

(No Model.)

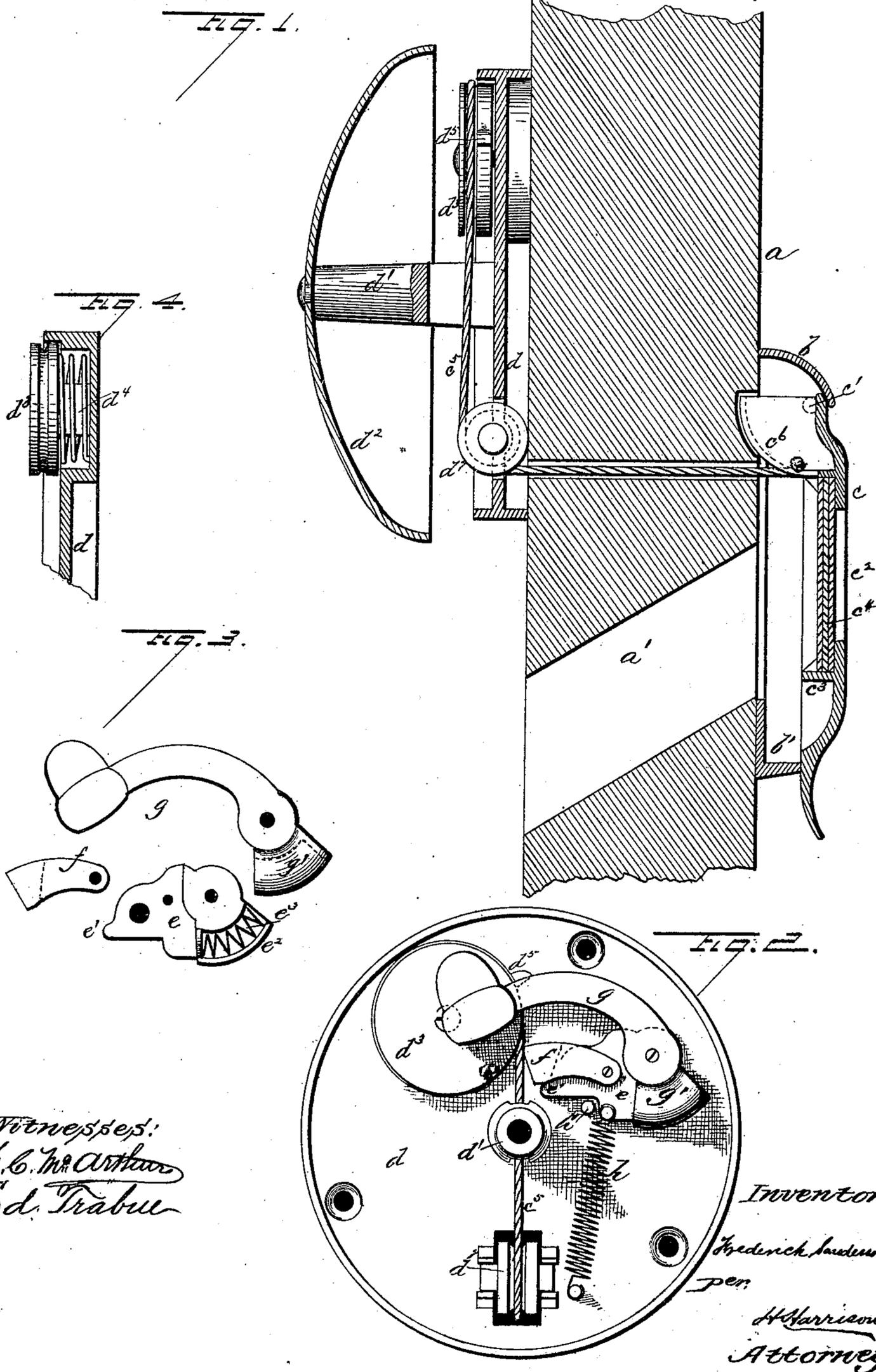
2 Sheets—Sheet 1.

