

(No Model.)

F. B. WOOD.
ELECTRIC BELL.

No. 359,309.

Patented Mar. 15, 1887.

FIG 1

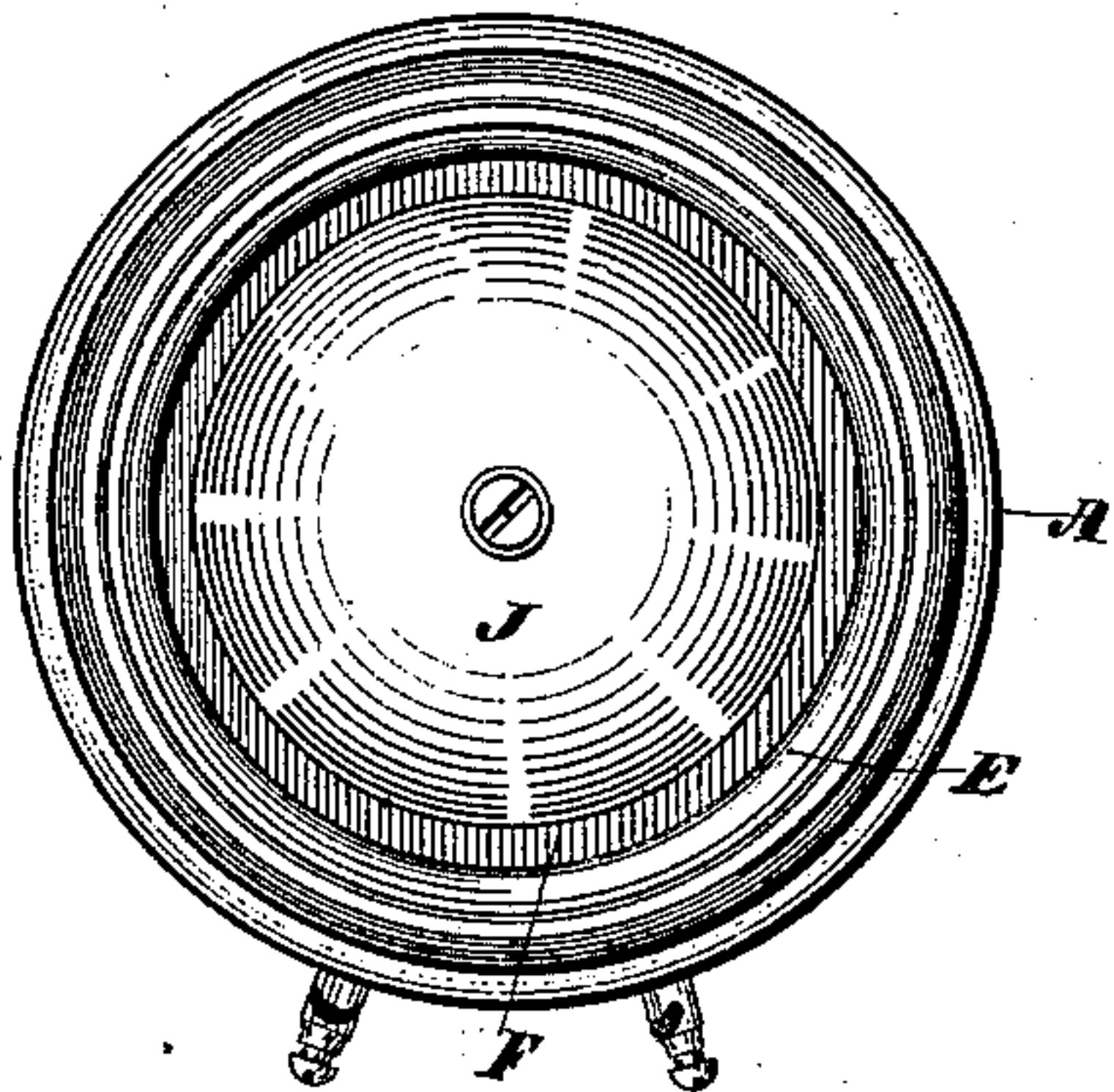


FIG 2

