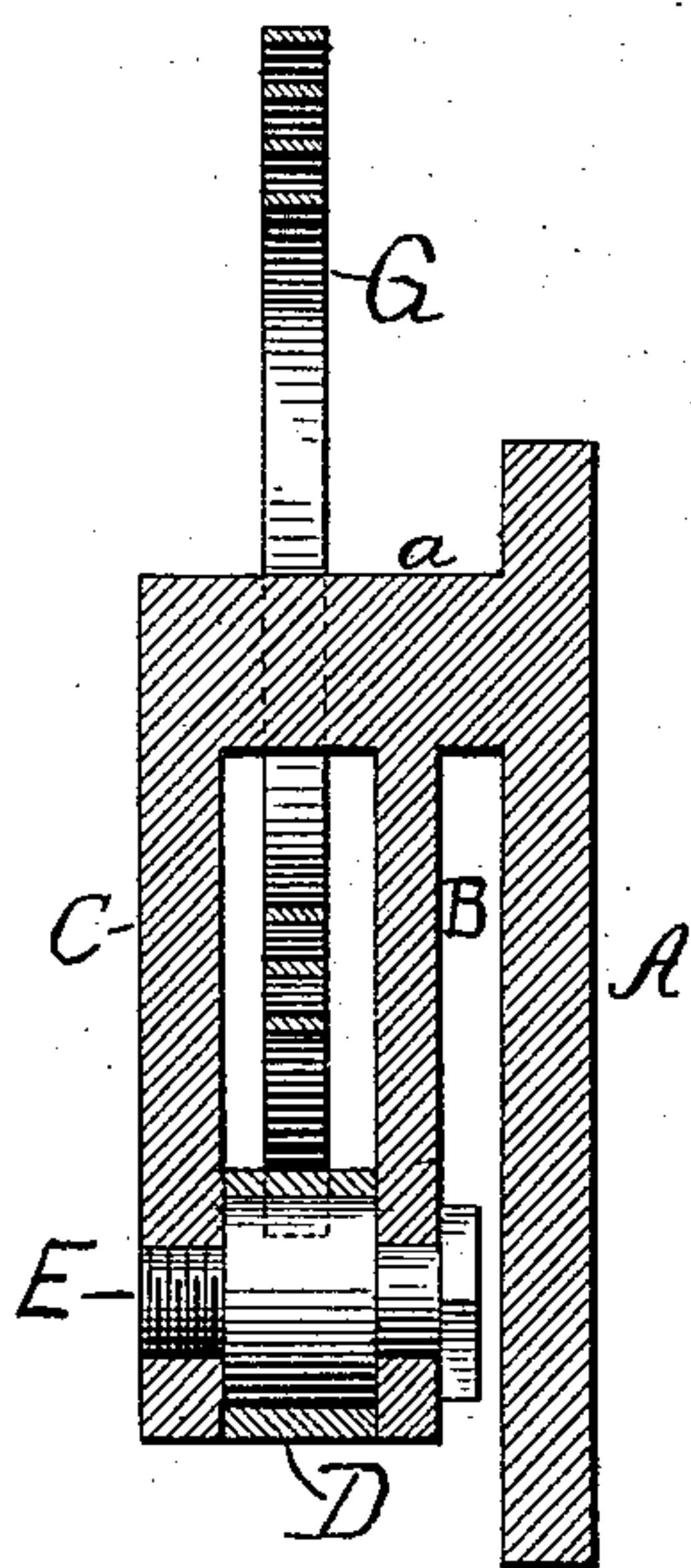
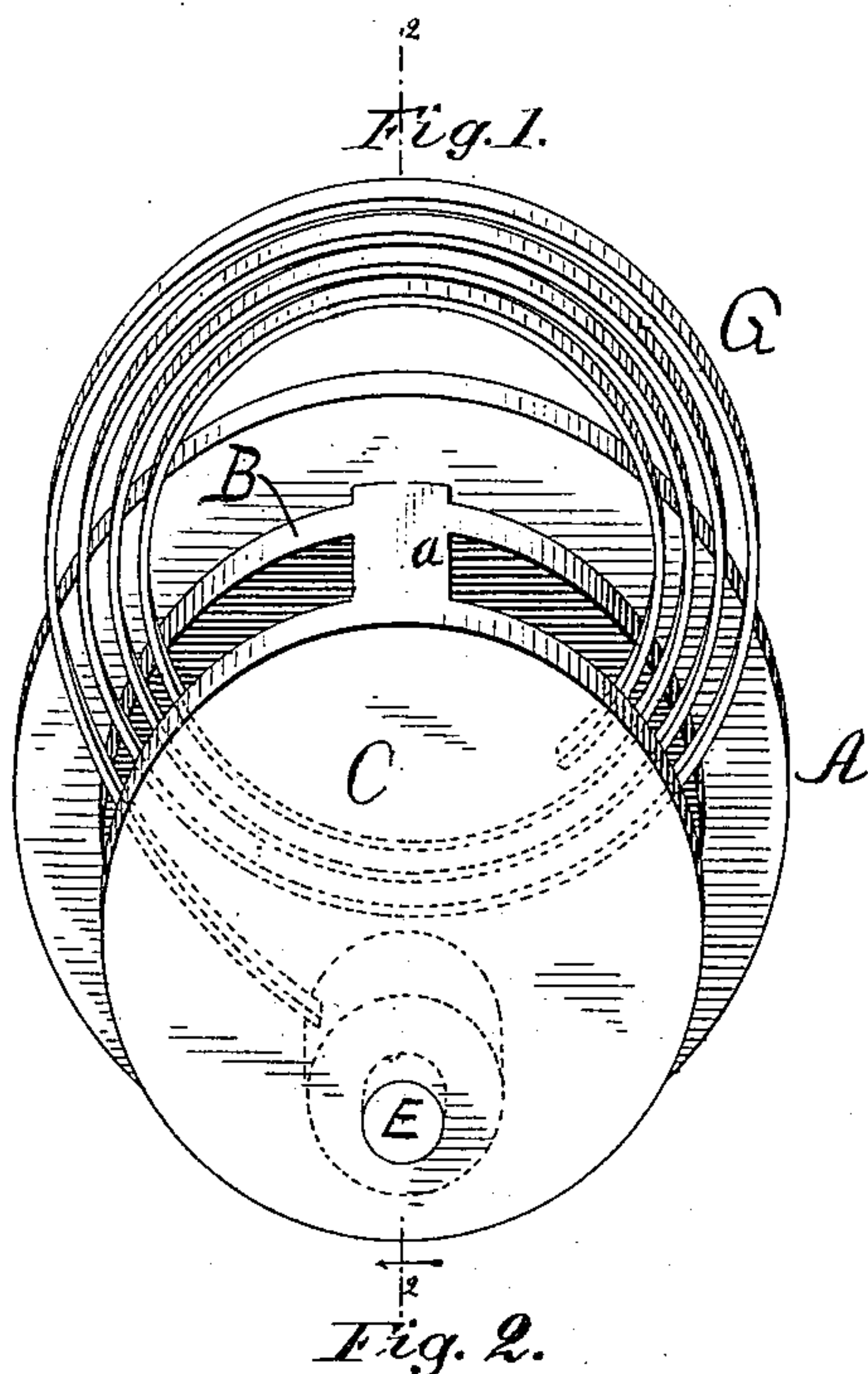


