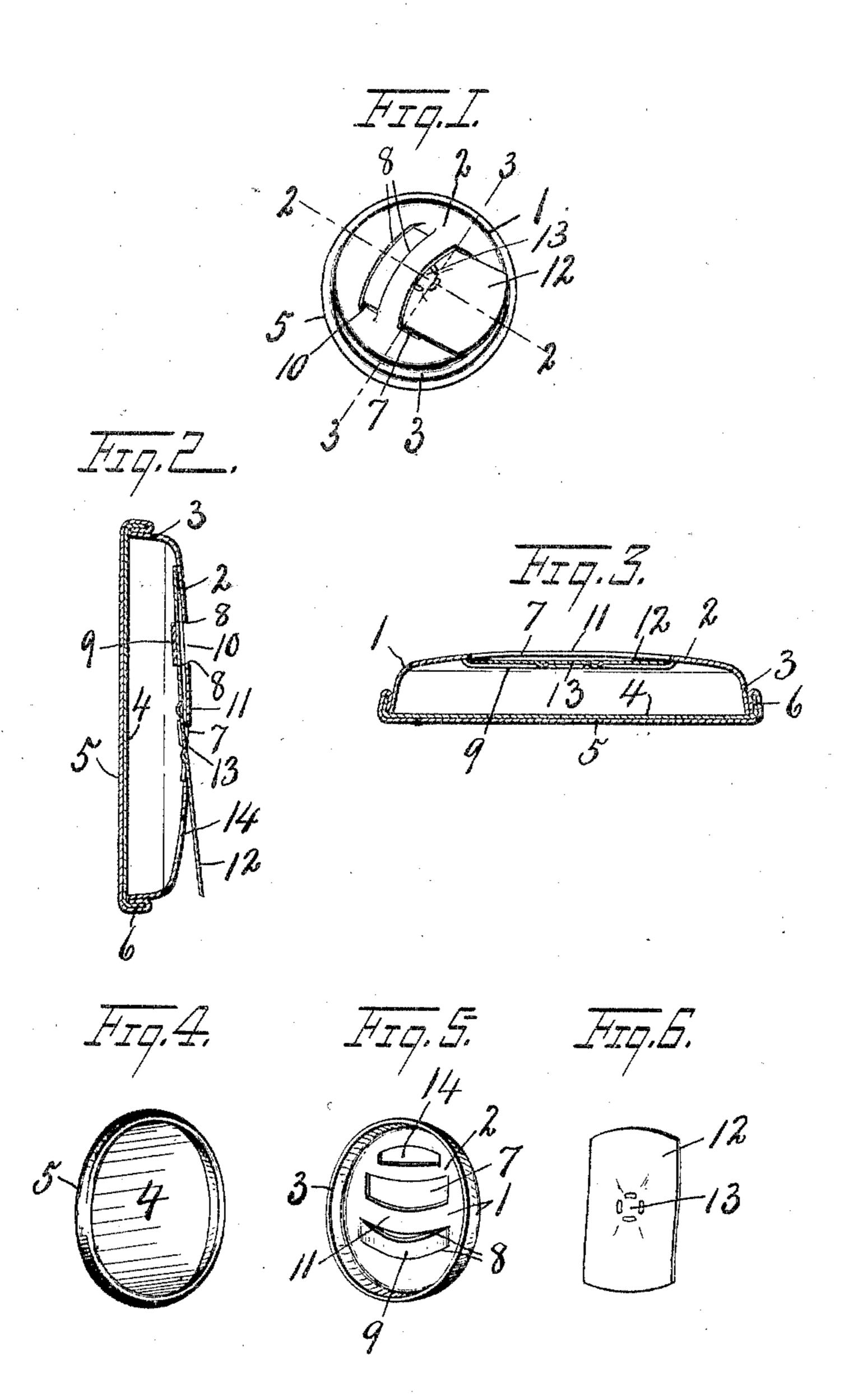
## J. MoLEAN. SNAP BUTTON.

APPLICATION FILED APR. 22, 1904.

NO MODEL.



Wilnesses: F.E. Arthur B.E. Robinson.

## UNITED STATES PATENT OFFICE.

## JOHN McLEAN, OF NEWARK, NEW JERSEY.

## SNAP-BUTTON.

SPECIFICATION forming part of Letters Patent No. 777,043, dated December 6, 1904.

Application filed April 22, 1904. Serial No. 204,354. (No model.)

To all whom it may concern:

Be it known that I, JOHN McLean, of Newark, in the county of Essex, in the State of New Jersey, have invented new and useful Im-5 provements in Snap-Buttons, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in ro snapping buttons in which a kinked spring-leaf is mounted upon a thin sheet-metal sounding board or shell and adapted to be operated for producing a snapping sound.

