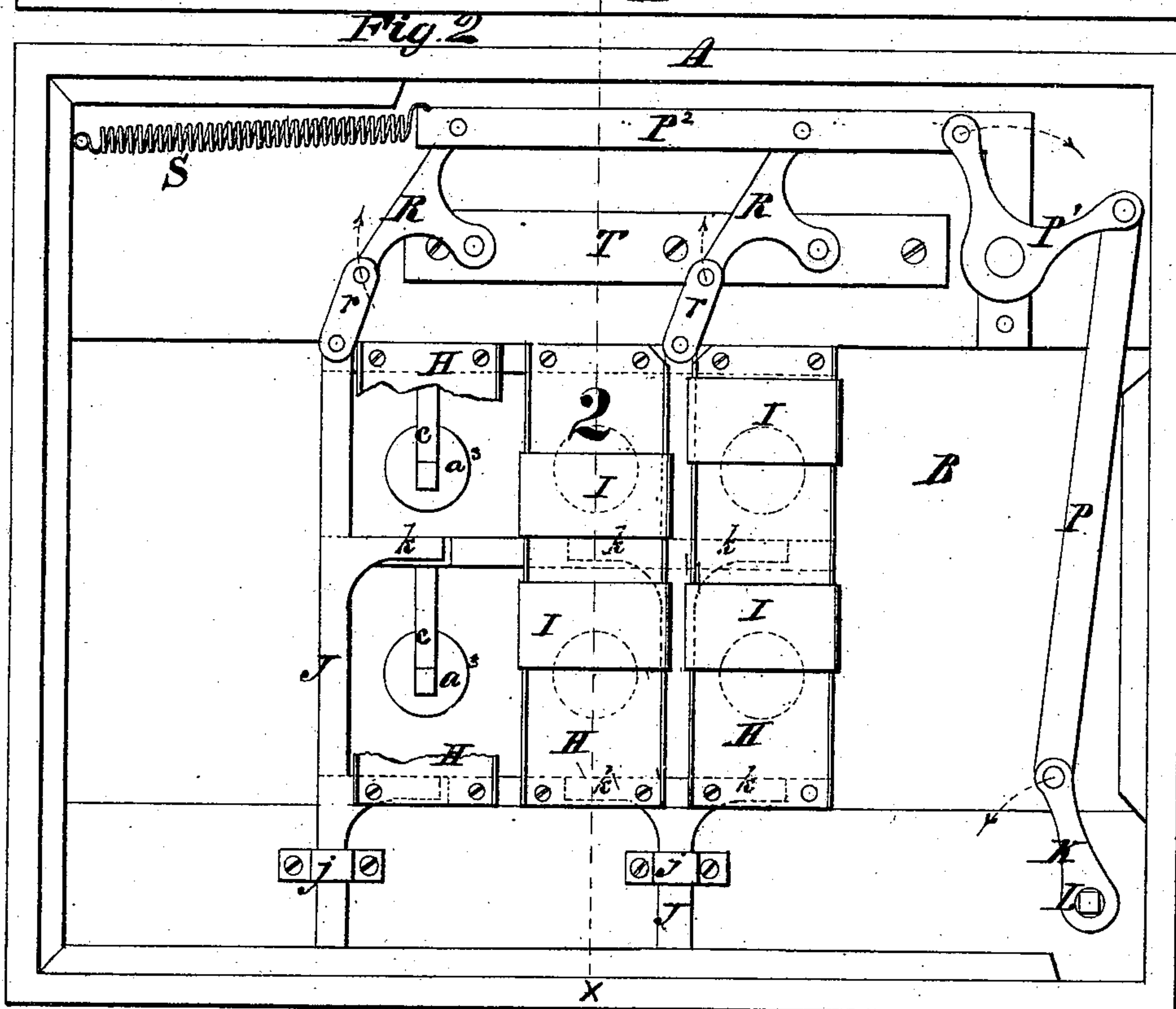
