

(No Model.)

W. H. DEANE.
ELECTRIC ALARM FOR CLOCKS.

No. 435,213.

Patented Aug. 26, 1890.

Fig. 1.

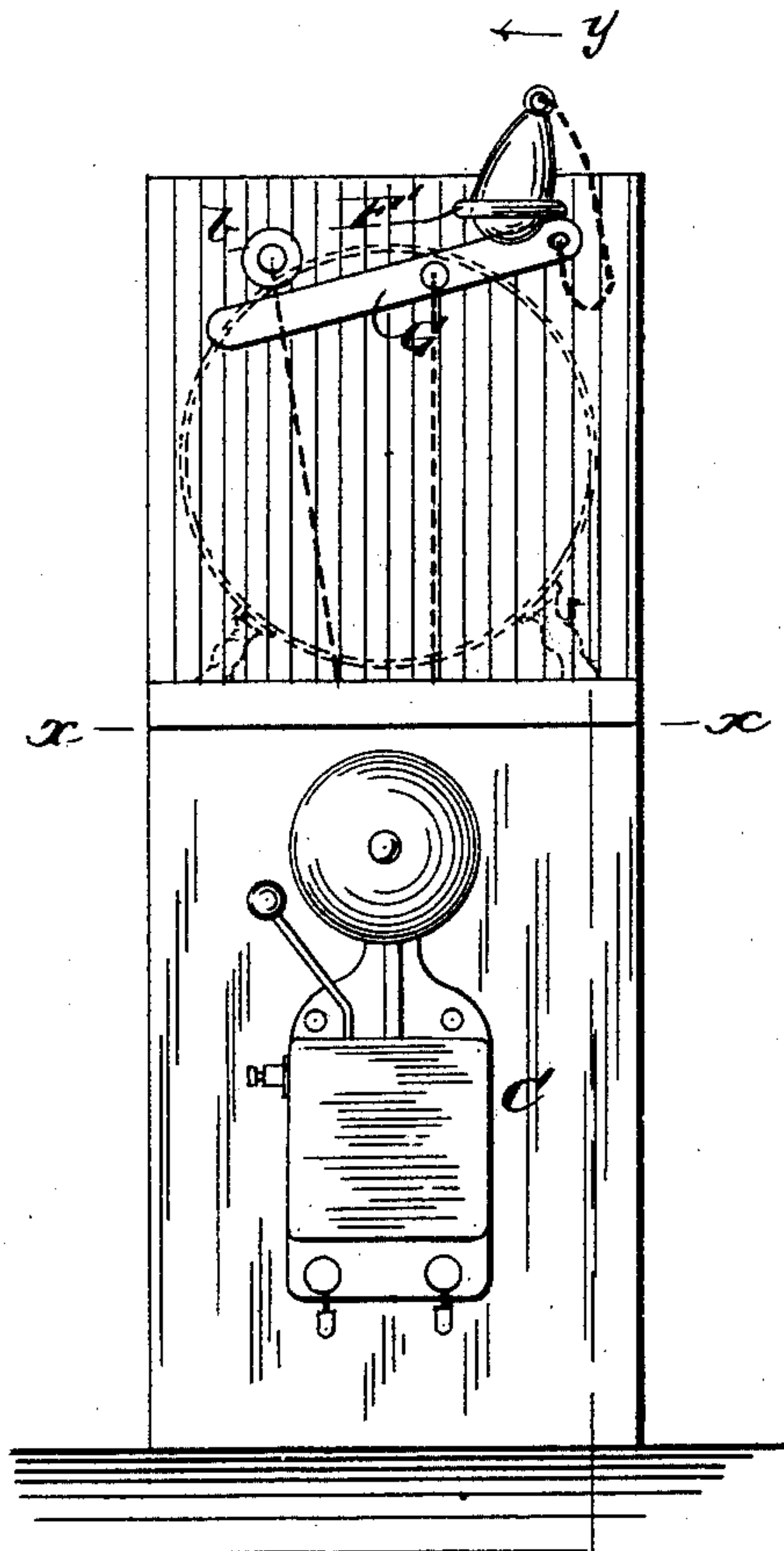


Fig. 2.

