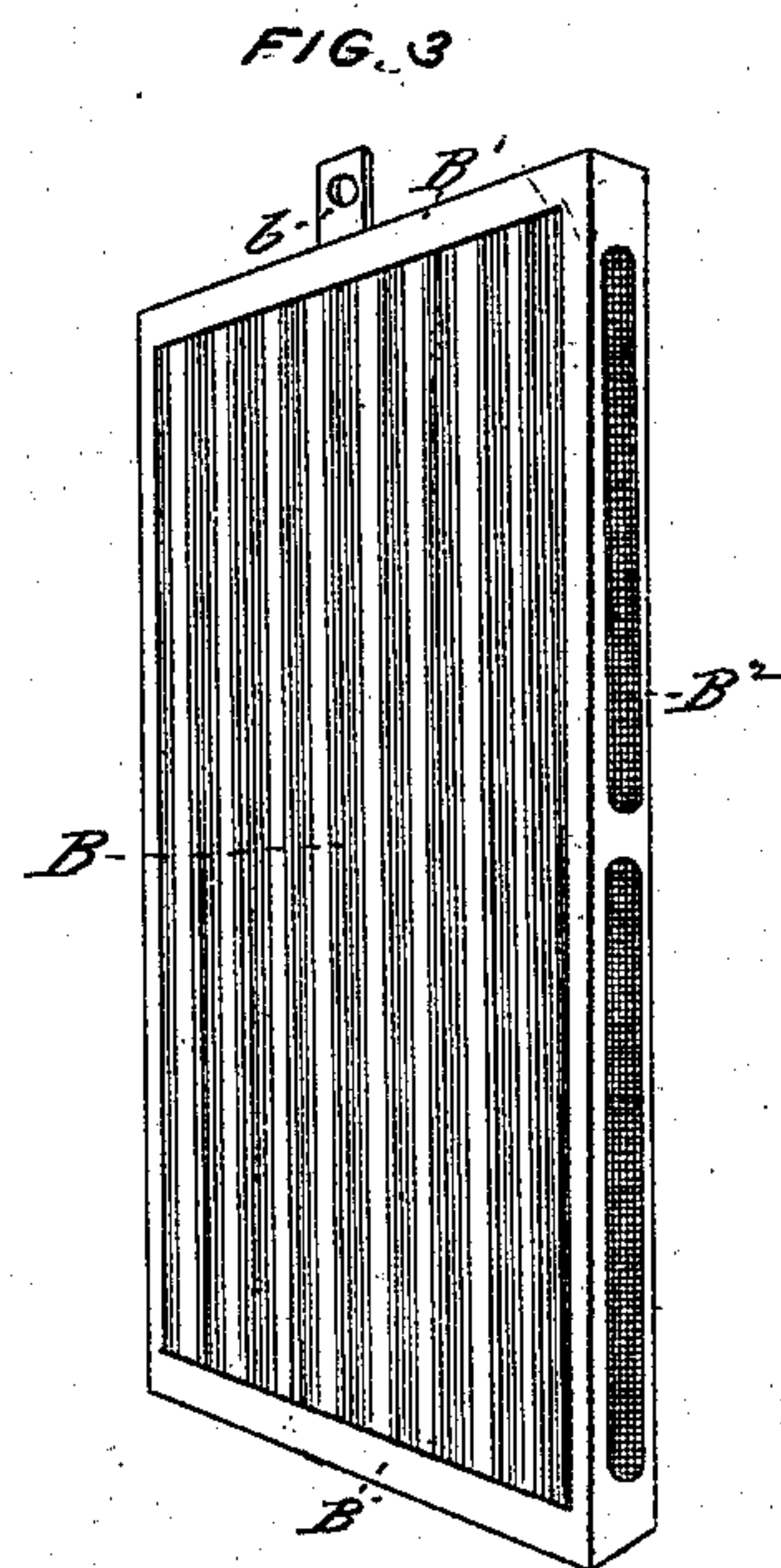
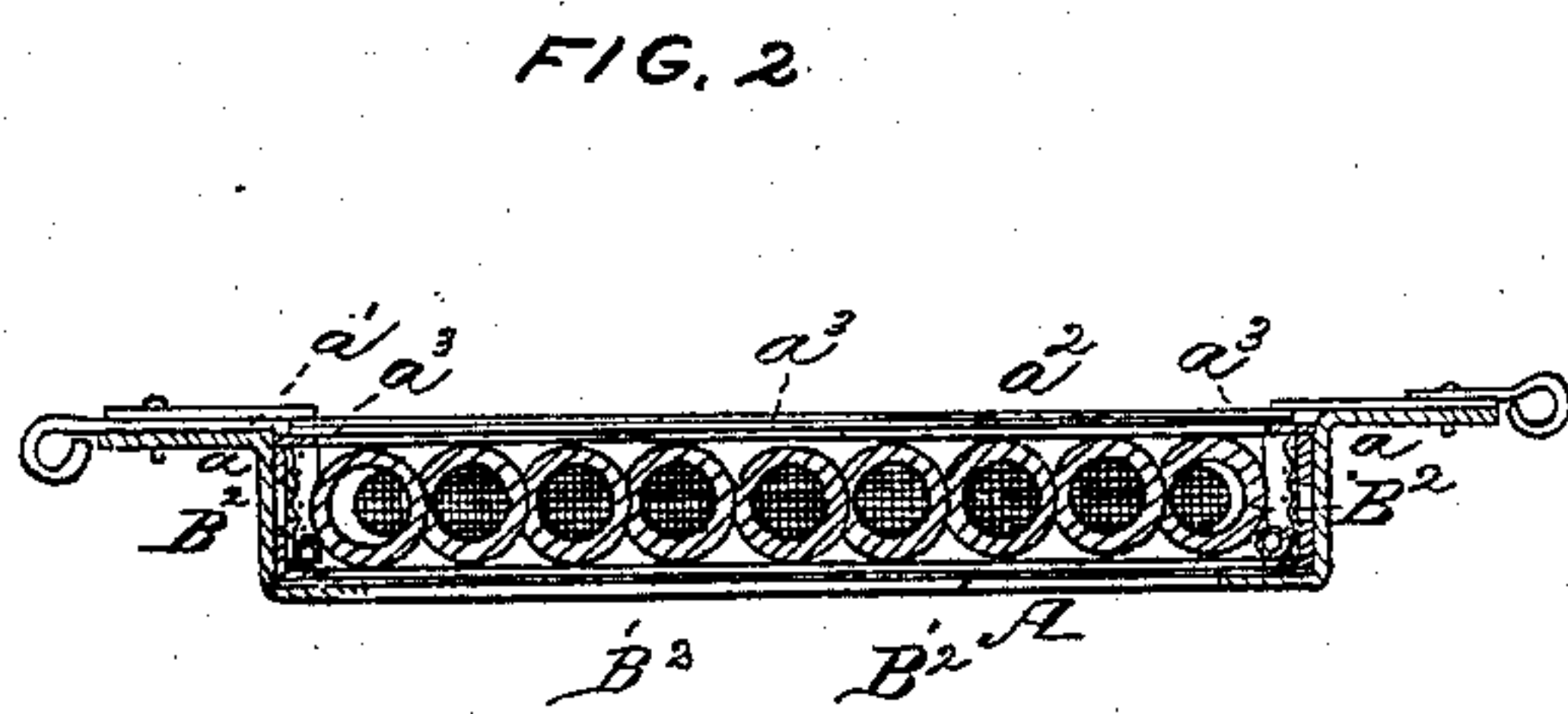