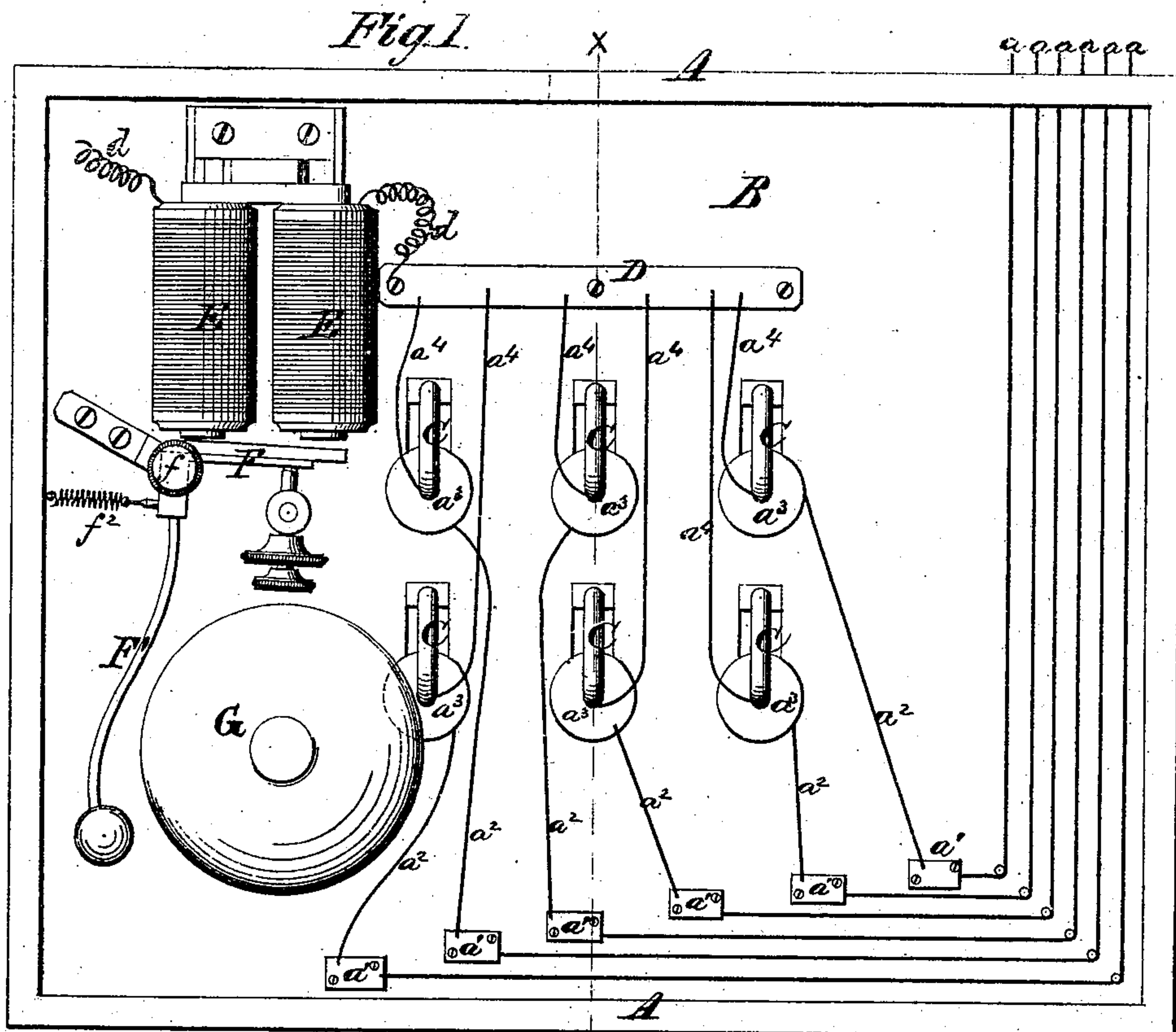


