

(No Model.)

W. E. BARTON.

HAND BELL.

No. 386,288.

Patented July 17, 1888.

Fig. 2

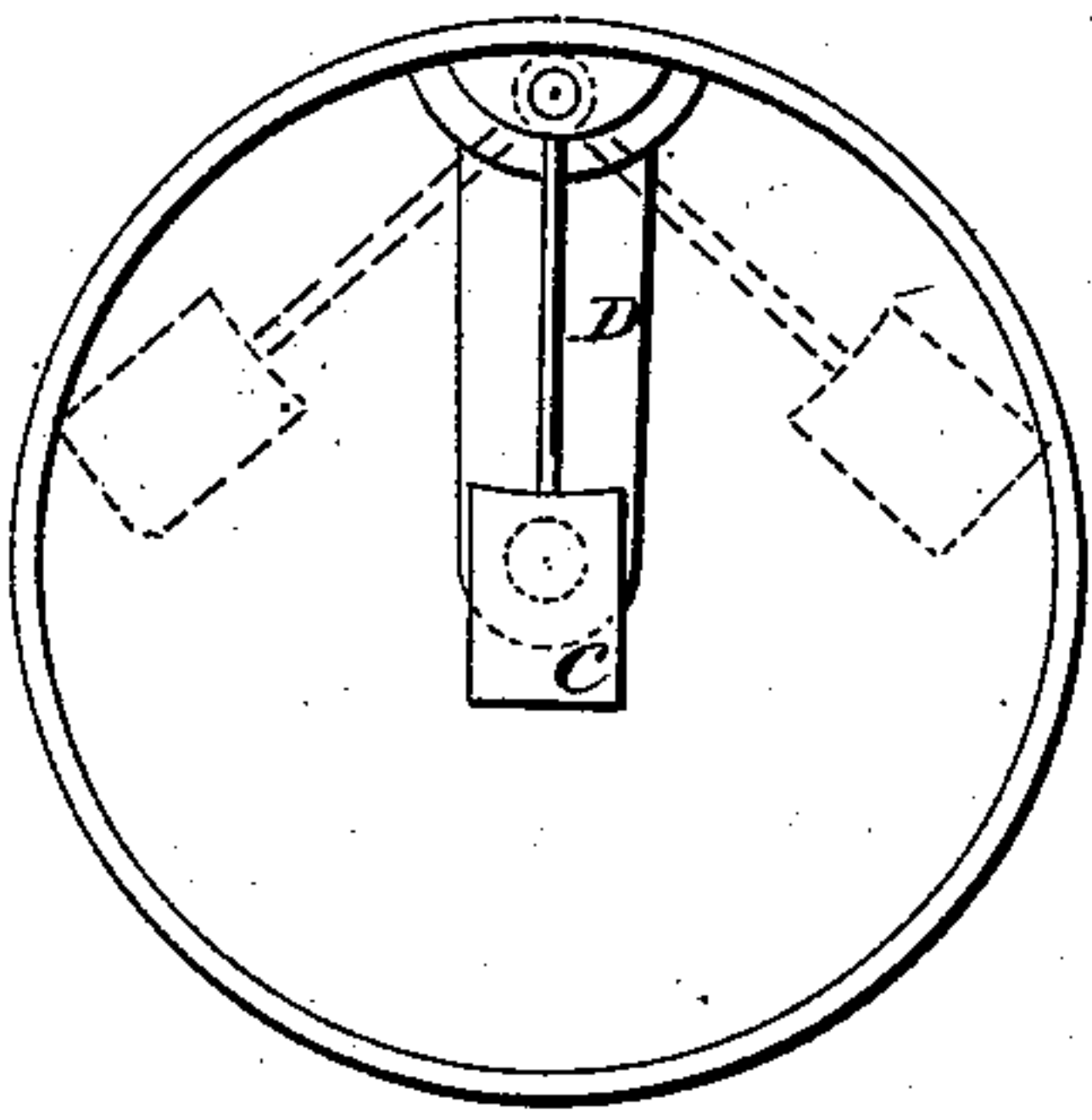


Fig. 3

