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C. M. MILLER

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BELL

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Fig. 1.

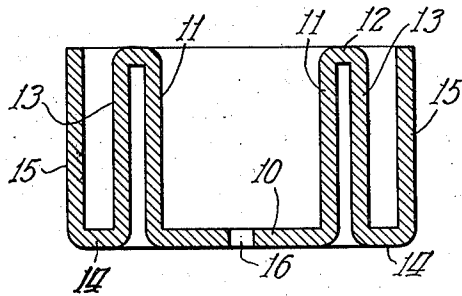
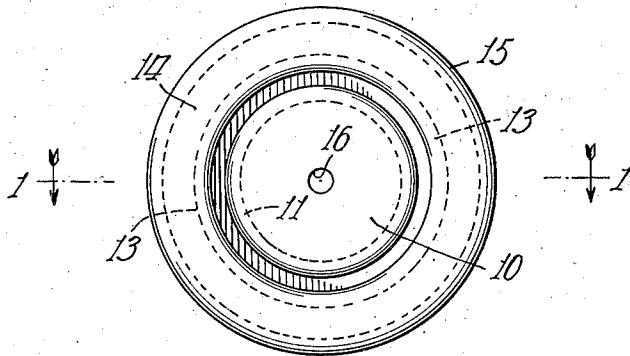


Fig. 2.



Inventor
Carl M. Miller

By: *C. P. Sofer* *Atty.*

UNITED STATES PATENT OFFICE

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BELL

Carl M. Miller, Chicago, Ill., assignor to Kellogg
Switchboard and Supply Company, Chicago,
Ill., a corporation of Illinois

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2 Claims. (Cl. 116—148)

This invention relates to an improvement in bells, whereby a bell of a given or desired tone may be produced which will occupy less space than previous bells.

5 In the conventional type of bell the shape is such as would be generated by a smooth curve. In the type of bell herein disclosed the bell is folded back on itself. Thus the surface area and the characteristic tonal qualities of the larger
10 bell are retained but the space required by the bell is much less. The amount of space saved is dependent on the number of folds; in a thrice-folded bell the lateral space occupied will be only about one-third of the space occupied by a bell
15 of the conventional type having substantially the same tone.

Due to the relation of the various walls and spaces of the bell to each other it is possible to create and control the desired qualities of the
20 bell. Thus a bell having desired qualities such as a pleasing tone, sustained vibration, required pitch and desired overtones may be readily designed.

Bells of this character are particularly desirable in connection with telephone boxes, gongs and other devices of like character where it is desired to provide a bell having a deep tone and higher overtones which may be located within the available space.

30 From the above it is obvious that the principal purpose of the present invention is to provide a bell having substantially the same characteristic tone of the conventional bell but which will occupy only a fraction of the lateral space thereof.

35 Referring now to the drawing in which like reference characters indicate the same parts in the several views,

Fig. 1 is a transverse section through the bell; and

40 Fig. 2 is a view looking at the closed side thereof.

Referring now in particular to Fig. 1 the bell

comprises the cup-shaped central portion comprising the top 10 and the substantially parallel side walls 11. The side wall 11 is folded back upon itself at 12 to provide a wall 13 substantially parallel with the wall 11. The wall 13 is in turn
5 folded back on itself at 14 to provide a wall 15 substantially parallel to the wall 13. The folding and refolding of the wall portion may be continued to provide any number of the U-shaped portions. The bell will obviously be supported by
10 means of a pin or rivet passing through the opening 16 in the portion 10.

While in the above description and in the drawing the parts 11, 13 and 15 have been shown as substantially parallel it is obvious that the parts
15 11—13 and 13—15 may be somewhat divergent without departing from the spirit of the present invention. Also the particular contour of the inner cavity formed by the parts 10 and 11 may be varied at will.

Having described my invention what I claim
20 is new and desire to secure by United States Letters Patent is:

1. A bell of the gong type comprising a cup-shaped body portion having a surrounding wall portion folded and refolded back upon itself
25 through the major portion of the depth of said cup-shaped portion, said cup-shaped portion having a width appreciably greater than the width of each of the folds of the wall portion providing
30 for relatively deep tones in a compact bell.

2. A bell of the gong type comprising a cup-shaped body portion having integral top and annular peripheral wall, said wall having a portion folded back upon itself and refolded thereupon
35 externally of the wall, said folded and refolded portions extending throughout the major portion of the depth of the wall, the top having a width appreciably greater than the width of each of the folds of the wall portion providing for rela-
40 tively deep tones in a compact bell.

CARL M. MILLER.