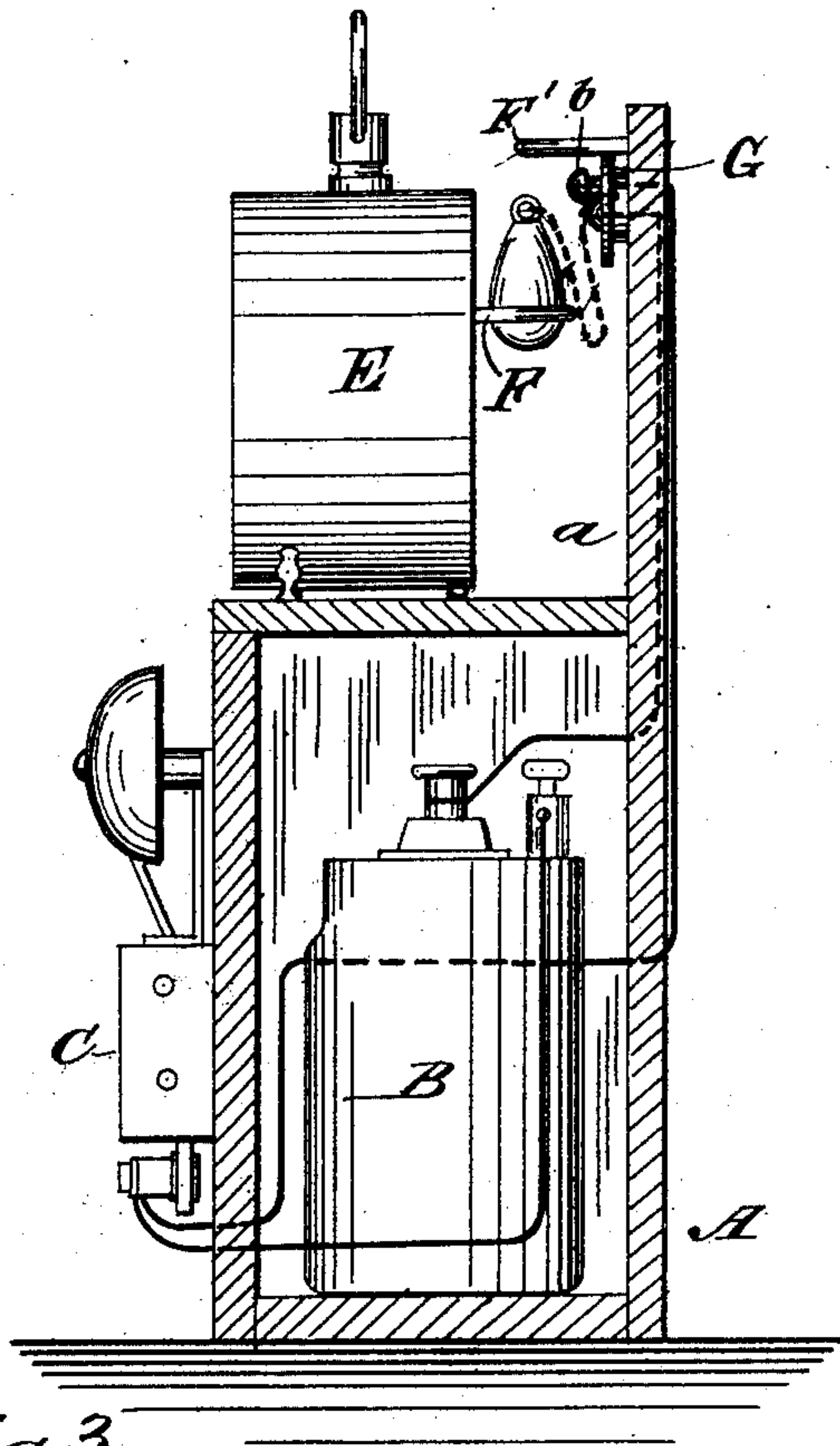
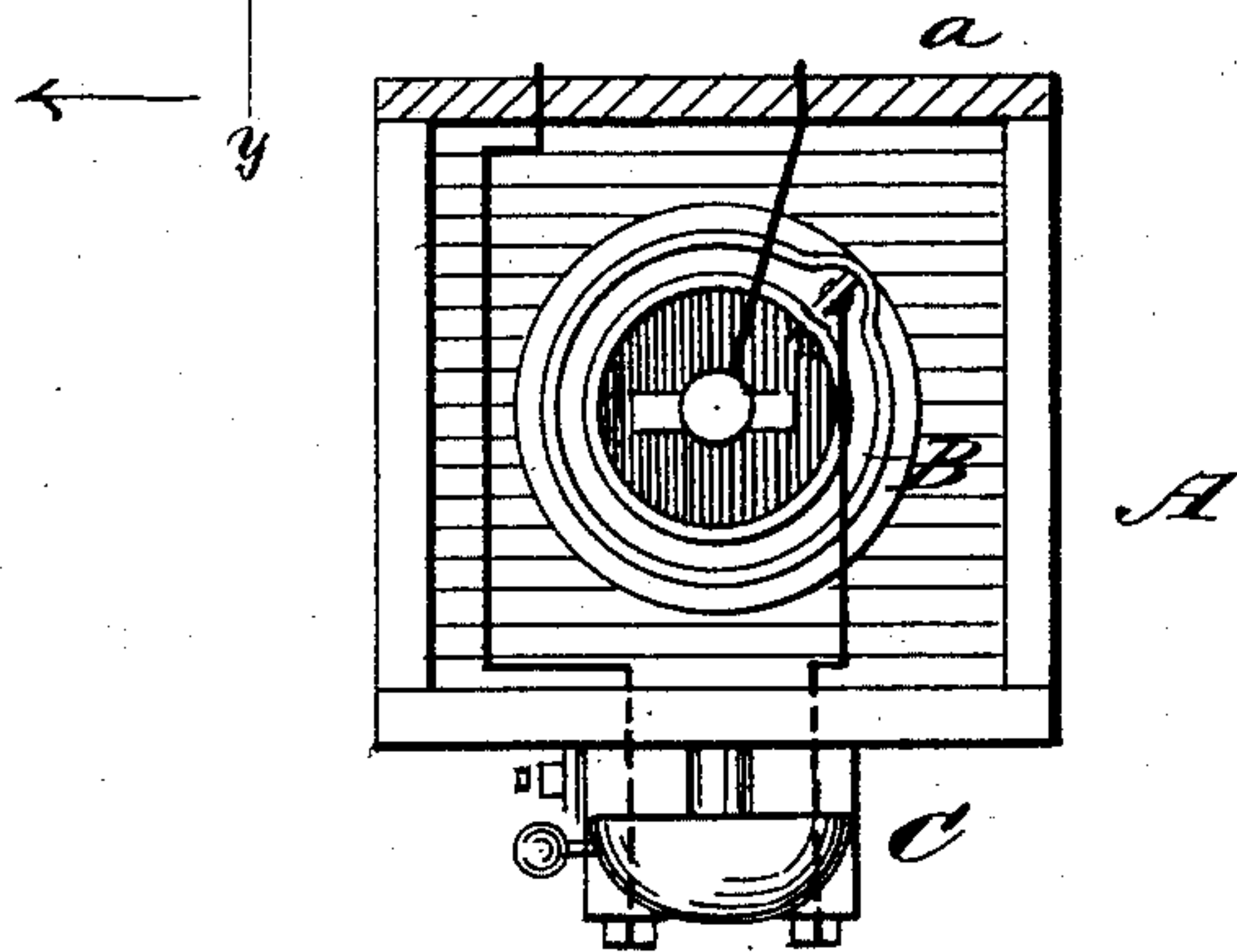