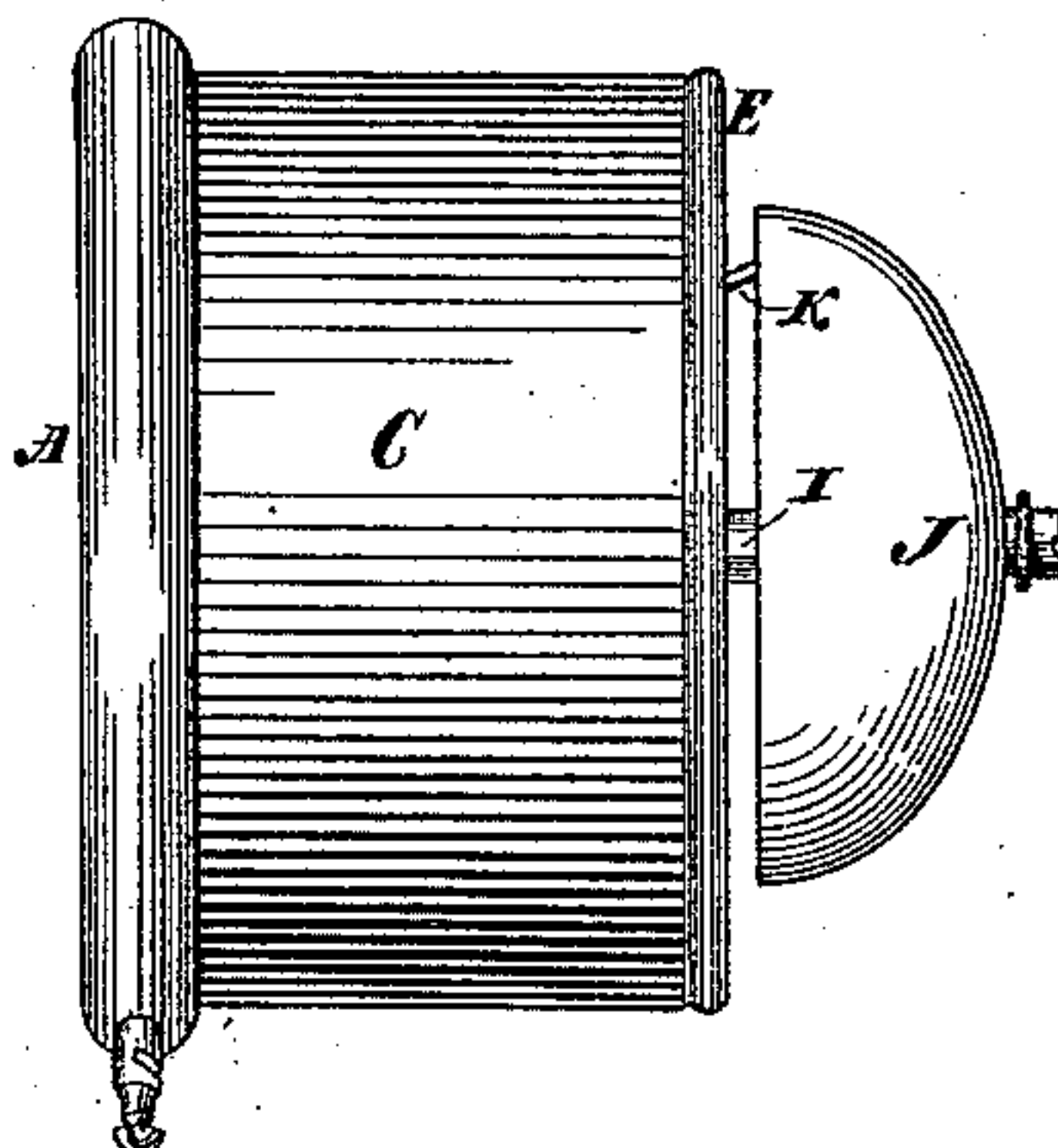
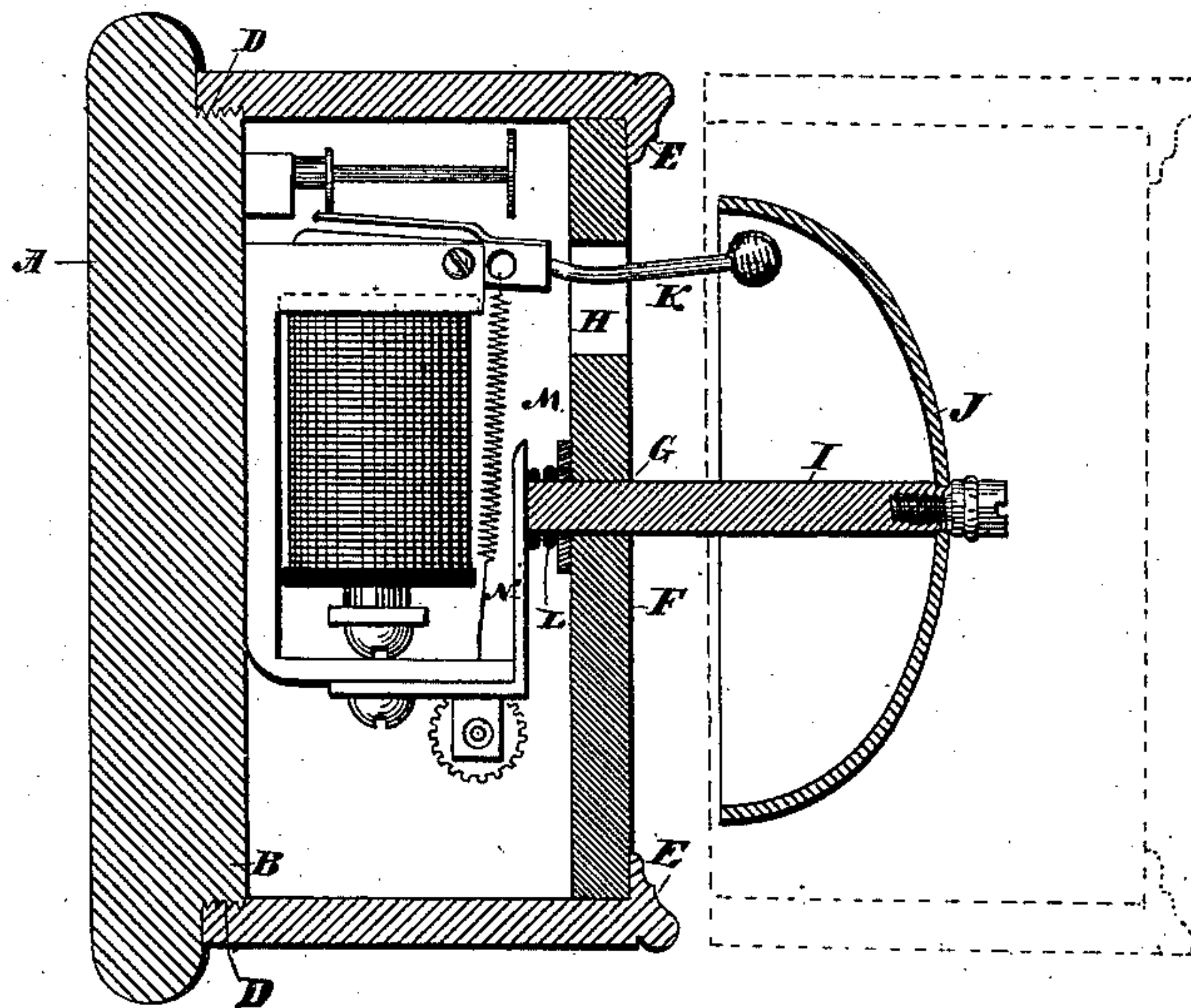


