

No. 822,715.

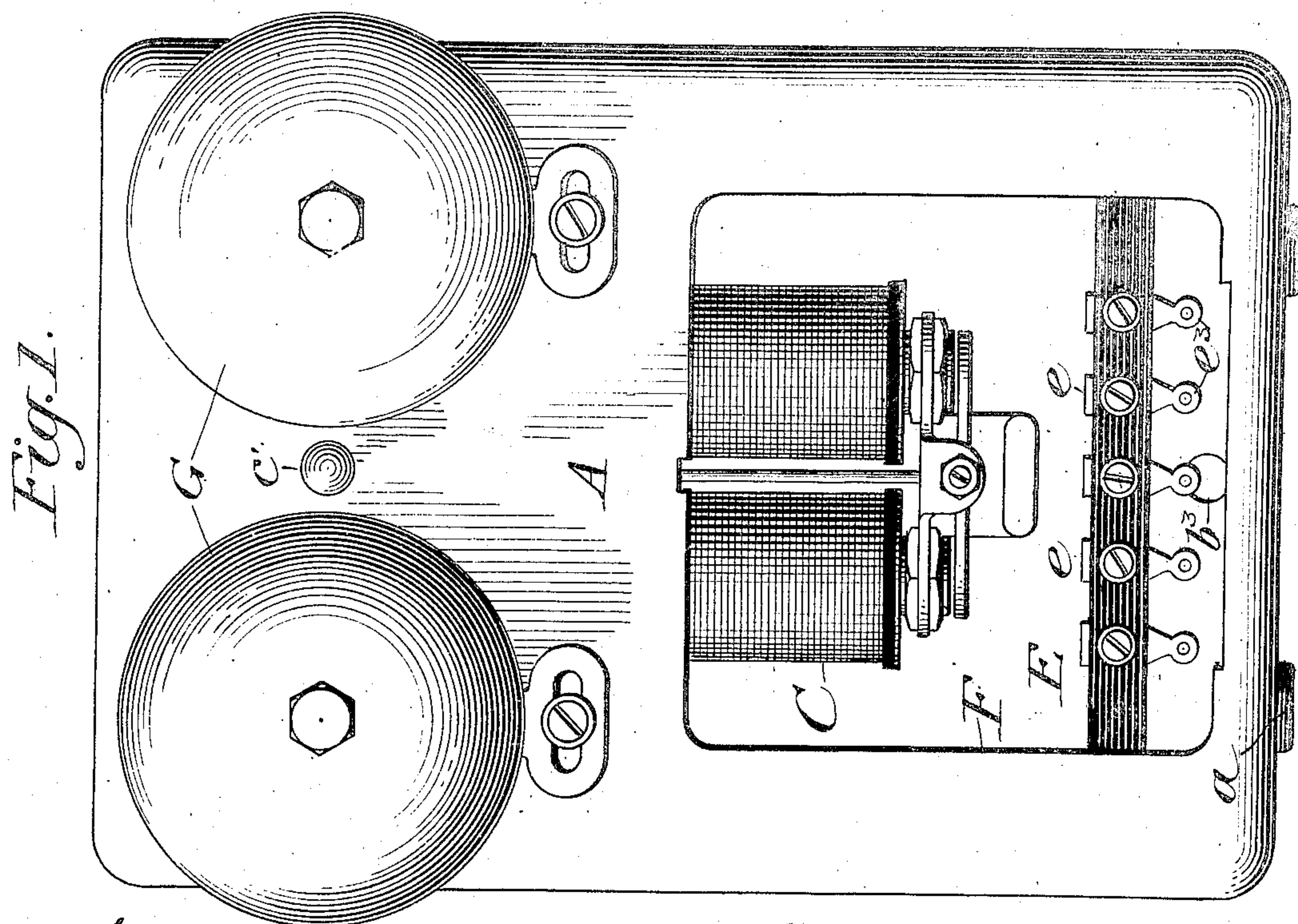
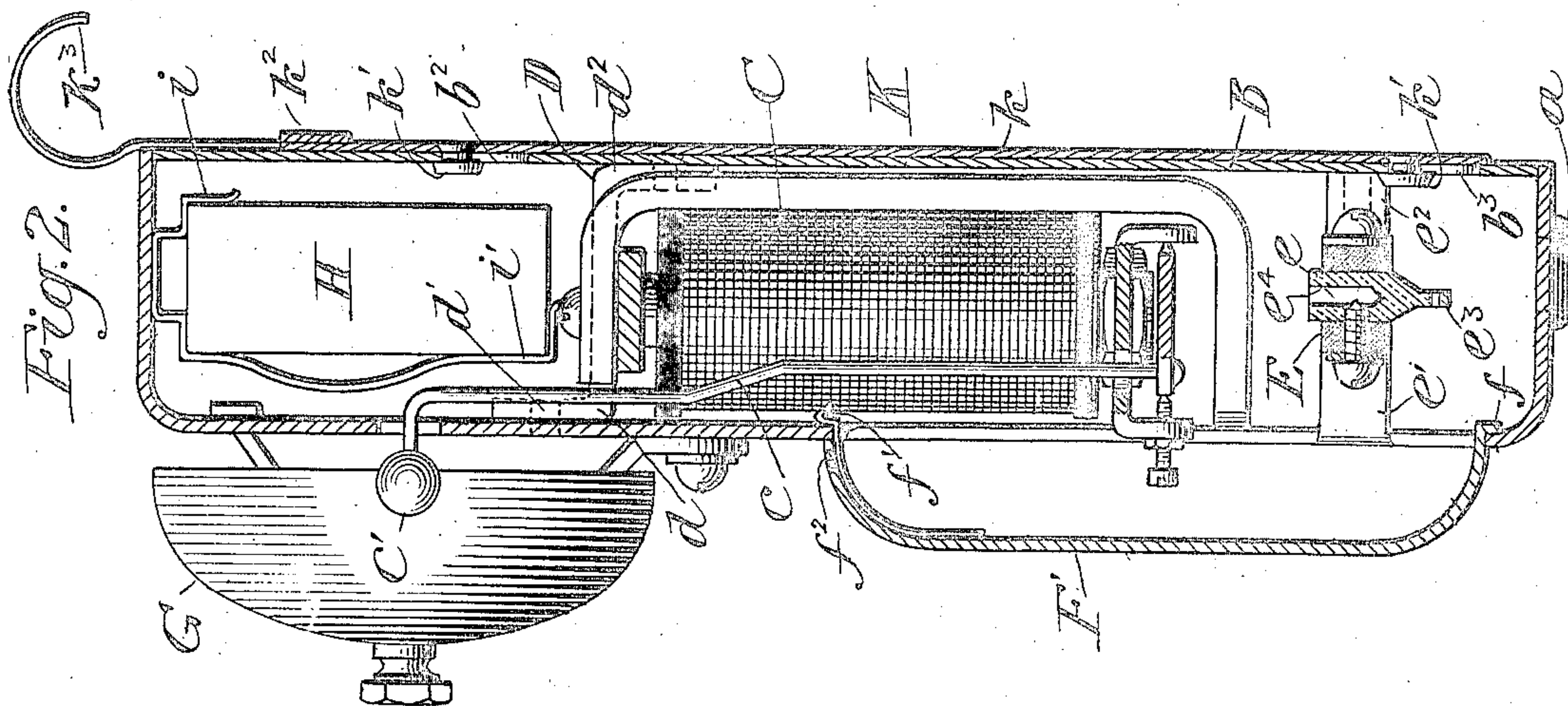
PATENTED JUNE 5, 1906.