2 Sheets--Sheet 1.

H. B. PORTER.
Electrical Annunciator.

No. 98,296.

Patented Dec. 28, 1869.



Witnesses.
R. H. Campbell.
J. C. Campbell

Inventor
Henry B. Porter
by his atty
Marion Fenwick Lawrence

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Fig. 3.

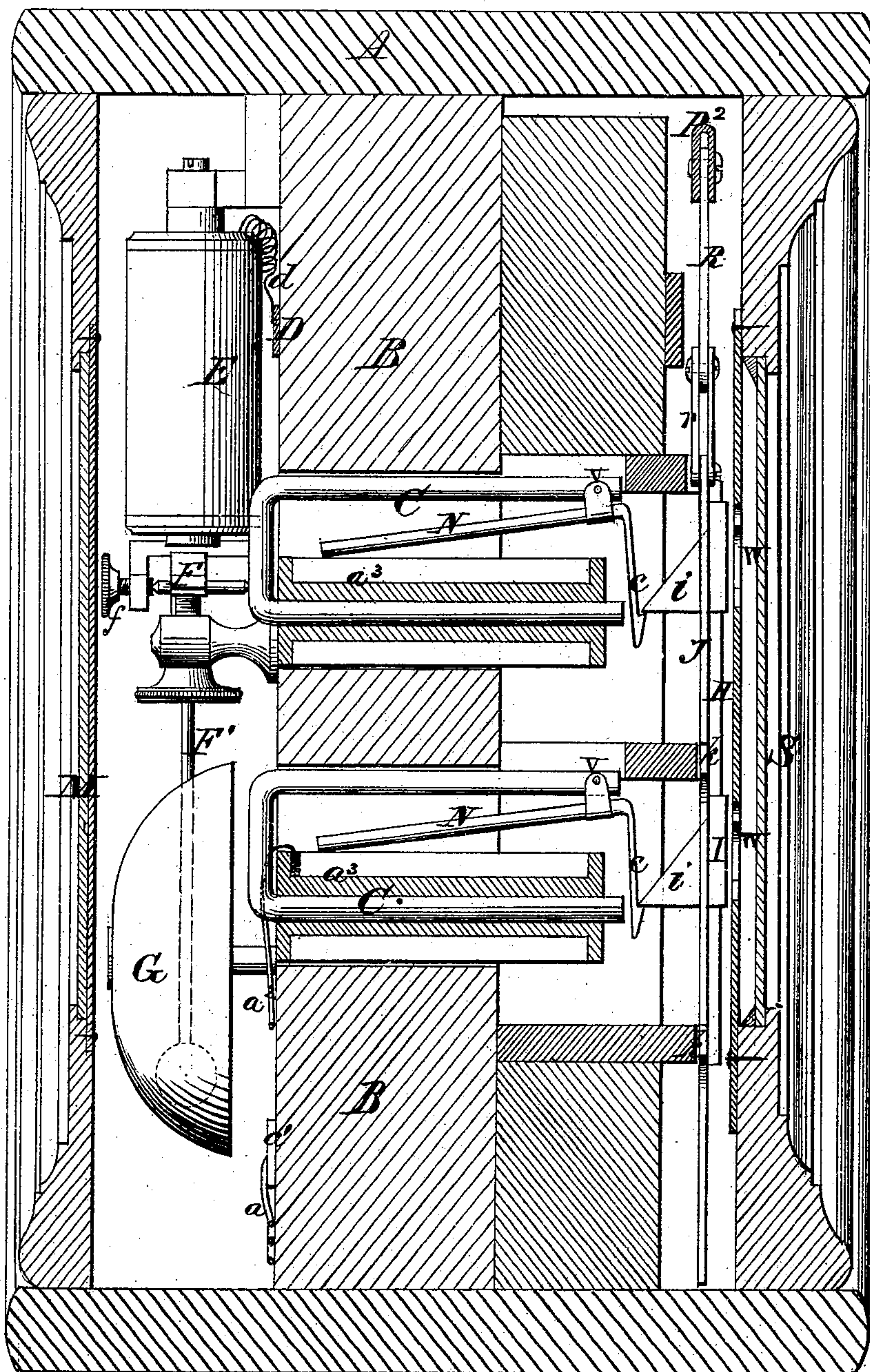
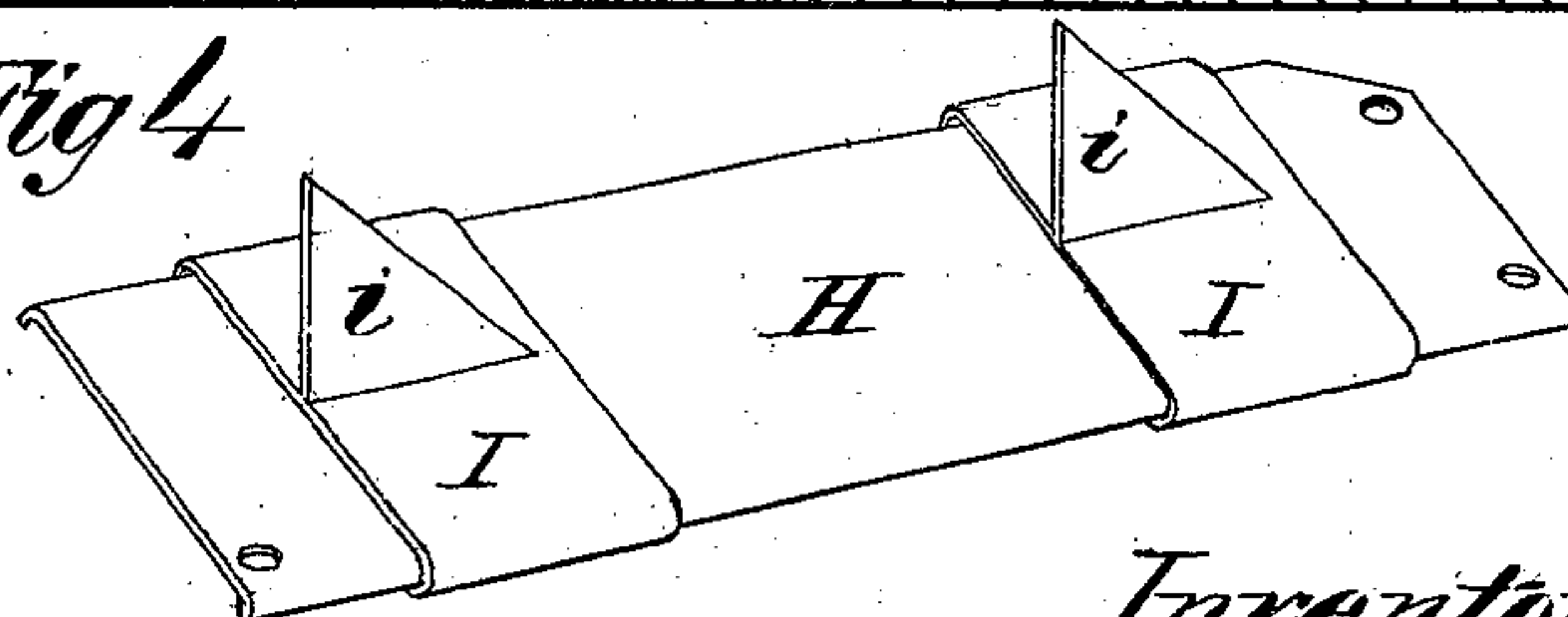