F. SANDERSON.

COMBINED DOOR PLATE AND LETTER SLIP ALARM.

No. 356,233.

Patented Jan. 18, 1887.



Witnesses:  
*A. C. McArthur*  
*Ed. Trabee*

Inventor:  
*Fredrick Sanderson*  
 per  
*H. Harrison*  
 Attorney.

(No Model.)

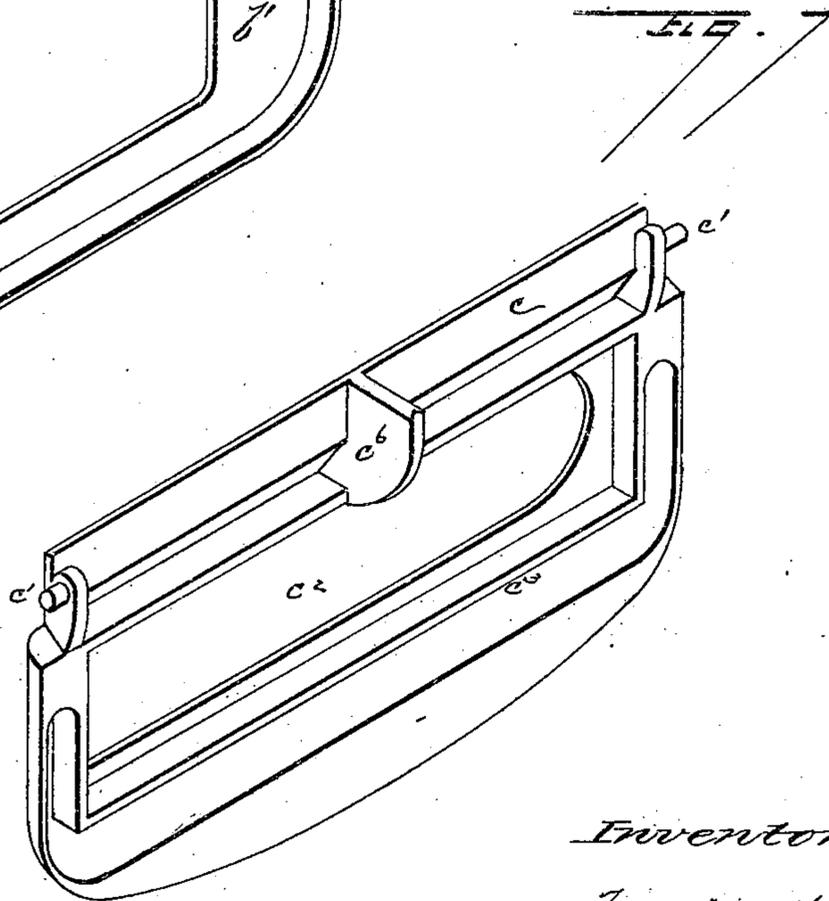
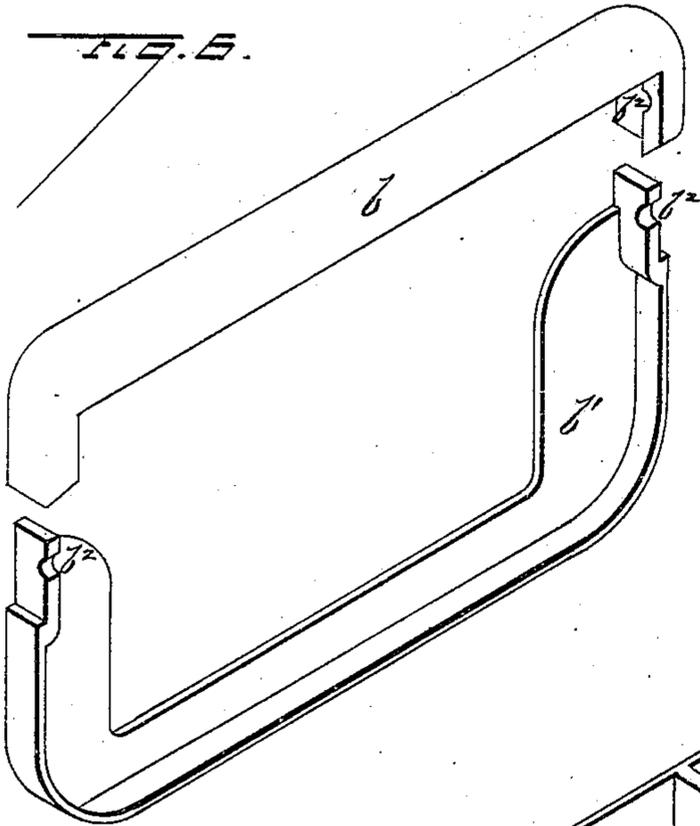
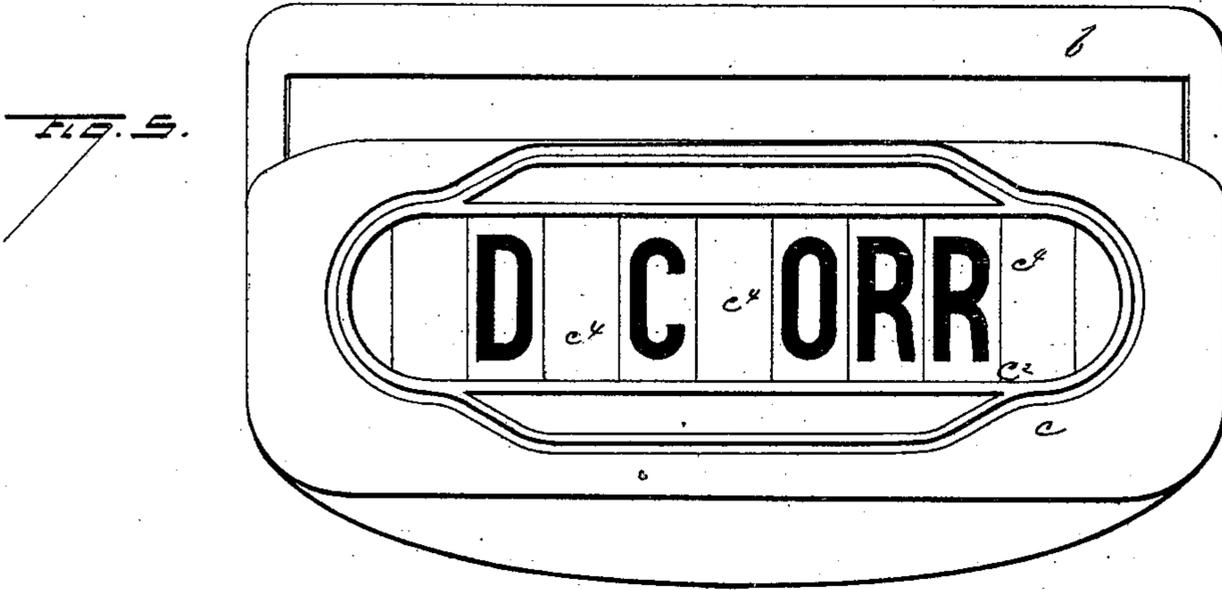
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*Frederick Sanderson*

