

WILLIAM A. CARON.  
Door Plate.

No. 121,703.

Patented Dec. 12, 1871.

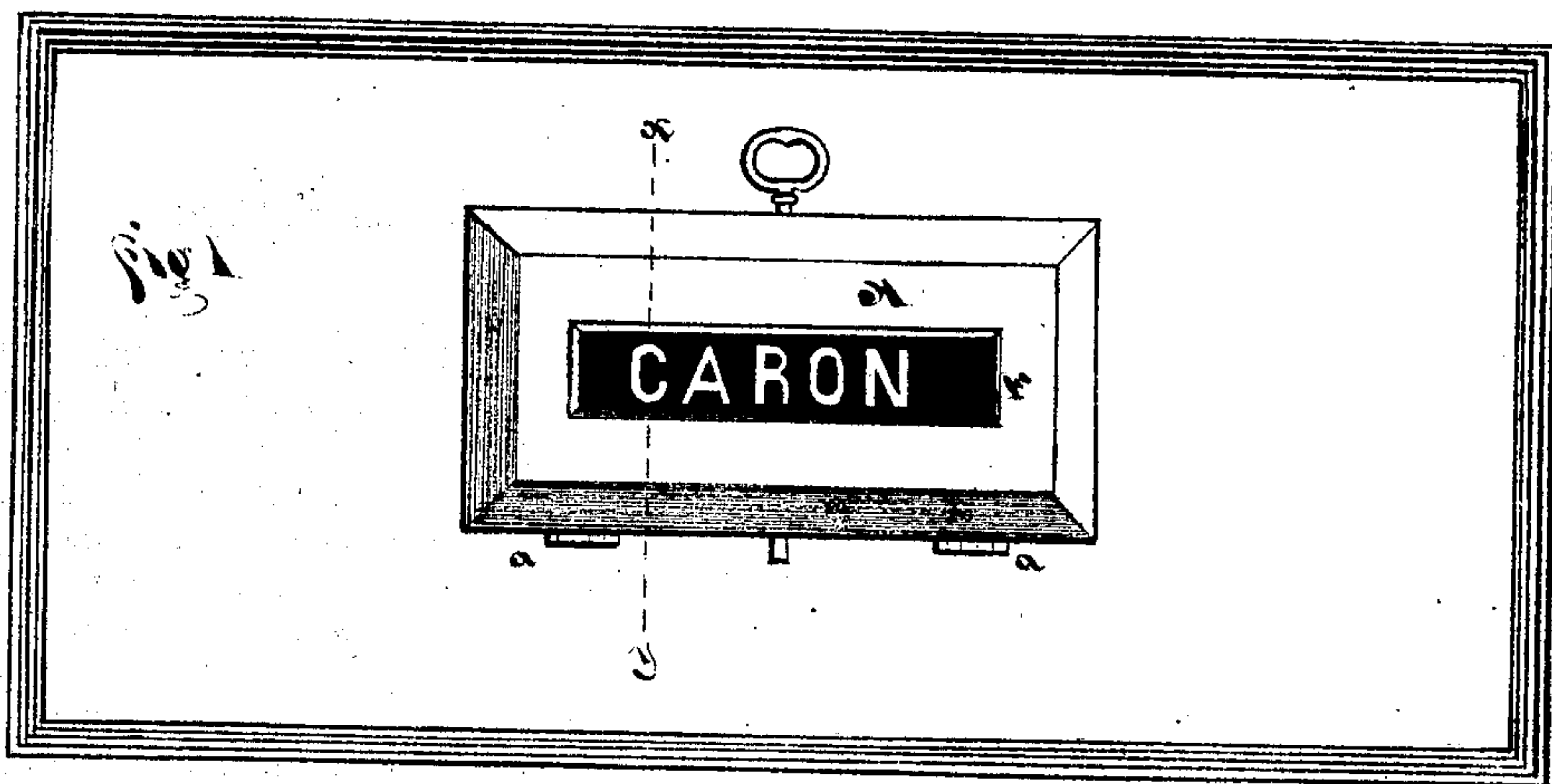