Fig 4



Witnesses:

Witnesses:
R. T. Campbell
J. V. Campbell

Inventor

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UNITED STATES PATENT OFFICE.

HENRY B. PORTER, OF CHICAGO, ILLINOIS.

IMPROVED ELECTRICAL ANNUNCIATOR FOR HOTELS.

Specification forming part of Letters Patent No. 98,296, dated December 28, 1869.

To all whom it may concern :

Be it known that I, HENRY B. PORTER, of Chicago, in the county of Cook and State of Illinois, have invented an Electrical Annunciator for Hotels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, Plate 1, is a view of the interior of the annunciator, showing the arrangement of wires and electro-magnets on one side of the partition. Fig. 2, Plate 1, is a view of the interior of the annunciator, showing the numbered plates, the sliding covers, and the devices for operating the covers. Fig. 3, Plate 2, is a section taken transversely through the annunciator in the vertical plane indicated by dotted lines x in Figs. 1 and 2. Fig. 4, Plate 2, is a perspective view of the back of one of the numbered plates and its slides.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain novel improvements on adjusting the slides which cover the numbers in a hotel-annunciator case, wherein electricity is employed as a means for enabling a person in any room in a hotel to sound an alarm, and at the same time expose to view in the office of the hotel the number of the room, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

A metallic wire of proper size, insulated or not, is inserted into the earth to a sufficient depth to insure its contact with constant moisture, and extends thence, by some convenient course, usually fastened to the lathing under the plastering, to the room whence the alarm is to be given. Here the wire is attached to an ordinary bell-crank or bell-pull, and so attached that when the crank is in its usual position held by a spring, it is not in contact with a second wire, but so arranged that by turning the crank it will be brought in contact with said second wire. This second wire, lettered a in Fig. 1, is thoroughly insulated by being covered throughout its entire length with cotton or silk, or some other non-conductor of electricity, and extended along the partitions to the annunciator at the office. After the

wire a passes through the outer case A of the annunciator it is attached to one end of a spool, a^3 , of coiled insulated wire, which spool is placed upon one leg of a bent soft-iron wire, C, bent in the form of the letter V. At the other end of the wire on spool a^3 another wire, a^4 , is attached, which extends to the electro-magnet E. After passing in these coils the wire lettered d passes out of the case A, and is carried to some convenient place, where it is joined to one of the poles of a small battery, the other pole of the battery being connected by a wire to the earth. This last-named wire need not be insulated; but all the wires from the bell-crank to the battery must be insulated in any well-known manner.

Each one of the V-wires C is so arranged that one leg is directly above the other, and it is placed in an aperture made through a partition, B, of dry pine, secured in a vertical plane within the case A, as shown in Figs. 1, 2, and 3. To the uncovered end of the V-wire C a hooked armature, c , is pivoted, so that it can swing freely, to which armature a gravitating arm is applied, which will act to keep the hooked end of this armature in the position indicated in Fig. 3, in which position a triangular toe, i , on a sliding cover, I, rests on said hooked end.

When the slide I is thus supported upon the hook of armature c this slide covers a number marked upon a plate, H, and when a current of electricity is passed through the helix a^3 , and the wire C is polarized, the armature c will be drawn to it, and the slide I released and allowed, by its own weight, to drop and expose to view a number corresponding to the room in which the current was established.

The electro-magnet E has an armature, F, poised upon pivots with a clapper, F', so attached that when the armature is drawn to the magnet an alarm will be sounded upon bell G. Spring f^2 draws the armature away from the magnet when the currents are off.

Having thus shown the method of dropping the slides or curtains I which cover the numbers corresponding to the rooms in a hotel, I will now describe the contrivances which are employed for returning one more of these slides or curtains to a position for covering the numbers.

The slides I are applied to vertical plates H,

which are secured to pieces applied to the partition B, and these slides are allowed free vertical play upon their respective plates, so that when released from their respective hooked armatures they will drop far enough to expose to view the numbers which, when held up, they cover.

On the back of each slide I a toe, *i*, is fixed, which toe is caught by the hooked armature *c* when the slide is up. Beneath the toes *i* are horizontal arms *k*, which are secured to or formed on vertically-sliding bars J, that are connected by links *r*, levers R, rod P², lever P¹ to a crank-arm, K, the stem L of which latter is adapted to receive a key. S is a spring, which will return the lifting devices to the position indicated in Fig. 2, after every upward movement given to the bars J.

I am aware of C. S. Bulkley's patent electrical annunciator, dated October 27, 1850; and, therefore, do not wish to be understood as claiming as my invention anything embraced by said patent; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The pivoted and gravitating hooked armature *c*, applied to a helix, *a*³, in combination with a sliding cover, I, substantially as and for the purpose described.

2. The arrangement of lifting-arms *k* on vertically-sliding bars J, in combination with the gravitating slides I, working over numbered or lettered plates H, said sliding bars J being connected to a key-shaft, L, substantially as and for the purpose described.

3. Covering-slides I, constructed with toes *i* upon them and arranged so as to move over stationary numbered or lettered plates H, substantially as described.

HENRY B. PORTER.

Witnesses:

J. NOBLE,

CHAS. B. DAGGETT.