## F. H. VAN HOUTEN.

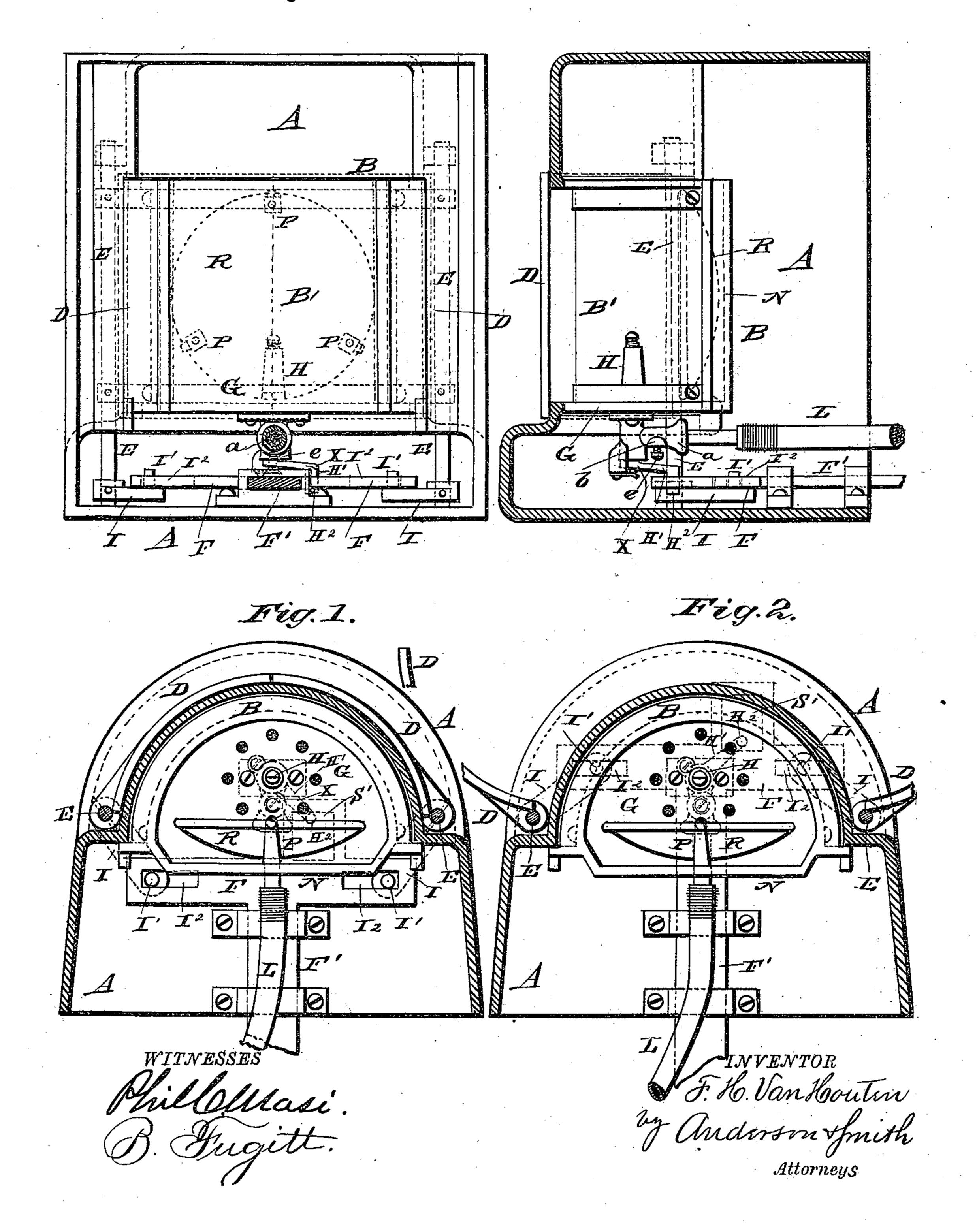
ILLUMINATOR FOR OVENS.