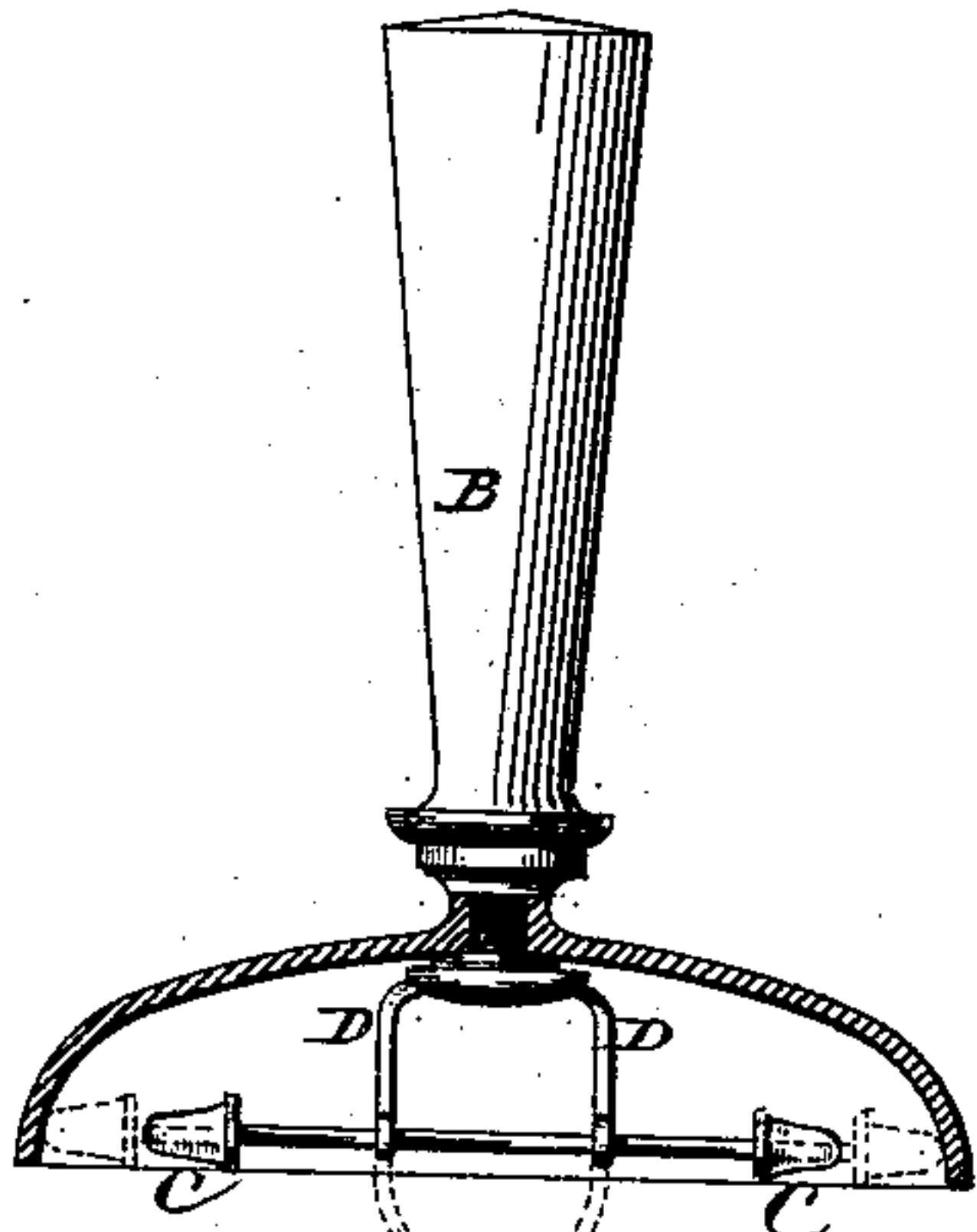


Fig. 5