(No Model.)

G. GARDNER.
CLOCK GONG AND BELL.

No. 334,012.

Patented Jan. 12, 1886.



WITNESSES:

Ernest Abshagen
H. M. Suplee

INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

GEORGE GARDNER, OF WINSTED, CONNECTICUT.

CLOCK GONG AND BELL.

SPECIFICATION forming part of Letters Patent No. 334,012, dated January 12, 1886.

Application filed October 9, 1884. Renewed December 5, 1885. Serial No. 184,804. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GARDNER, a citizen of the United States, residing at Winsted, in the county of Litchfield and State of Connecticut, have invented new and useful Improvements in Clock Gongs and Bells, of which the following is a specification.

My invention relates to a gong or bell for clocks, upon which the hours may be indicated or alarms may be struck by means of a hammer in the usual or any desired manner.

My invention consists in a novel construction of a series of sounding-plates and the coiled spring, gong, or bell, and the combination and arrangement thereof with relation to each other, whereby the vibrations are increased and multiplied and rendered more distinct than heretofore, and the sound is intensified and improved, as hereinafter more particularly described.

In the accompanying drawings, Figure 1 represents a perspective view of the invention; and Fig. 2, a central vertical section of the same, taken on line 2 2, Fig. 1.

A represents a plate, preferably metallic and circular in shape, having connected with it, by a post, *a*, near its upper edge and in front of it, two smaller plates, B and C, which I also prefer to construct of metal and of circular shape. The plate A, post *a*, and the plates B and C may be formed in one piece, or may be constructed separately and fastened together in any well-known manner.

At a point about diametrically opposite the post *a*, or near their lower edges, the plates B and C are connected to each other by a bolt, E, passing through a washer or roller, D. To this washer or roller is secured the lower end of a steel spring, G, which is formed into a coil, which I prefer to construct extending upward above the upper edges of the plates, with the post *a* inside of the coil. The coil thus formed constitutes the gong. In operation, after the parts are assembled, the plate A is attached to the back of the clock on the inside of the case by screws passed through the plate A and into the clock-back in proper position relative to the striking mechanism of

the clock, which is constructed in any usual or preferred manner.

As the hammer strikes the coil G the vibrations are conveyed to the plates B and C, which vibrate in unison therewith, and thence they are conveyed by means of post *a* to the plate A, which acts as a sounding-board, and the vibrations are thus multiplied, and the volume of sound is increased and rendered more sonorous and musical. As the post *a* conveys the sound very rapidly to the plate A, I have found in practice that no matter how rapidly the hammer may strike the gong there is no running together of the sound, but each vibration is separate and distinct. The best results are attained when the striking part of the hammer is made of leather.

When constructed as hereinbefore described, my sounding device is very powerful, while at the same time the sound is very sweet, soft, and prolonged.

A bell may be used in place of the gong with satisfactory results. I prefer, however, to use the gong, as hereinbefore described.

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

1. An attachment for a clock gong or bell, consisting of a series of parallel disks or plates connected together by a transverse post or bar, connecting the series so as to hold them relatively secured together with small spaces between them, and two of the said sounding plates or disks further attached together by an intervening bolt or pin, to which is attached the sounding device, substantially as shown and described.

2. The combination of the plate A, post *a*, plates B C and gong G, and means for securing the same in place, substantially as shown and described.

In witness whereof I have hereunto set my hand this 12th day of July, 1884.

GEORGE GARDNER.

In presence of—

NORMAN W. SHOUS,
SARA A. BEERS.