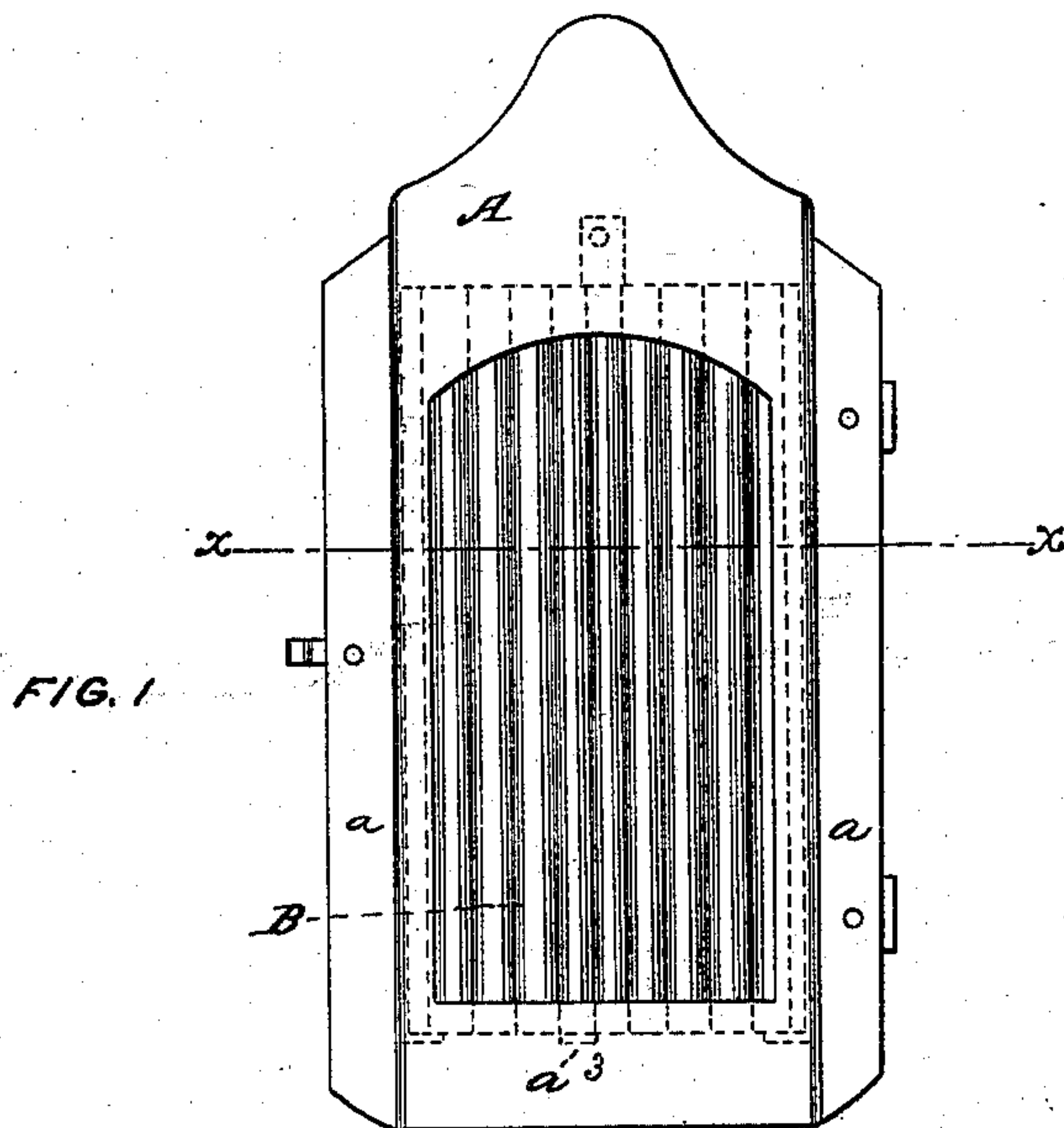


