W. H. NICHOLS.

Revolving Chime-Bells.

No. 162,682. Patented April 27, 1875.

Fig. 1.

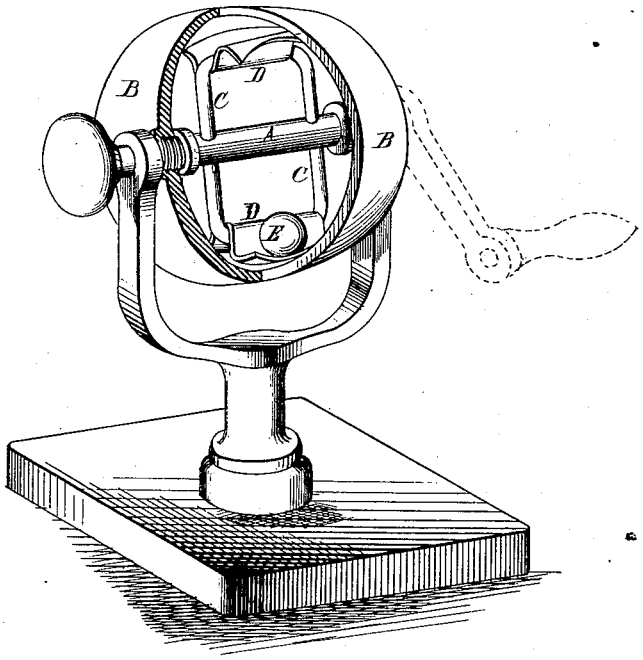
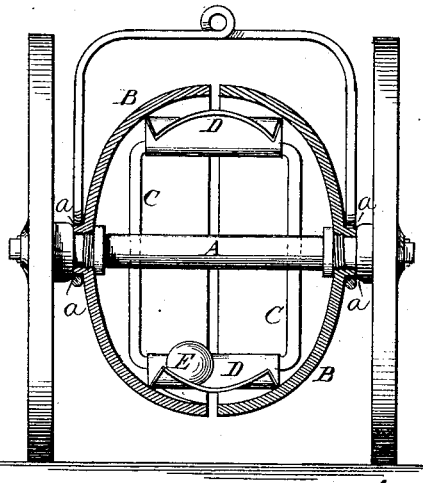


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM H. NICHOLS, OF EAST HAMPTON, CONNECTICUT, ASSIGNOR TO BEVIN BROTHERS MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN REVOLVING CHIME-BELLS.

Specification forming part of Letters Patent No. **162,682**, dated April 27, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. NICHOLS, of East Hampton, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Revolving Chime-Bells, of which the following is a specification:

This invention relates to certain new and useful improvements in that class of bells consisting of two concave shells mounted upon a shaft, with the openings or mouths of the shells facing each other, and rung by a hammer or clapper confined between the two gongs by rotating the bell. In certain instances, as in bells which are rotated only in one direction, it is proposed to use only two cups or seats at the ends of a single arm projecting from the revolving bell-shaft, such cups sufficing to hold the loose ball or clapper away from the shells or gongs immediately after they have been struck. The object of my invention is to provide bells of this description with a hammer or clapper that will be caught and held away from the gongs for an instant after striking, in order to allow a perfect vibration of the gongs, and thus improve their tone; and to this end the shaft upon which the shells or gongs are mounted is provided with one or more radial arms, extending nearly to the periphery of the gongs or shells at opposite sides of the shaft, and carrying one or more cups or seats at their ends, which are adapted to catch and hold the hammer or clapper for an instant at various periods of the rotation of the gongs, the clapper consisting of a loose ball confined between the two gongs.

In the drawings, Figure 1 represents a perspective view of my improved bell, with a portion of the gongs removed, showing the interior of the same; and Fig. 2 is a vertical section thereof.

The letter A represents the shaft, and B B the concave shells or open-mouthed bells fastened thereon, with their concave or open sides facing each other, so as to nearly meet. C C represent radial arms, securely attached to the shaft A between the gongs, and extending nearly to the periphery of the same. To the end of said arms are attached the cups or seats D D, which are adapted to catch and hold the clapper E for an instant at various points during the rotation of the bell. Said clapper consists of a ball of metal, or other suitable material, placed loosely within the shells composing the bell. When the bell is used as a toy, a bail is secured loosely at its forked ends over the projecting ears *a* on the bells B, the shaft A being securely attached at its ends to two wheels, so that the bell may be rotated for sounding the same by simply drawing it along through the medium of the bail. When used as a call or other bell, the shaft upon which the gong or bell is fitted proper may be mounted in standards, or in a suitable supporting-frame, so as to revolve between the same, and in this instance the shaft is provided with milled knobs or handles at the ends, by means of which the bell can be rotated.

It is obvious that the gongs thus arranged may be mounted in various other ways, so as to be rotated and rung, to serve either as a toy, or for various purposes to which bells are adapted. For instance, it may be mounted between standards, and rotated by means of a crank, or pulley and band, the band being attached to any mechanism by means of which it may be made to rotate the shaft and ring the bell.

The operation of the device, when rotated, will be readily understood from the foregoing description. As the bell revolves, the hammer or loose ball is carried upward until it falls by its own weight against one or both of the shells or gongs, after which it is caught up and held by one of the cups or seats until the same is sufficiently elevated to drop it again against the gongs. While thus held away from the gongs or shells, the bell will be left free to vibrate, thus securing a clear and sonorous tone, which would be impossible if the clapper should be left at all times in contact with the gongs, as in similar devices heretofore constructed.

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

1. In combination with a bell constructed to be rotated by wheels or by a suitable

handle, cups or seats located at or near the inner periphery of the same, for catching and holding a loose ball or clapper after the striking operation, substantially as herein described, for the purpose set forth.

2. The combination, with the open-mouthed gongs or shells B B, constructed to be rotated by wheels or by a suitable handle, of the revolving shaft or axis A, the arms C projecting from the same, and the clapper or ball-retaining seats or cups at the ends of said arms, substantially as herein described.

WILLIAM H. NICHOLS.

Witnesses:

NATHL. C. SMITH,

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