My object is to mount one end of the buckled <sup>15</sup> spring-leaf upon the convex base of a sheetmetal cup having a cap closing its open end for forming an interior chamber, so as to reverberate the sound produced by the operation of the snapping spring.

Another object is to provide the base with suitable parallel transverse bars arranged in different planes one in advance of the other and to insert the end of the spring-leaf under one of the bars and over the other, whereby the 25 spring-leaf is held in place and permits its free end to be sprung by hand a limited distance for producing the snapping effect without cutting away the portion of the base underlying the free end of the snapping spring.

In the drawings, Figure 1 is an inverted perspective view of my improved snapping button. Figs. 2 and 3 are sectional views taken, respectively, on lines 22 and 33, Fig. 1. Figs. 4, 5, and 6 are perspective views show-35 ing, respectively, the cap or cover, the sheetmetal cup or shell, and the spring snapping leaf.

Similar reference characters indicate corresponding parts in all the views.

In carrying out the object stated I provide a sheet-metal cup 1 with a convex bottom 2 and flaring sides 3, the open side of the cup being closed by a suitable sheet-metal cap 4, having a covering 5, of celluloid or other suit-45 able material, which is adapted to receive a print or other ornamentation. This cover constitutes the exposed face or front of the button and is provided with an annular flange 6, while the marginal edges of the covering 5 5° are turned inwardly around the edges of the flange 6 and are impinged between said flange 6 and the flaring sides 3 of the shell 1. In other words, the flange 6, with the covering thereon, is crimped over the adjacent edges of the flaring sides 3, thereby locking the two circu- 55 lar parts together.

The base 2 of the cup 1 is formed with a transverse slot 7 and with substantially parallel slits 8, the stock between the slits being depressed inwardly to form a transverse bar 60 9 and a slot 10, the bar 9 having its ends integral with the base 2 at opposite ends of the slot 10. These slots 7 and 10 are disposed one in advance of the other, thus forming a second transverse bar 11, running parallel 65 with and between the slots 7 and 10. These bars 9 and 10 are also arranged one in advance of the other, but in different planes, for receiving and retaining a spring snapping leaf 12, which is buckled centrally at 13. 70 This lever 12 is inserted through the slot 7 and under the transverse bar 11, but over the transverse bar 9, so that its inner end lies within and close to the inner face of the convex bottom 2, while its outer free end ex- 75 tends outwardly through the slot 7 and lies along the outer convex face of the bottom 2, so that the free edge of the snapping spring is some distance from the adjacent outer face of the bottom 2 to allow a sufficient move- 80 ment of said free edge to produce the snapping effect. This free edge of the snapping leaf also lies in a plane substantially coincident with the periphery of the cup.

It will be seen upon reference to Fig. 2 85 that the edge of the slot 7 opposite the bar 11 forms a fulcrum for the snapping spring 12, and in this figure and also in Fig. 3 it will be seen that a space is left between the buckled portion 13 of the snapping leaf and 90 the inner face of the bar 11 to permit this part of the snapping-leaf to be sprung outwardly as the free end of the lever is depressed, thus producing the snapping effect.

In order to make a more efficient sounding- 95 board of the cap it is generally provided with an additional slot or opening 14 beneath the free end of the spring-leaf 12, which permits the escape of the reverberated soundwaves.

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Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. A snapping button comprising a shell 5 having slits spaced apart and the intervening portion depressed to form a bar, and a spring snapping leaf having one end inserted through the slits and across the bar.

2. A snapping button comprising a sheet-10 metal shell having a portion thereof partially severed and depressed and forming a slot and an underlying bar united at its ends to the shell and a spring snapping leaf having one end inserted across the slot between the bar and ad-

15 jacent parts of the shell.

3. A snapping button comprising a sheetmetal shell having substantially parallel slots, a bar secured at its ends to the shell at opposite ends of one of the slots, and a spring 20 snapping leaf inserted through the other slot

and between said bar and adjacent portions of the shell.

4. A snapping button comprising a shell, substantially parallel bars united to the shell one in advance of the other but in different 25 planes, and a spring snapping leaf having one end inserted under one bar and over the other bar.

5. A snapping-button comprising a sheetmetal cup and a cap for its open side, the 30 base of the cup being formed with bars arranged one in advance of the other but in different planes, and a spring snapping leaf inserted under one bar and over the other.

In witness whereof I have hereunto set my 35

hand this 19th day of April, 1904.

JOHN McLEAN.

Witnesses:

HARLE W. HATHAWAY, JAMES C. DAY.