S. A. BEYLAND.

BELL BOX.

APPLICATION FILED MAY 17, 1904.

2 SHEETS—SHEET 1.



Witnesses:
O. W. Edlin.
James H. Marr.

Inventor:
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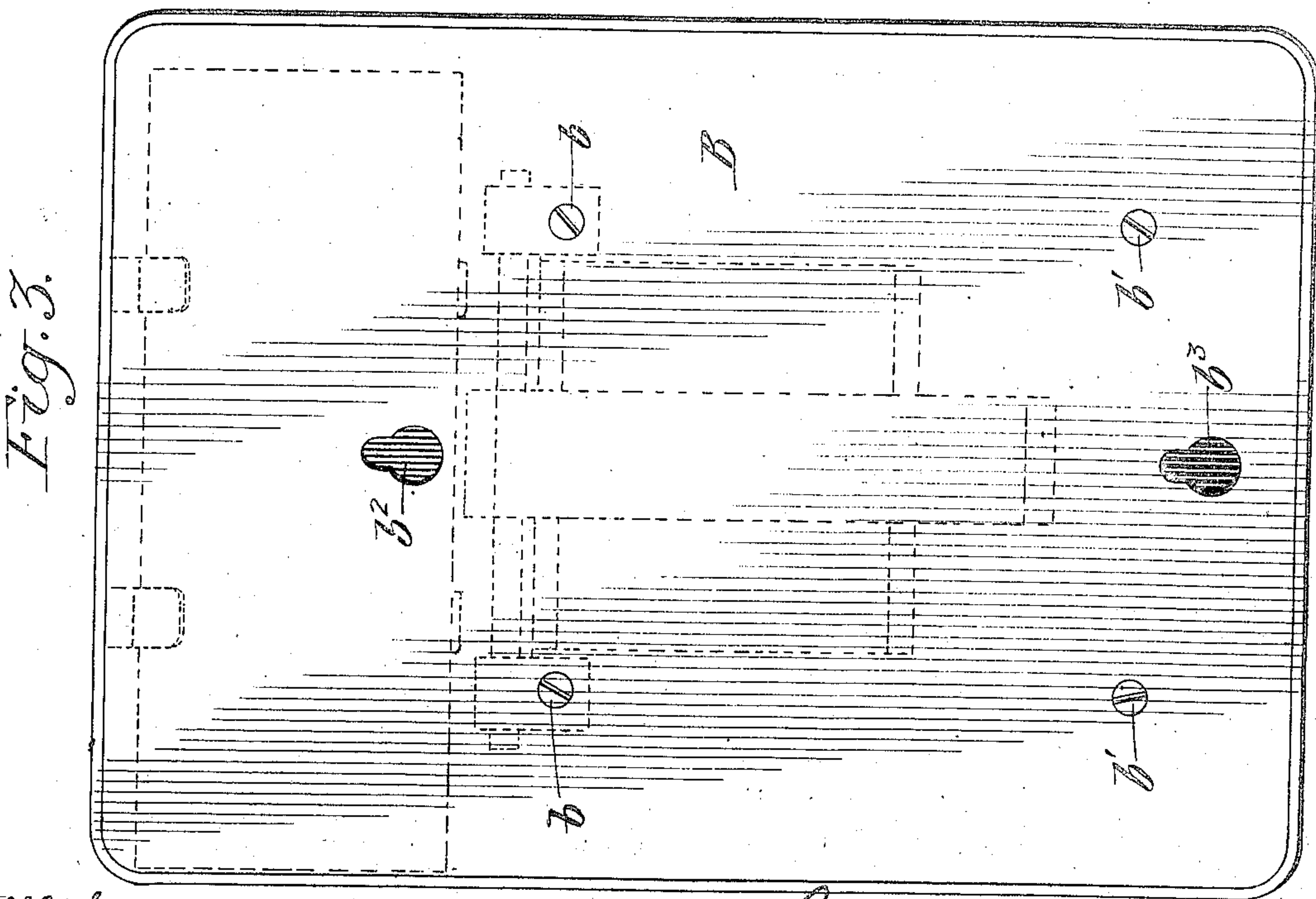
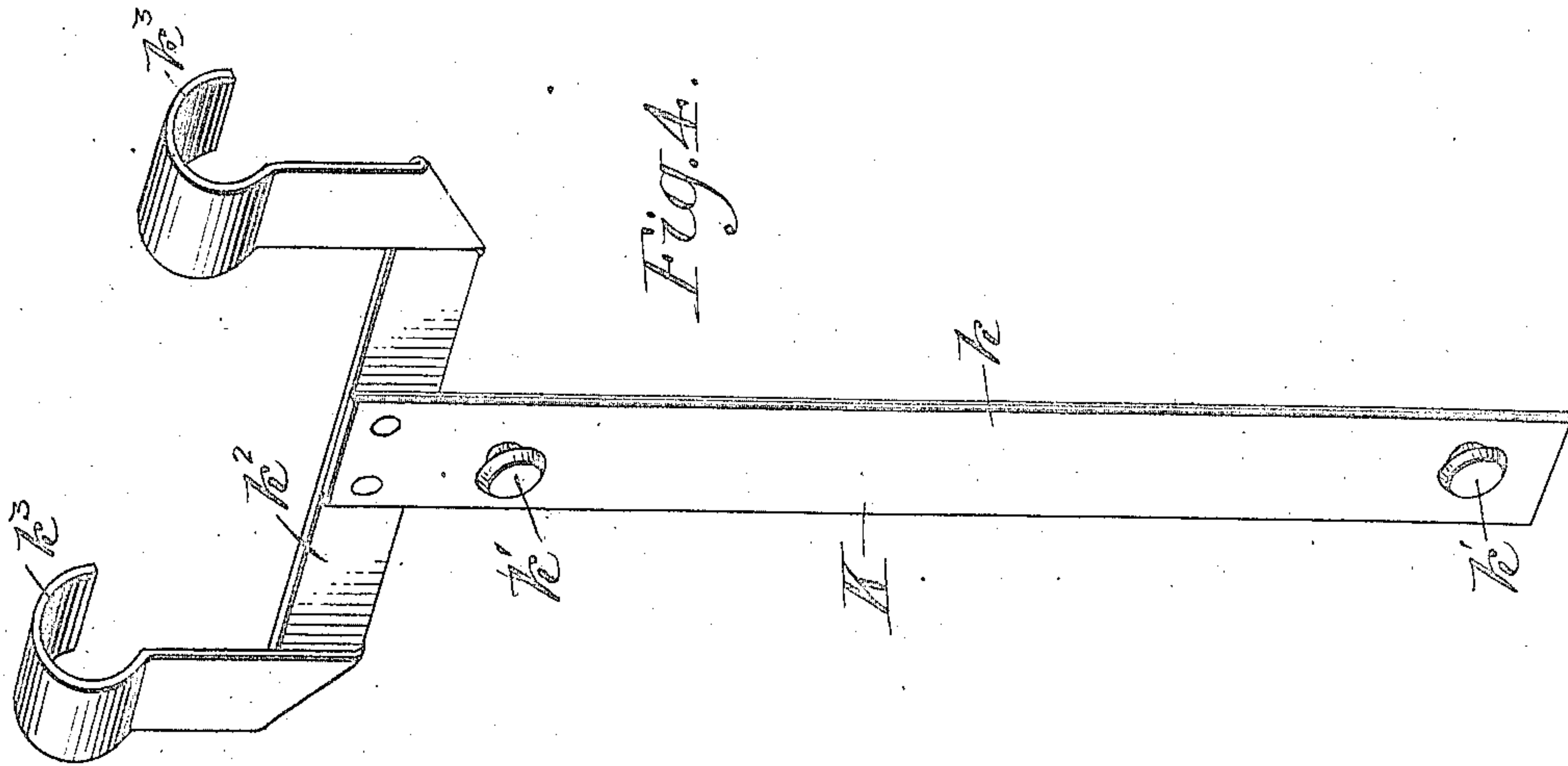
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2 SHEETS—SHEET 2.



