

(No Model.)

H. W. BARNES.

CLOCK BELL.

No. 312,792.

Patented Feb. 24, 1885.

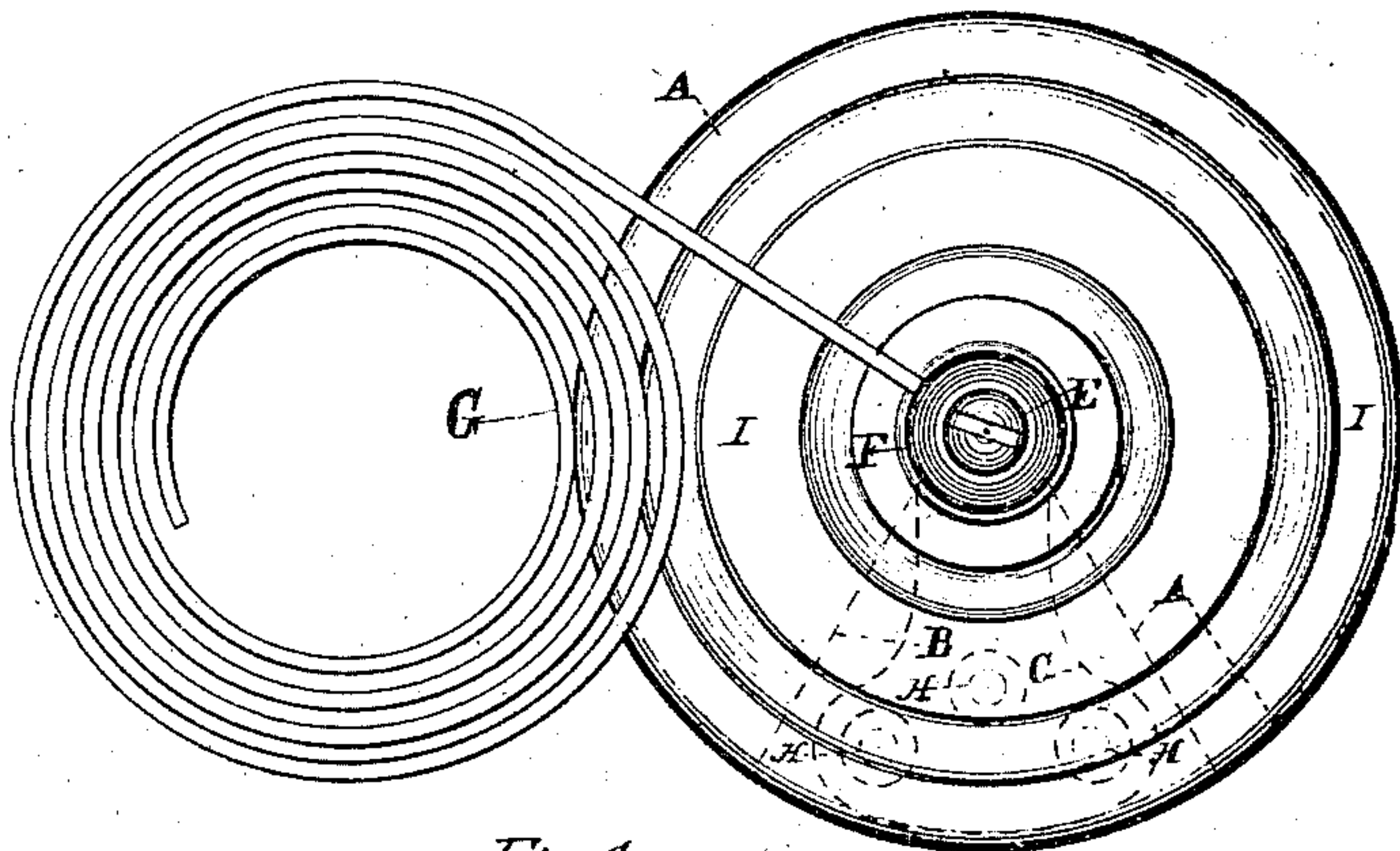


Fig. 1.

Fig. 2.

