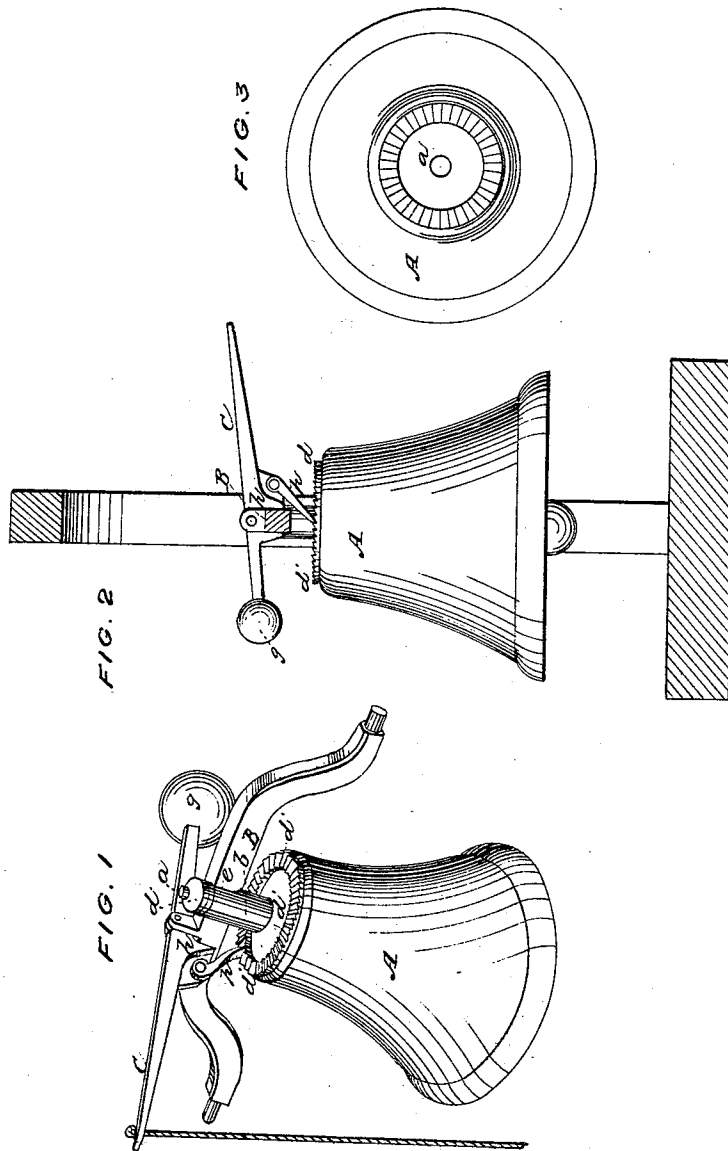


P. L. WEIMER.
 Ringing Bells.

No. 67,006.

Patented July 23, 1867.



WITNESSES:

W. Campbell
Edw. Schaffer

INVENTOR:

P. L. Weimer
by his agent
Mason, Fenwick & Hannum

United States Patent Office.

P. L. WEIMER, OF LEBANON, PENNSYLVANIA, ASSIGNOR TO HIMSELF, J. A. WEIMER, AND L. E. WEIMER, OF THE SAME PLACE.

Letters Patent No. 67,006, dated July 23, 1867.

IMPROVED MEANS FOR RINGING BELLS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, P. L. WEIMER, of Lebanon, in the county of Lebanon, and State of Pennsylvania, have invented a new and improved Mode of Ringing Bells; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, showing the application of my invention to a bell.

Figure 2 is a side elevation of the same.

Figure 3 is a top view of the bell.

Similar letters of reference indicate corresponding parts in the three figures.

The object of this invention is to provide a very simple and efficient means for rotating mounted bells while being rung, so that the hammers shall strike at different points upon the sound-bows or interior surfaces of the bells, thereby preventing injury to the bells by the successive striking of their hammers upon the same points.

The nature of my invention consists in the application to a bell, which is allowed to have a rotary motion about its axis, of a ratchet which is acted upon by a pawl, that is applied to a vibrating loaded lever in such manner that in the act of ringing the bell, by giving it a swinging motion, it shall be rotated intermittently about its axis, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

The bell A which I have represented in the accompanying drawings, may be constructed in the usual well-known manner, and provided with a stud or pin, *a*, projecting from the centre of its crown. This stud passes through a tubular bearing, *b*, formed upon the oscillating yoke B, and receives a washer, *c*, and nut, *d*, upon its upper end, by which means the bell is allowed to rotate about its axis while it vibrates about the axis of motion of said yoke. Upon the crown of the bell A, and concentric to its axis, is a ratchet-wheel, *d'*, the teeth of which are made in its top surface, as shown. This ratchet face may be formed in casting the bell, or the circular elevation in which these teeth are made may be cast with the bell, and the teeth cut in afterward, or if desirable, the ratchet-wheel may be made separate from the bell, and secured to it in any suitable manner. Upon one side of the turning-pin of the bell two lugs are formed on the upper edge of the yoke B, between which is pivoted a lever, C, one end of which is loaded by the ball *g*, and the other has the bell-rope attached to it, as shown in figs. 1 and 2. This lever C is pivoted to its yoke B so as to have a motion independent thereof, and the lug or boss *h*, which is formed on the lower edge of this lever, is designed to afford an abutment for it against the yoke when its long arm is drawn down in the act of ringing the bell. A pawl, *p*, is pivoted to the lug *h* of lever C, so that the engaging end of this pawl will lie upon and engage with the ratchet-teeth upon the crown of the bell, as shown in figs. 1 and 2. The weight *g* upon the shortest arm of lever C will depress this arm when there is no draught upon the bell-rope, and thus move the pawl *p* backward one or more teeth, so that when the bell-rope is pulled the pawl will cause the bell to move a short distance about its axis. By this means the bell will receive intermittent circular movements in the act of ringing it, and the hammer will strike at a different point at each successive stroke.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The application of ratchet-teeth to the crown of a bell which is adapted for being rotated, by a vibrating lever and pawl, while being rung, substantially as described.
2. An independently vibrating lever, C, provided with a weight and a pawl, or their respective equivalents, and applied to an oscillating yoke, B, having a rotating bell suspended from it, substantially as described.

P. L. WEIMER.

Witnesses:

GEO. W. TODD,

JOHN SHINDEL.