fig 2

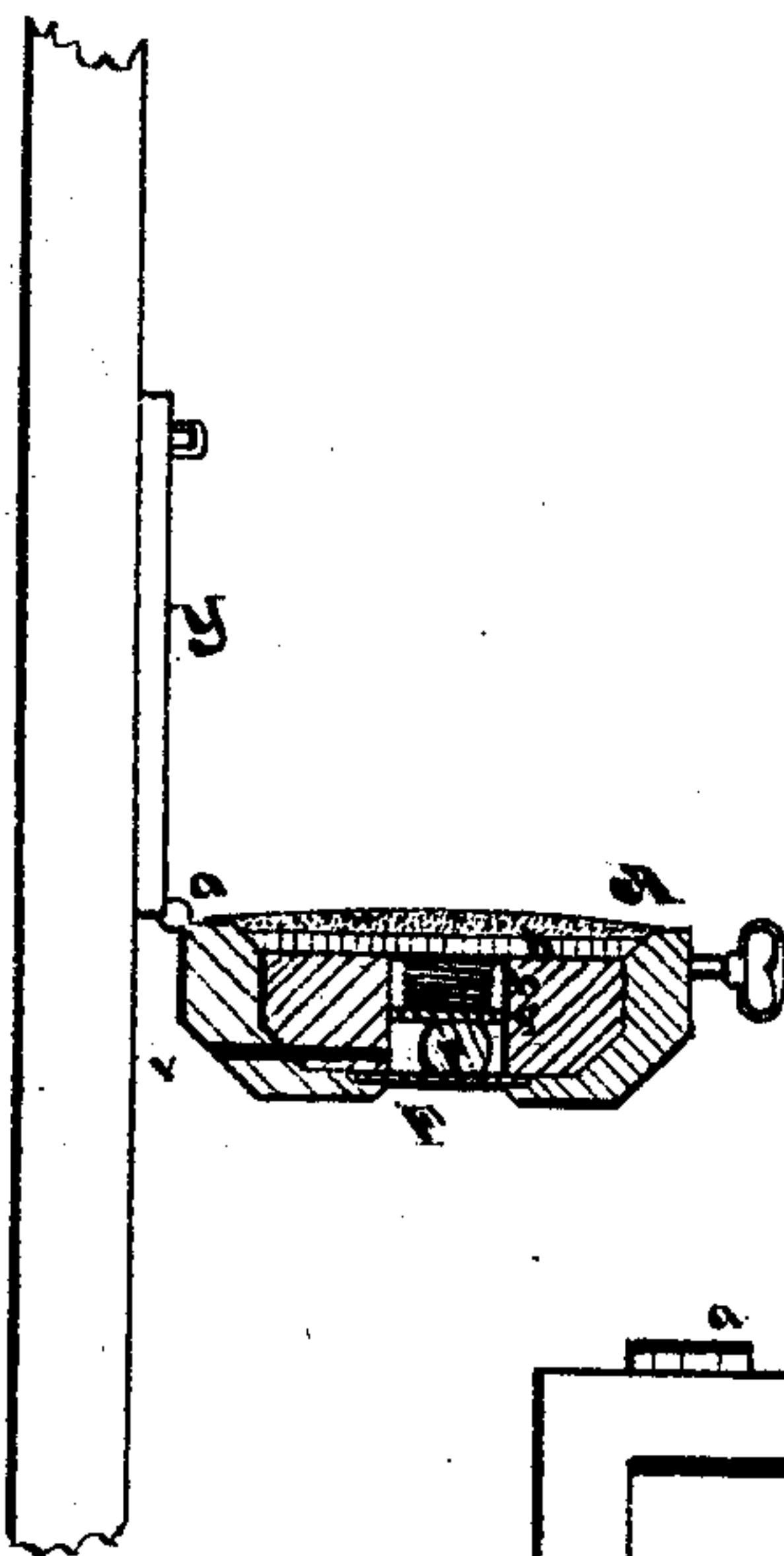
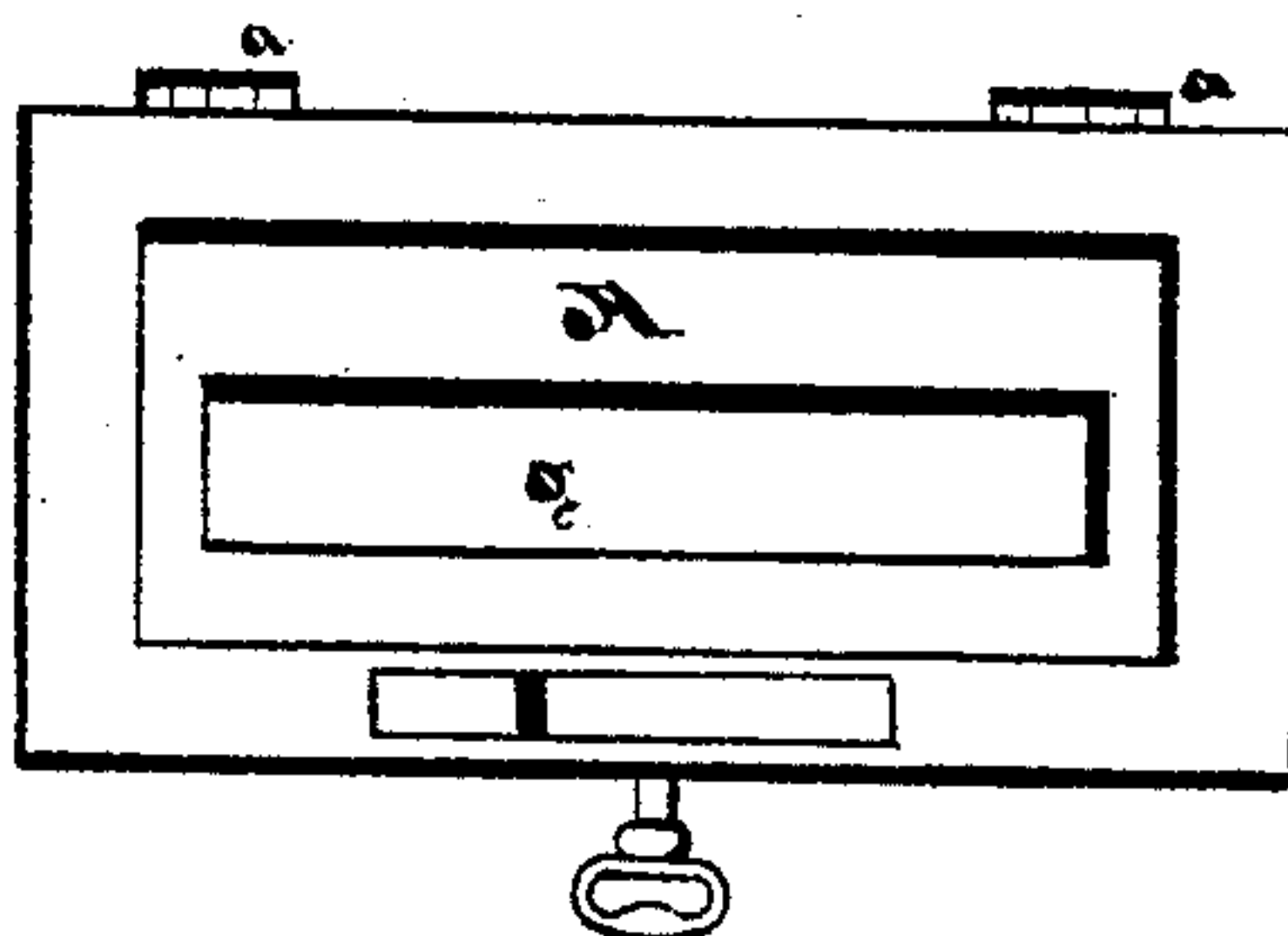