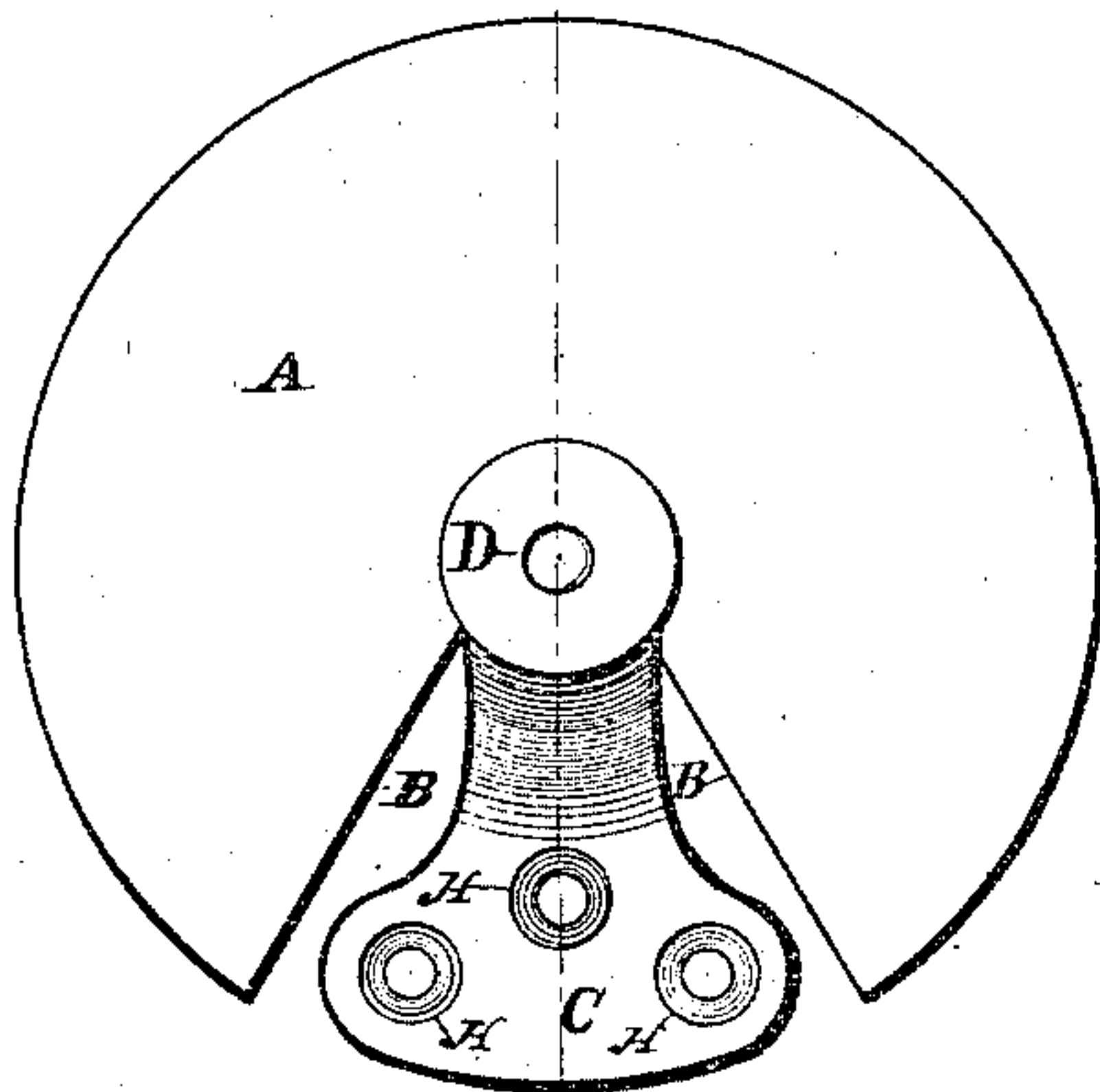
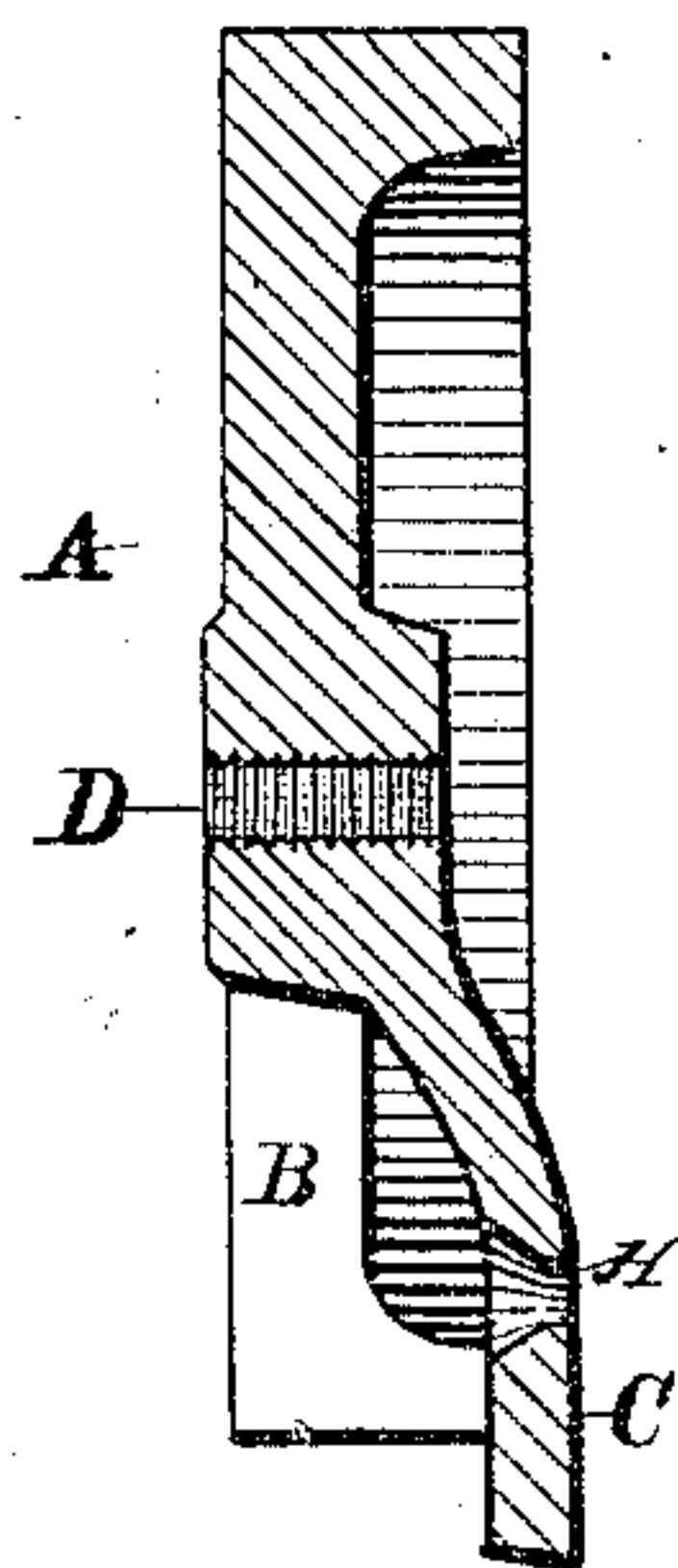