No. 356,018.

Patented Jan. 11, 1887.

Fig. 3.

Fig.4.



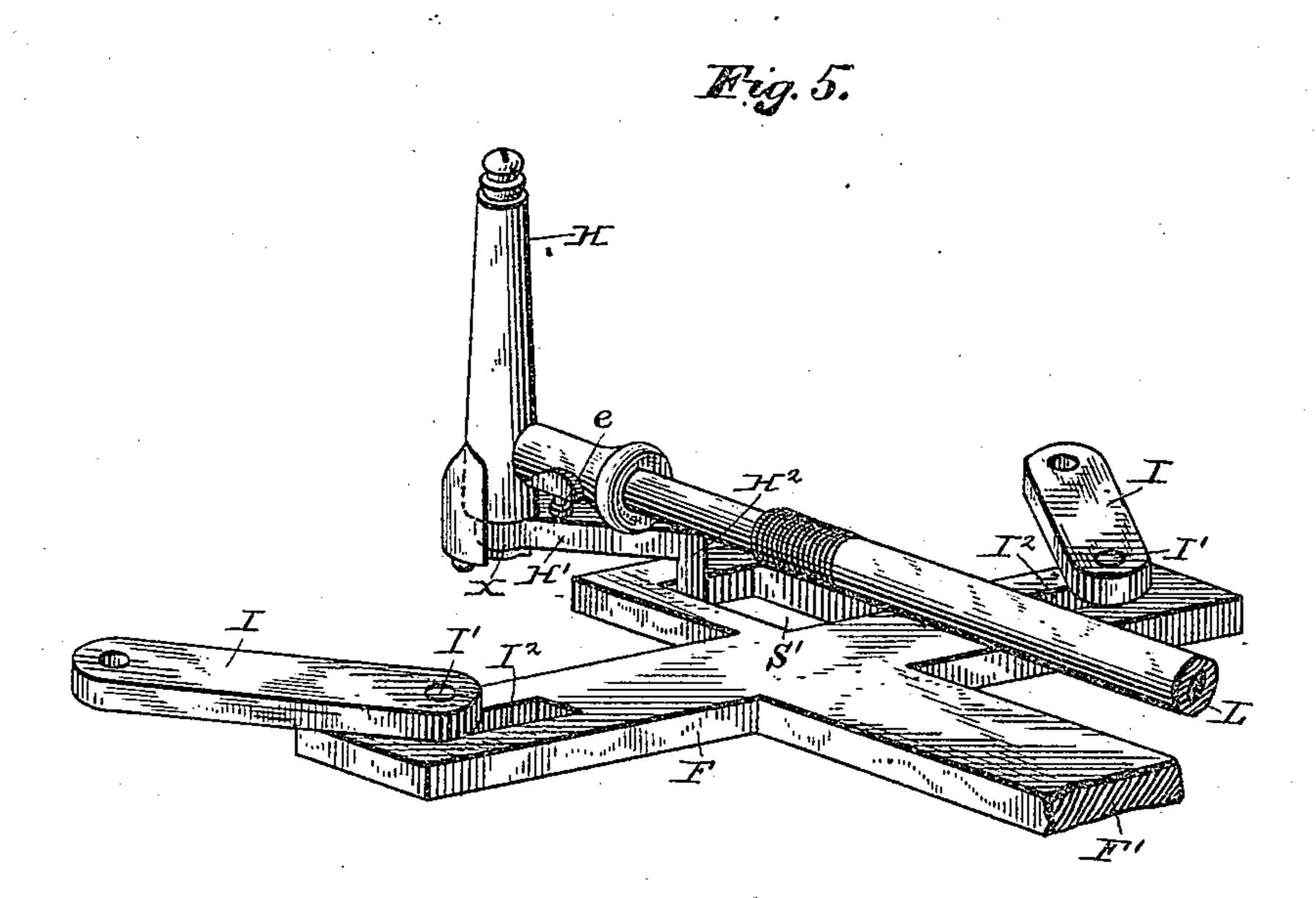
(No Model.)