Fig. 3.



WITNESSES:

H. M. Apple.
C. Sedgwick.

INVENTOR:

W. H. Deane
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM H. DEANE, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF
AND J. J. MAHON, OF SAME PLACE.

ELECTRIC ALARM FOR CLOCKS.

SPECIFICATION forming part of Letters Patent No. 435,213, dated August 26, 1890.

Application filed January 30, 1890. Serial No. 338,604. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DEANE, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Electric Alarm for Clocks, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a rear elevation of my improved electric alarm for clocks. Fig. 2 is a vertical transverse section taken on line *y y* in Fig. 1, and Fig. 3 is a horizontal section taken on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to provide a simple and effective device for attachment to clocks for giving an alarm at a predetermined time.

My invention consists in the combination, with the hour-hand arbor of the clock or of some other rotating part—such as the winding-arbor of the alarm mechanism—of a ring or apertured key adapted to receive a weight, a circuit-closing lever connected with the weight by a chain, a battery and electric bell, and the electrical connections, all as will be hereinafter more fully described.

The box A, which contains the battery B, is provided with a back *a*, which is extended above the top of the body of the box. To the front of the box is attached an electric bell C, which is of the usual construction. The clock E rests upon the box A and is provided with a ring F, which may serve as a winding-key to the alarm mechanism, or it may be attached to some other moving portion of the clock.

In the extension *a* is inserted a contact-stud *b*, and to the extension is pivoted a lever G, the longer arm of which extends under the contact-stud *b*, and the shorter arm extends under the ring F. In the ring F is loosely placed a weight H, which is connected with the shorter arm of the lever G by a chain *c*. The pivot of the lever G is connected with one pole of the battery B. The other pole of the battery is connected with one binding-post of the bell C, and the remaining binding-post is connected with the contact-stud *b*.

When the clock in its operation turns the ring F so as to release the weight H, the said weight drops and brings the longer arm of the lever G into contact with the stud *b*, thus closing the circuit and causing the electric bell to sound until the weight H is replaced in the ring or in the supporting-ring F', projecting from the extension *a*.

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

1. In an electric alarm for clocks, the combination of a weight adapted to be released by a clock, electric-circuit-closing mechanism operated by the weight, and a battery and alarm device, substantially as specified.

2. The combination of the battery B, the box A, the electric bell C, the clock E, provided with the ring F, the lever G, the weight H, the contact-stud *b*, and the electrical connections, substantially as specified.

WILLIAM H. DEANE.

Witnesses:

GEO. M. HOPKINS,
C. SEDGWICK.