(No Model.)

A. C. SANFORD.

CLOCK BELL.

No. 439,193. Patented Oct. 28, 1890.

Fig. 1.

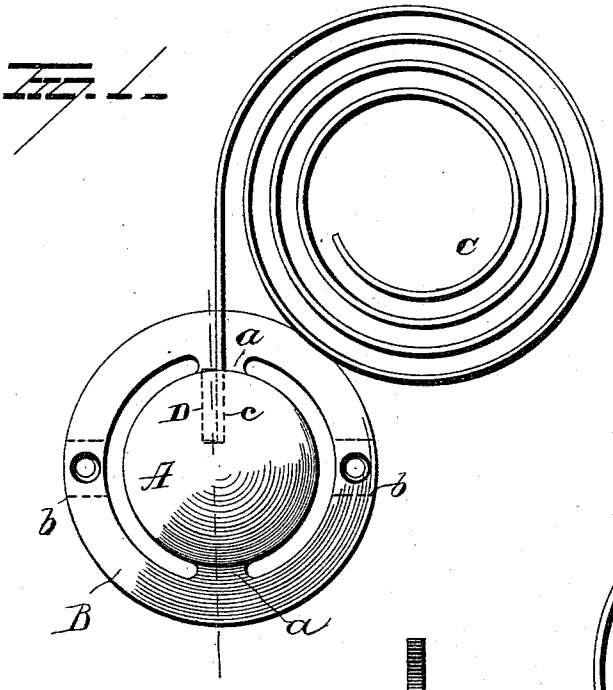


Fig. 3.

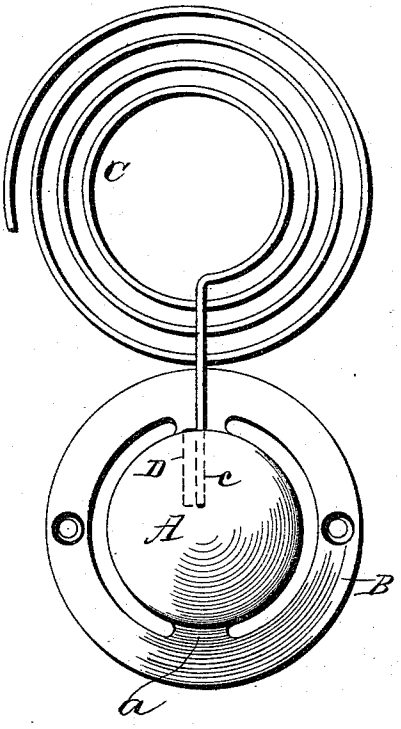
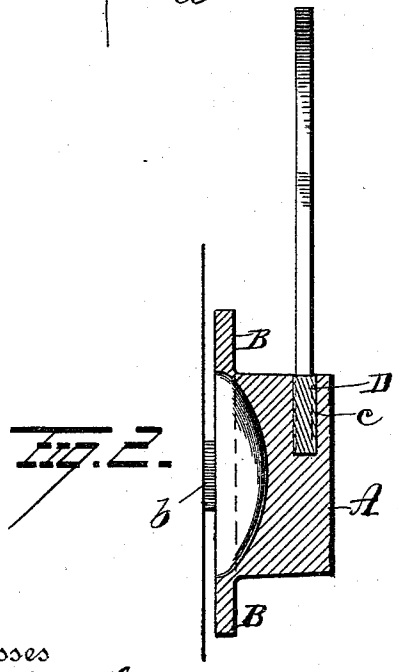


Fig. 2.



Witnesses
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G. F. Downing

Inventor
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By his Attorney
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AARON C. SANFORD, OF THOMASTON, CONNECTICUT, ASSIGNOR OF TWO-THIRDS TO GEORGE W. SANFORD AND THOMAS A. GATSEL, OF SAME PLACE.

CLOCK-BELL.

SPECIFICATION forming part of Letters Patent No. 439,193, dated October 28, 1890.

Application filed April 3, 1890. Serial No. 346,417. (No model.)

To all whom it may concern:

Be it known that I, AARON C. SANFORD, of Thomaston, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Clock-Bells; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in clock-bells, the object of the same being to provide means whereby the bell-wire is rigidly secured in the bell-stand without the use of solder, thereby lessening the cost of manufacture and improving the tone of the bell.

With this end in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation showing my improvement in dotted lines. Fig. 2 is a view of the same in section, and Fig. 3 is a modification.

A represents a bell-stand made of cast metal, which is centrally supported within a ring B, by means of arms *a a* diametrically opposite each other, the said ring and arms forming an integral part of the bell-stand. The ring B is provided on its rear face, preferably at points midway between the arms *a a*, with shoulders *b b*, which may be cast with the ring B or brazed thereon, and is also provided with screw-holes, which latter pass through shoulders *b b*. Thus it will be seen that when the ring is attached to the back of a clock-case the greater portion of the bell-stand is supported at a distance from and perfectly free of the clock-back.

C is the wire coil of the bell, and may be of any size or shape in cross-section, according to the character of the sound desired to be produced. The outer end of the bell-wire is straightened and inserted in a hole *c*, drilled or cast in the bell-stand, and is secured therein by a metal pin or key D, which is driven into the hole *c* and serves to tightly wedge the end of the bell-wire against displacement. To admit of securing the bell-wire in this manner, the hole *c* is made sufficiently larger than the diameter of the bell-wire to allow a stiff metal pin to be driven in and wedge the bell-wire in place. This method of securing a bell-wire to a stand is much simpler and cheaper than the ordinary method of soldering the bell-wire to the stand, and, further, the completed bell gives a much clearer and better sound when the bell-wire is secured to the stand by a hard-metal wedge or pin than when the fastening is made of softer metal.

In the modified form of my invention, as represented in Fig. 3, the outer end of the wire coil is free, while the inner end thereof is bent laterally from the body of the wire coil and secured at its free extremity to the bell-stand by means of a pin or key, as above described.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

1. A clock-bell consisting of a stand having a hole of considerable depth formed therein, a bell-wire having one end inserted the full depth of the hole, so that an extended bearing is formed therein for it, and a pin or wedge composed of hard material and adapted to fill the space in the hole unoccupied by the spring, whereby the entire portion of the latter within the hole is held firmly against the wall of the latter, to the end that a better tone is possible, substantially as set forth.

2. The combination, with a metal stand, a ring, and arms at points diametrically opposite each other connecting the post and ring, of

a bell-wire having one end inserted in a hole in a side of the stand directly over one of the arms, and a pin or wedge inserted in the hole and adapted to hold the bell-wire firmly against the wall of the hole, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

AARON C. SANFORD.

Witnesses:
GEORGE H. STOUGHTON,
HENRY E. STOUGHTON.