2 Sheets—Sheet 2.

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WITNESSES

ATTORNEYS

## United States Patent Office.

FRANK H. VAN HOUTEN, OF MATTEAWAN, NEW YORK.

## ILLUMINATOR FOR OVENS.

SPECIFICATION forming part of Letters Patent No. 356,018, dated January 11, 1887.

Application filed May 7, 1886. Serial No. 201,474. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. VAN HOUTEN, a citizen of the United States, residing at Matteawan, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Illuminators for Ovens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a horizontal section, showing doors closed. Fig. 2 is a similar view, showing doors open. Fig. 3 is a rear elevation, and Fig. 4 is a vertical longitudinal section. Fig.

20 5 is a perspective detail view.

My invention relates to illuminators for bakers' ovens; and it consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claims.

Referring by letter to the accompanying drawings, A designates the outer case of the oven, carrying a lantern, B, which is provided with a mica front, B'.

R is a concave reflector, which is attached to the solid back portion, N, of the lantern by means of suitable hooks or supports, P.

G indicates the jet-carrying frame.

H is the burner, which is provided with a main channel, a, and a smaller auxiliary channel, b, the latter channel, b, being provided with a regulating-screw, e, by which to regulate the supply of gas that flows through the auxiliary channel b, or to entirely cut off the flow of gas to the burner, as may be desired. A length of flexible pipe or tubing, L, extends from the burner to the gas-supply.

On the front portion of the case A is hinged a pair of doors, D D, said doors being fastened to the vertical hinge-rods E E, which pass through the web of the case A from the outside to the inside. Upon the lower ends of the vertical rods E E are attached arms I I, having projecting pins I', which engage

the slots I<sup>2</sup> I<sup>2</sup> of the sliding frame F, the 50 latter being provided with a handle, F', by which to move the sliding frame to and fro to open and close the doors D D. This handle F' works in guide-brackets secured to the bottom of the outer casing, and extends out 55 beyond said casing.

X designates the cut-off cock, which is connected to the lower end of the burner H, and is provided with an arm, H', having a downwardly-projecting pin, H<sup>2</sup>, which enters the 60 rectangular slot S', made integral with the

slotted sliding frame F.

When the sliding frame F is in the position shown in Fig. 1, then the doors are closed and the gas is cut down to a small flame. 65 By throwing the sliding frame forward the doors will be opened and the gas will be turned on full head.

The doors D D close the hole which would otherwise exist when the lantern is removed, 70 and they also protect the mica when there is smoke in the oven.

I sometimes use a single door, D', in lieu of the two doors D D, in which case a single arm, I, only is used, and a single rod, E, will 75 serve as a hinge-rod and engage the sliding frame F, which, when operated by its handle F', will open and close the single hinged door.

Having described this invention, what I claim, and desire to secure by Letters Patent, 80

is—

1. The combination, with the outer case and the lantern having the cut-off cock, of the doors fastened to the vertical hinge-rods, the slotted sliding frame provided with a han- 85 dle, and the arms having projecting pins connecting the vertical hinge-rods and the slotted sliding frame, substantially as specified.

2. The combination, with the outer case and the lantern, of the doors fastened to the 90 vertical hinge-rods, the slotted sliding frame provided with a handle, the arms having projecting pins connecting the vertical hinge-rods with the slotted sliding frame, the burner having the cut-off cock, and the arm having 95 one end secured to the said cock and its opposite end engaging a slot in the slide, substantially as specified.

3. The combination, in an oven-light, substantially as described, of the slide having a forward slotted portion, a burner above the slide, an arm extending from the key of the burner and engaging the forward slot of the slide, and arms connecting the lateral slotted branches of the slide with the doors, substantially as specified.

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

FRANK H. VAN HOUTEN.

Witnesses:

SAMUEL K. PHILLIPS, JAMES G. MEYER.