FIG 3



WITNESSES:

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ELECTRIC BELL.

SPECIFICATION forming part of Letters Patent No. 359,309, dated March 15, 1887.

Application filed April 29, 1886. Serial No. 200,531. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. WOOD, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Electric 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 electric bells, and more particularly to casings for the same, the object being to provide for electric bells a casing which shall be dust-proof, adapted for access to the mechanism of the instrument without disturbing the bell thereof, and simple, compact, and ornamental.

With these ends in view my invention consists in the combination, with a mechanism and a bell located in front of the same, of a frame constructed to be removed and replaced without disturbing the bell.

My invention further consists in the combination, with a mechanism and a bell located in front of the same, of a frame constructed to be removed and replaced without disturbing the bell, and a dust-guard located between the bell and mechanism.

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 view in front elevation of a bell embodying my invention. Fig. 2 is a side view thereof; and Fig. 3 is a view showing the casing and the bell in vertical transverse section, and the mechanism in side elevation, and also showing, by broken lines, the frame as removed over the bell.

As herein shown, the casing consists of a base, A, adapted to be secured to a wall, desk, or other object, and provided upon its outer face with a circular screw-threaded shoulder, B; of an annular frame, C, open at both ends, and provided at its inner end and upon its inner face with screw-threads D, adapting it to be screwed upon the shoulder B aforesaid, and at its outer end with an inwardly-projecting lip, E, and of a circular dust-guard, F, adapted to fit within the frame C, and provided with a central aperture, G, and with an elongated

opening, H, as shown. The said dust-guard is mounted through its central aperture, G, upon a spindle, I, located centrally to the frame C, and projecting forward and beyond the same and the guard, and carrying the bell J, the hammer K of which extends through and vibrates in the opening H of the guard, which is located between the bell and the mechanism of the instrument, the bell and the frame being proportioned so that the frame will pass freely over the bell, which, by virtue of making the frame open at both ends, is exposed. A spiral spring, L, encircling the spindle and interposed between a washer, M, located behind the guard, and the plate N, supporting the spindle, serves to pass the guard forward and hold it firmly against the lip of the frame, and so secure and maintain a perfectly dust-proof connection between them.

The mechanism of the bell may be of any approved construction. When it is desired to gain access to it for purposes of adjustment or repair, the frame is unscrewed and removed over the bell without disturbing the same or the dust-guard. After the instrument has had attention, the frame is passed over the bell without any disturbance of the adjustments just effected and screwed onto the base of the casing, its lip being pressed against the outer edge of the dust-guard to form a dust-tight connection between them.

The adaptation of the casing for access to the mechanism of the instrument without removing the bell or disturbing the adjustment of the mechanism is of obvious convenience and advantage, as is also the protection secured by the dust-guard. Moreover, the exposure of the bell increases its effect and improves the appearance of the device. Furthermore, a casing constructed in accordance with my invention is very simple, compact, and ornamental.

I would have it understood that I do not limit myself to the exact construction and arrangement of parts herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention; neither do I in this application claim the mechanism shown, but reserve the right to do so in another pending application.

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

1. In an electric bell, the combination, with
5 a mechanism and a bell located in front of the same, of a frame to inclose the mechanism and adapted to be removed and replaced without disturbing the bell, substantially as set forth.
- 10 2. In an electric bell, the combination, with a mechanism and a bell located in front of the same, of a frame to inclose the mechanism and made open at both ends, substantially as set forth.
- 15 3. In an electric bell, the combination, with a mechanism and a bell located in front of the same, and mounted upon an outwardly-extending spindle, of a frame to inclose the mechanism, and adapted to be removed and re-
20 placed without disturbing the bell, substantially as set forth.
4. In an electric bell, the combination, with a mechanism and bell, of a frame constructed to surround the mechanism and to be removed
25 and replaced without disturbing the bell, and a dust-guard located between the bell and mechanism, substantially as set forth.
5. In an electric bell, the combination, with a mechanism and bell, of a frame constructed
30 to surround the mechanism and open at both ends and passing freely over the bell, and a dust-guard interposed between the mechanism and bell and having dust-proof connection with the frame, substantially as set forth.
- 35 6. In an electric bell, the combination, with

a mechanism and bell, of a frame constructed to surround the mechanism to be removed and replaced without disturbing the bell, and provided at its outer end with an inwardly-projecting lip, and a dust-guard interposed be- 40
tween the bell and mechanism and engaging with the lip of the frame, substantially as set forth.

7. In an electric call-bell, the combination, with a mechanism and bell, of a casing con- 45
sisting of a base having a circular shoulder upon its outer face, an annular frame adapted to surround the mechanism to pass freely over the bell, and to have its open inner end se-
cured to the shoulder of the base, and a 50
dust-guard interposed between the bell and mechanism, and having dust-proof connection with the frame, substantially as set forth.

8. In an electric bell, the combination, with a mechanism and bell, of a frame constructed 55
to surround the mechanism and to be removed and replaced without disturbing the bell, a dust-guard interposed between the mechanism and bell and mounted upon the spindle carrying the latter and having dust-proof con- 60
nection with the frame, and a spring for pressing the guard against the frame, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 65
ing witnesses.

FRANK B. WOOD.

Witnesses:

J. GILLET NOYES,
JAMES F. DOYLE.