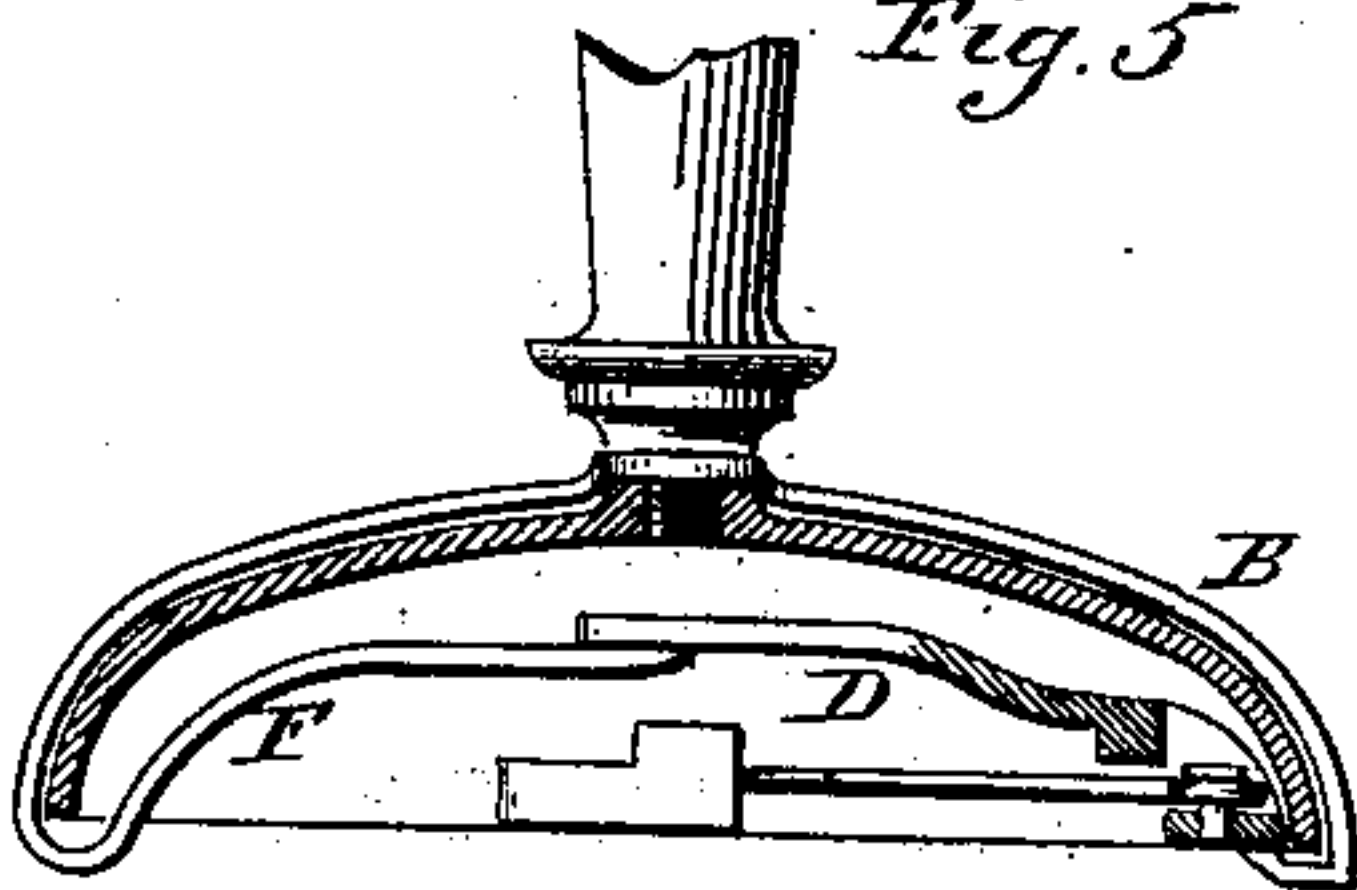
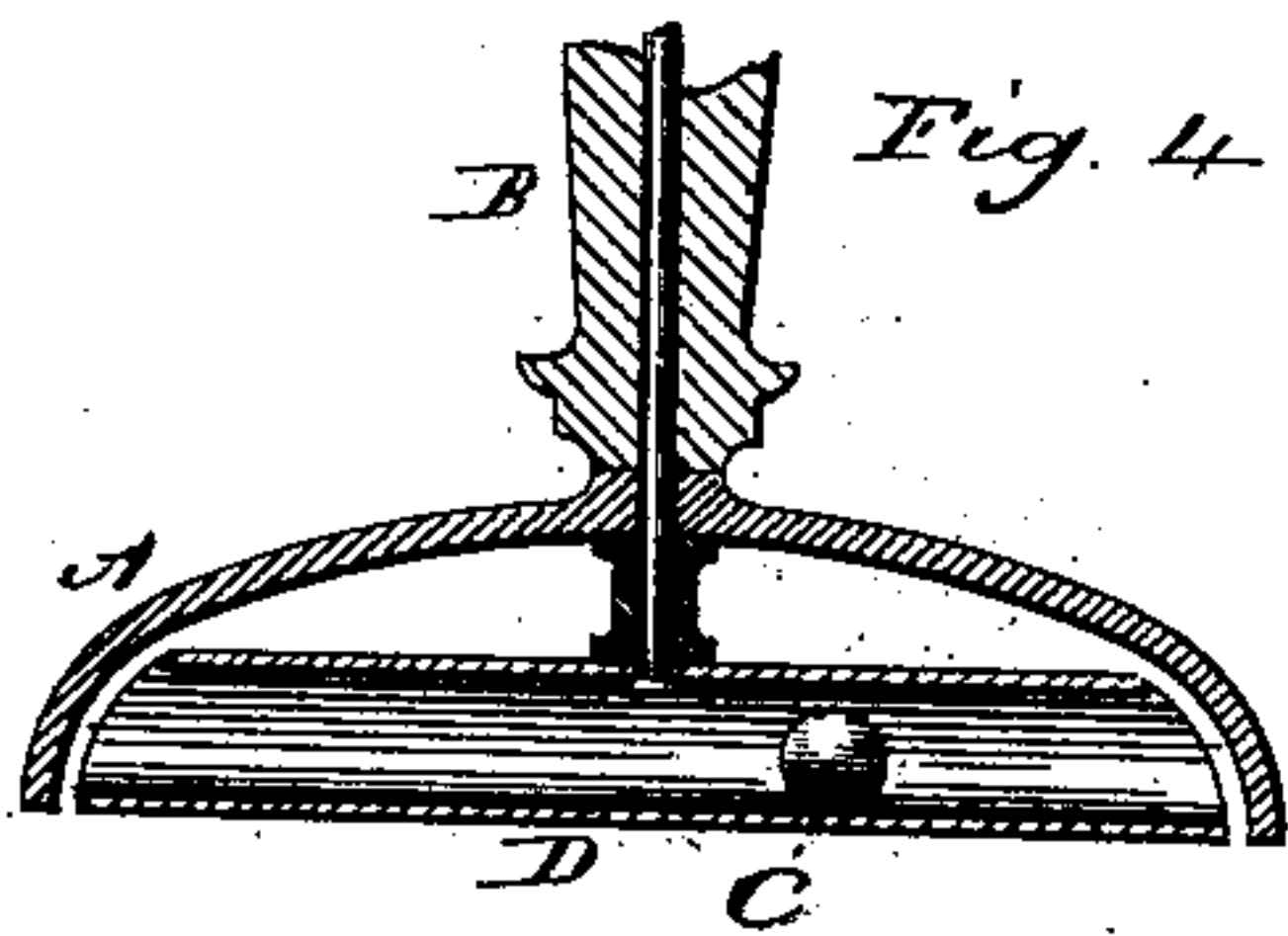