Witnesses:
D. W. Edlin
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UNITED STATES PATENT OFFICE.

SIDNEY A. BEYLAND, OF ELYRIA, OHIO, ASSIGNOR TO THE DEAN ELECTRIC COMPANY, OF ELYRIA, OHIO, A CORPORATION OF OHIO.

BELL-BOX.

No. 822,715.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed May 17, 1904. Serial No. 208,324.

To all whom it may concern:

Be it known that I, SIDNEY A. BEYLAND, a citizen of the United States, residing at Elyria, in the county of Lorain and State of Ohio, have invented a certain new and useful Improvement in Bell-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to bell-boxes for electric signaling; and the particular embodiment thereof herein set forth is especially designed and intended for use in connection with telephone desk instruments or as an extension-bell for telephone-stations.

The principal object is to produce apparatus of the above character which shall be compact and slightly in form, economical to manufacture, durable and efficient in use, and in which the various parts may be readily assembled and are easily accessible for wiring connections and for adjustment.

A further object is to provide an improved suspending device for such apparatus.

These and other objects will more fully appear as I proceed with the description of my invention.

The invention consists in the novel features and details of construction hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a front view in elevation of a bell-box constructed according to my invention, the cover of the face aperture or opening being removed to show the arrangement of apparatus within. Fig. 2 is a central longitudinal section of Fig. 1, showing the arrangement of apparatus as viewed from the side, the cover of the face-aperture being in place. Fig. 3 is a rear view of the box; and Fig. 4 is a perspective view of the suspending device, which is shown in Fig. 2 attached to the box.

Referring to the drawings, wherein like reference characters indicate corresponding parts, it will be seen that the box proper or inclosing case is composed of two principal parts, a front or body portion A and a rear closure-plate B. These are preferably sheet-metal punchings, any suitable metal, such as brass or steel, being used, and the portion A is suitably formed up, preferably with rounded edges at the front.

Within the body portion A the ringer C is

mounted in an upright position upon brackets D, which are bent at an angle at d and secured to the box in any suitable manner, as by a screw d' . Brackets D have also at the other end a similar bend d^2 , to which the closure-plate B is removably secured. In Fig. 2 only one of these brackets is shown; but it will be understood that they are arranged one at each side of the upper end of the ringer and constitute a combined ringer-support and box-body brace.