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HARRY W. BARNES, OF BRISTOL, CONNECTICUT.

## CLOCK-BELL.

SPECIFICATION forming part of Letters Patent No. 312,792, dated February 24, 1885.

Application filed October 23, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY W. BARNES, residing at Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Cathedral Gong Clock-Bells; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in cathedral gong clock-bells, the object being to produce a compact and ornamental bell of superior tone at a low cost for manufacture.

With these ends in view my invention consists in a gong-bell having its sounder and standard cast in one piece and the latter located within an opening made by breaking the outline of the former.

My invention further consists in a gong-bell having its sounder and standard cast in one piece, and the latter located within an opening made by breaking the outline of the former and joining the sounder at or near its center.

My invention further consists in a gong-bell having its sounder and standard cast in one piece, the former being circular in general contour and having a sector-shaped opening, and the latter being located within such opening.

My invention further consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of one form which my invention may assume. Fig. 2 is a similar detached view of the sounder and standard, and Fig. 3 is a sectional view thereof taken longitudinally through the latter.

As herein shown, the sounder A is circular in general contour, with a sector-shaped opening, B, in which the standard C is located, which standard is cast in one piece with the sounder, and joins the same at or near its center. The sounder is centrally perforated, as at D, to receive the screw E, which passes through the collet F of the coil G and secures it in place, and the standard is provided with

perforations H, for its attachment to the back of the clock, from which it clears the sounder by being offset therefrom, as shown in Fig. 3 of the drawings. An ornamental scalp, I, interposed between the collet and the sounder, fits over the latter and conceals it and also the standard, and thus in itself forms a complete finish for the bell.

By compacting the sounder and standard and casting them in one piece, as above described, the production of the completed article is not only made less expensive, but a desirable economy of space within the clock is effected, and the joining of the standard to the sounder at or near the center thereof results in improving the tone of the bell, for the reason that the vibrations of the coil are transmitted almost directly to the standard, the induced vibrations in which latter determine to a great extent the quality of the sound.

It is apparent that the form of the sounder and standard may be varied and still preserve the characteristic feature of locating the latter within an opening formed by breaking the outline of the former. I would therefore have it understood that I do not limit myself to the exact form and construction herein shown and described, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. A gong-bell for clocks, having its sounder and standard cast in one piece, and the latter located within an opening formed by breaking the outline of the former, substantially as set forth.

2. A gong-bell for clocks, having its sounder and standard cast in one piece, and the latter located within an opening formed by breaking the outline of the former, and joining the same at its center, substantially as set forth.

3. A gong-bell for clocks, having its sounder and standard cast in one piece, the former being circular in general contour and having a sector-shaped opening, and the latter being located within such opening, substantially as set forth.

4. A gong-bell for clocks, having its sounder

and standard cast in one piece, the former  
being circular in general contour and having a  
sector-shaped opening in which the latter is  
located, and a scalp fitting over the sounder  
5 and concealing it and the standard, substan-  
tially as set forth.

In testimony whereof I have signed this

specification in the presence of two subscri-  
ing witnesses.

HARRY W. BARNES.

Witnesses:

DELLA N. BARNES,  
M. S. SEELEY.