— *Pen* —  
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# UNITED STATES PATENT OFFICE.

FREDERICK SANDERSON, OF CHICAGO, ILLINOIS.

## COMBINED DOOR-PLATE AND LETTER-SLIP ALARM.

SPECIFICATION forming part of Letters Patent No. 356,233, dated January 18, 1887.

Application filed November 28, 1885. Serial No. 184,165. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK SANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Combined Door-Plates and Letter-Slip Alarms, of which the following is a specification, to wit:

This invention relates to an improvement in combined door-plates and letter-box alarms; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention relates to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a vertical section of a portion of a door with my invention in place thereon. Fig. 2 is a view of the bell mechanism. Fig. 3 is a detail view of the separate parts of the spring-hammer. Fig. 4 is a detail section of the spring-actuated drum. Fig. 5 is a front elevation of the door-plate. Fig. 6 is a perspective view of the frame of the same, and Fig. 7 is a rear perspective view of the hinged covering-flap.

*a* represents a door, of any construction, provided with a slit, *a'*, for the passage of mail-matter, such as letters, papers, &c. On the outside of the door is secured a frame formed of an upper hooded part, *b*, and a lower flanged part, *b'*, the adjacent edges of which parts are overlapped, and each formed with a half-circular socket, *b<sup>2</sup>*, as in Fig. 6. The parts of this frame I secure firmly together by rivets or solder, and in them I hinge the flap *c*, which is provided with hinge-projections *c'*. The flap is formed with a central opening, *c<sup>2</sup>*, surrounded on its rear side with a flange, *c<sup>3</sup>*, which forms a receptacle for a series of separate letter-blocks, *c<sup>4</sup>*. These blocks are made separate, and each is either left blank or provided with a single letter, as desired. Thus any desired combination of these letter-blocks may be inserted to form any name, and it is not material whether a glass be placed over them or not. They are retained in place by putty

or other suitable means, and show clearly the name of the resident in any house to which they may be applied.

Upon the inner side of the door is secured a plate, *d*, on which is cast the bell-standard *d'*, carrying the bell *d<sup>2</sup>*, as in Figs. 1 and 2. On this plate is pivoted a grooved drum, *d<sup>3</sup>*, beneath which, in a recessed part of the plate, is a recoil-spring, *d<sup>4</sup>*, as in Fig. 4. This drum is provided on one side with a projection, *d<sup>5</sup>*, and is connected by a cord or wire, *c<sup>5</sup>*, with a semicircular projection, *c<sup>6</sup>*, formed on the rear of the hinged flap and curved concentrically with its pivots. This cord or wire passes over a guide-roller, *d<sup>7</sup>*, in the lower part of the main plate *d*. On the plate *d* is also pivoted a small casting, *e*, having a projecting lug, *e'*, on its forward end, and on its rear end a socket, *e<sup>2</sup>*, in which is placed a spring, *e<sup>3</sup>*; also, on the forward end of said casting *e* is pivoted a dog, *f*, resting closely on the lug *e'*, as shown in Figs. 2 and 3, and also on the rear end of the casting is pivoted a hammer, *g*, having on its heel a socket, *g'*, which covers the spring *e<sup>3</sup>*.

In use this device is applied, as in Fig. 1, to the door, and upon lifting the flap or slip *c* the cord or wire *c<sup>5</sup>* is pulled, and the consequent revolution of the drum *d<sup>3</sup>* causes its projection *d<sup>5</sup>* to engage and press down the pivoted dog *f*, carrying with it the pivoted casting *e*, when the opposite end or arm of the casting *e* will be raised, distending the spring *h*, which will have the effect upon the escape of the said projection from the said dog to throw the casting against the stud or projection *h'*. This, however, does not carry the hammer far enough to strike or sound the bell, but the concussion produced thereby throws the hammer forward, the same having, through its pivotal and spring connection with the casting *e*, an independent movement, when it (the hammer) will strike the bell a single blow and return to its position. When the mail has been deposited and the flap or slip released, the spring *d<sup>4</sup>* at once returns the grooved drum to its place, and its projection lifts the dog *f* and passes it freely, the dog *f* at once dropping back to place by gravity.

The device is applicable to any door and sounds an alarm at once on the deposit of the

mail, and also acts as a door-plate, and may have placed thereon the name of the occupant of the house.

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

1. The combination, with the frame composed of the parts overlapped and having sockets, of the hinged covering-flap provided with lugs, whereby the device is firmly secured without exposing screws or other fastenings, substantially as and for the purpose set forth.

2. The hinged plate having an opening surrounded by a flange, in combination with a series of separate letter-blocks secured therein, substantially as and for the purpose set forth.

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

FREDERICK SANDERSON.

Witnesses:

W. C. McARTHUR,  
EDWARD TRABUE.