Below the ringer in the lower part of the box I provide a terminal rack E, consisting of a strip of fiber, rubber, or other insulating material carrying terminals or binding-posts e . The rack E is mounted upon brackets e' , which consist, preferably, of lugs punched from and integral with the front of the box and turned inwardly, these being cut at the same time as the opening or window F in the front of the box, which will be described presently. These brackets e' carry distance-pieces e^2 and with them form braces for the lower end of the closure-plate B in a manner similar to brackets D. The wiring of the apparatus in the box is soldered or otherwise suitably attached to the lugs e^3 of the binding-posts, and the circuit-wires connecting with the rest of the telephone set through bushed holes a are inserted in the upper openings e^4 .

In order to permit of inspection and adjustment of parts, I provide a face-opening F in the front A of the box, through which access may be had to the armature portion of the ringer and to the terminal rack, so that at any time the ringer may be adjusted and the circuit connections changed without moving the box from its position of use or removing the back closure-plate. The face-opening is provided with a removable cover F, having a tongue f at one end, adapted to engage over the edge of the opening, and a spring-latch f' at the other end. When it is desired to remove the cover, a small tool is inserted in hole f^2 to depress the spring-latch clear of the edge of opening F.

Gongs G of any desired variety are mounted upon the front of the box, and clapper-rod c extends upwardly from the ringer-armature and is bent outwardly through an opening in the box-face to the clapper c' between the gongs. By this arrangement great compact-

ness is secured, the ringer-magnets lying longitudinally in the box instead of being perpendicular to its face, as usual.

In the upper part of the box above the ringer is a condenser H, securely yet removably held in place by spring-clips I, attached to the upper end of the box-body. These clips have each two branches, one long one i' , which supports the condenser, and the other, i , which serves to hold the condenser in position. After the apparatus has been mounted in the box closure-plate B is placed in position at the back and secured by screws $b b'$, which take into brackets or braces $d^2 e^2$, respectively, as shown clearly in Fig. 3. Closure-plate B is provided with buttonholes $b^2 b^3$, by means of which the box may be attached to its support, such as a wall or desk. The lower hole b^3 may be reached from the front of the box through opening F, so that by using a screw for this hole the box may be securely fastened.

Sometimes it is undesirable to secure the box in its position of use by means of nails or screws on account of injury to woodwork or plastering or for some other reason, and for such circumstances I provide a suspending device K, (shown in Figs. 2 and 4,) which forms an important feature of my invention. This consists of a strip k , provided with buttons or headed projections k' , adapted to engage buttonholes $b^2 b^3$ of the closure or back plate B and securely hold said strip thereto. Attached to the upper end of strip k is a cross-strip k^2 , having its ends bent upwardly and hooked, as at k^3 , to engage a picture-molding or other projection suitable for supporting the bell-box. No change in the construction of the box is required for this supporting device, and it is easily attached or detached at will.

The surface of the box may be enameled in any color to match the woodwork or interior furnishings of the apartment where it is to be used and is neat and pleasing in appearance.

The construction as a whole is very compact, the apparatus being arranged so as to occupy a minimum space and the entire box being less than one-half the size of the ordinary wooden bell-box.

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

1. In a bell-box, a body portion, a ringer mounted therein, a terminal rack mounted adjacent said ringer, and a closure-plate, said body portion being provided with an opening in addition to the closure-plate opening to permit access to said ringer and terminal rack, and a removable cover for said opening.

2. In a bell-box, a body portion open on one face, a closure-plate for said opening, a bracket attached within said body portion extending to constitute a brace for attachment of said closure-plate, and a ringer mounted upon said bracket.

3. In a bell-box, a body portion open on one face, a closure-plate for said opening, bracket connection between said body portion and closure-plate, a ringer mounted upon said bracket connection, another bracket connection between said body portion and closure-plate adjacent said ringer, and a terminal rack mounted upon said second bracket connection.

4. In a bell-box, a body portion open on one face, a closure-plate for said open face, brackets connecting said body portion and closure-plate, a ringer and a terminal rack mounted upon said brackets, said body portion being provided with an opening in addition to the closure-plate opening to permit access to said ringer and terminal rack, and a removable cover for said opening.

In testimony whereof I have affixed my signature in presence of two witnesses.

SIDNEY A. BEYLAND.

Witnesses:

W. E. HARKNESS,
RAY H. MANSON.