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM E. BARTON, OF EAST HAMPTON, CONNECTICUT.

HAND-BELL.

SPECIFICATION forming part of Letters Patent No. 386,288, dated July 17, 1888.

Application filed June 20, 1887. Serial No. 241,816. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. BARTON, of East Hampton, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Hand-Bells; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, which said drawings constitute part of this specification, and represent, in—

Figure 1, a vertical central section showing the hammer and handle in side view; Fig. 2, an under side view of the bell; Figs. 3, 4, and 5, modifications.

This invention relates to an improvement in that class of open-mouth hand-bells in which the handle for ringing the bell is in the axial line of the bell. In the usual construction of this class of bells the hammer is hung within the bell at its axis or connection with the handle, and so that in ringing the hammer swings in a plane parallel with the axis. This necessitates making the bell of considerable depth, in order to give the requisite swing to the tongue. Bells of a gong shape have been constructed in which two bells are employed, the open mouths toward each other, with the handle extending from the two bells in a line between the bells—that is, at right angles to the axis of the bell.

The object of my invention is the construction of a gong-shaped or open-mouth bell in which the handle is applied in an axial line therewith, and so that a bell of very little depth may be employed. To this end my invention consists in the arrangement of a tongue adapted to move in a line across the bell in a plane at right angles to the axis of the bell, and in which the handle is attached to the bell in an axial line therewith.

A represents the bell proper, which is of the usual gong shape, or of any suitable shape having an open mouth. Upon the back of this bell, and in a central position in the axial line of the bell, the handle B is attached. This may be in the usual manner of securing handles to bells.

C represents the hammer, which is arranged in a horizontal plane and so as to swing across the plane of the bell or at right angles to its

axis. In the best construction for hanging the hammer an arm, D, is made fast to the inside of the bell at the center, as seen in Figs. 1 and 2, which may serve as the nut by which the bell and handle are secured together. This arm or bracket D extends radially outward to near the inner surface of the bell, and near its outer end, and upon a pivot, E, the hammer C is hung, so as to freely swing upon the pivot and in a plane at right angles to the axis of the bell, as to the positions indicated in broken lines, Fig. 2, so that the hammer may strike the bell near its extreme outer edge.

The bell is rung by grasping the handle in the usual manner and swinging the bell from right to left, or up or down, as the case may be, so as to cause the hammer to vibrate upon a pivot and impart the necessary blows upon the bell. It is best done by holding the bell in the position indicated in Fig 2 and swinging from right to left.

Instead of pivoting the hammer to the bracket, as I have described, it may be arranged in the bracket, as seen in Fig. 3, in which case the hammer consists of a rod having a striker, C, upon each end and the rod supported in a bracket, D, attached to the center of the bell and at right angles to the axis of the handle and bell, and so that the hammer may slide diametrically across the bell, as indicated in broken lines in Fig. 3; but, as in the first-mentioned case, the movement of the hammer is at right angles to the axis and is entirely within the bell, the handle being in axial line therewith, so that the height of the bell is very slight when compared with the usual hand-bells.

Again, the hammer may be guided by a tube, as seen in Fig. 4, the tube being the bracket D, which is made fast to the bell diametrically across the bell and at right angles to its axis and the axis of the handle, the tube-like bracket extending nearly to the inner surface of the bell; and in this tube a free hammer, C, is arranged in ball-like shape, so as to readily move through the tube as the bell is swung in the manner before described, the ball or hammer imparting the blow to the bell.

I prefer to attach the bracket centrally to the bell within the bell; but the attachment may be made upon the outside, the bracket D

being still within the bell, but an extension, F, therefrom around the edge of the bell, up and returned to the center, where it is secured to the bell—say with the handle—as seen in Fig.

5 5. In all these cases the same peculiarity exists of the arrangement of the hammer to swing in a plane at right angles to the axis, the handle extending from the bell in the line of its axis.

10 I prefer to apply the handle to the back of the bell, but it may be applied to the open side of the bell, as indicated in broken lines, Fig. 3; but in this case it is still in the axial line of the bell.

15 I claim—

1. The combination of an open-mouth bell, a handle attached to the back of the bell in

axial line therewith, and a hammer supported within the bell, said support extending from the center or axis of the bell, and the hammer 20 arranged to move in a plane at right angles to the axis of the bell, substantially as described.

2. The combination of an open-mouth bell, a handle, B, secured to the back of the bell and extending in an axial line therefrom, a 25 bracket fixed to the axis of said bell and extending radially therefrom, and a hammer hung to the outer end of the said bracket and adapted to swing in a plane at right angles to the plane of the bell, substantially as described.

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Witnesses:

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