B. NOTT.
Stove Door.

No. 98,879.

Patented Jan. 18, 1870.



WITNESSES:

A. B. Jones
H. Jones

INVENTOR:

Benjamin Nott
By D. E. Jones & Co
His Attorneys

United States Patent Office.

BENJAMIN NOTT, OF ALBANY, NEW YORK.

Letters Patent No. 98,879, dated January 18, 1870.

ILLUMINATOR FOR STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN NOTT, of the city of Albany, in the county of Albany, and in the State of New York, have invented an Improvement in Illuminators for Stoves, Furnaces, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 represents a front view of the illuminator, encased in a suitable frame on the rear of a stove-door.

Figure 2 is a horizontal section on line *xx*, of fig. 1.

Figure 3 is a perspective view of the illuminator detached.

The same letters are used in all the figures, in the designation of identical parts.

The object of my invention is to so arrange an illuminator, for which I obtained Letters Patent on November 10, 1868, upon the door of a stove, or upon the stove itself, that it can be removed at any time with the greatest facility, when it becomes necessary to do so, for the purpose of cleaning the glass tubes.

To this end, my invention consists in the construction of the illuminator, and in its combination with the door of a stove, as will be more fully explained hereinafter.

In the annexed drawings—

A represents a stove-door, having a large opening in its face, which is to be closed by the illuminator.

Upon the sides of this door are formed angular flanges *a a*, and upon that portion of these flanges which is parallel to the face of the door, are fastened, or they may be cast in one piece with such door, strips *a' a'*, projecting inwardly, over the corners of the flanges, sufficiently to retain the illuminator.

Cross bars *a² a²* are stretched from one flange to the other, above and below the opening in the door, to strengthen them, as well as to serve as further security for retaining the illuminator.

The lower cross-bar is united to the door by short bars, *a³*, upon which the under edge of the illuminator rests, when inserted in the door.

B represents the illuminator, which is constructed of a number of glass tubes, inserted in a suitable frame, of such size as to fit loosely in the casing formed upon the rear side of the stove-door.

The upper end of the illuminator-frame *B¹*, is left open, for the convenient removal and insertion of the glass tubes, and in the other end, upon which the tubes rest, a long slot is formed, so as to allow a current of air to pass constantly through the tubes. The sides may be provided with slots, in a similar manner, as shown.

B² are strips of wire gauze, inserted between the end tubes of the illuminator and its frame, and under the ends of the tubes to prevent the gaseous products of combustion entering such tubes, and thus smoking them on the inside.

A short projection or ear, *b*, is formed on the upper end of the illuminator, by which to take hold with the hand, on inserting or removing the same. In figs. 1 and 2, I have shown the illuminator, inserted in its place in the door. Should the glass tubes at any time become smoked so as to impair their translucency, the illuminator is removed out of the door, the opening of which may at such time be temporarily closed by a sheet of tin, and the tubes taken out of the frame, if necessary, and cleaned. This may be done while the stove is in full operation.

I have described the illuminator as applied to a stove-door; but it is apparent, that it is equally applicable to doors of all other kinds of heating-apparatus, or that it may be applied in any other part of the stove or other heating-apparatus.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a stove or other heating-apparatus, an illuminator, when such illuminator is detachably arranged thereon, substantially as and for the purpose set forth.

2. The combination of a stove-door, A, with the illuminator B, when arranged with reference to each other, substantially as and for the purpose set forth.

3. In combination with the glass tubes of the illuminator B, the wire gauze *B²*, substantially as and for the purpose set forth.

The above specification, signed by me, this 8th day of December, 1869.

BENJAMIN NOTT.

Witnesses:

JOHN Q. WELLS,
ROBERT H. NOTT.