fig 3



Witnesses

E. Dudley Chapin.  
Wm B. Parker

Inventor

William A. Caron  
by his attorneys  
Gardner & Hyde

# UNITED STATES PATENT OFFICE.

WILLIAM A. CARON, OF SPRINGFIELD, MASSACHUSETTS.

## IMPROVEMENT IN DOOR-PLATES.

Specification forming part of Letters Patent No. 121,703, dated December 12, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM A. CARON, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented an Illuminated Door-Plate, of which the following is a specification:

My invention relates to a door-plate constructed so that a stick of phosphorus shall be held against a glass plate having the letters of the name surrounded by an opaque surface and left themselves transparent or the reverse, the phosphorus to be held by a spring against the glass plate and to be surrounded by some non-inflammable substance, as glass, cement, plaster, &c., and packed by rubber cloth behind the spring, so that no more air can be admitted to the phosphorus and the small space surrounding it than is allowed through a small adjustable aperture through the frame of the plate for the purpose of admitting just sufficient to carry on the slow process of combustion necessary to evolve the gas for illumination. For convenience the case containing the phosphorus, transparent plate, and all of the essential parts of the invention is hinged at its lower side to the door, so that it can be swung down to renew the phosphorus when such is required, and on being brought to its place again can be locked to the door so as to effectually secure it from interference; the object of my invention being to provide a door-plate the name upon which shall be luminous in the dark, and that shall require no more attention than the renewal of the phosphorus at intervals of weeks, and that shall be perfectly safe.

In the drawing, Figure I is a front view of the plate complete. Fig. II is a cross-section on the line *y y*, and Fig. III is a detail view of a part of my invention.

A is the case holding the plate, and hinged at *a* to the door of the building. The case A may be formed of glass, metal, or other non-combustible substance, and may be made of various ornamental forms, and instead of coming immediately against the face of the door may be swung

against a plate of the same material as itself, so as to effectually obviate the remotest possibility of the communication of fire to the door. Within the case is a slot having for its base the glass plate F. The phosphorus, in a stick, *p*, of the length of the slot and row of letters to be illuminated, is placed within this slot and in contact with plate F, and the piece of sheet metal *g* is placed in the slot and over the phosphorus; the plate *g* is pressed in contact with the phosphorus *p*, and the phosphorus against the letters by springs *b b* proceeding from plate *h* let into the back of case A and packed to be perfectly airtight, so that when the case is locked to the face of the house-door or to a plate, *y*, upon it, the plate *h* has a bearing, and the waste of the stick *p* by combustion is taken up by the agency of the springs *b b* attached to plate *h*; and by the rubber packing the admission of air to the interior of the case A is cut off, except through the aperture *v* through the case opposite the position of the stick of phosphorus, which supply of air can be regulated by a plug or other device so that the amount having access to the phosphorus can never be enough to produce active combustion, while sufficient to cause the phosphorus to give off its maximum amount of illuminating-gas, at will.

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

As a new article of manufacture, a door-plate having letters illuminated by a stick of phosphorus pressed against it and air supplied in such small quantity as to preclude active combustion, while causing the phosphorus to evolve sufficient illuminating-gas to make the letters visible in the dark, the parts being arranged and constructed for that purpose and substantially in the manner shown and described.

WILLIAM A. CARON.

Witnesses:

R. F. HYDE,  
HENRY MORRIS.

(146)