

(No Model.)

H. W. LIBBEY.
CLOTHES DRIER.

No. 533,993.

Patented Feb. 12, 1895.

Fig. 1.

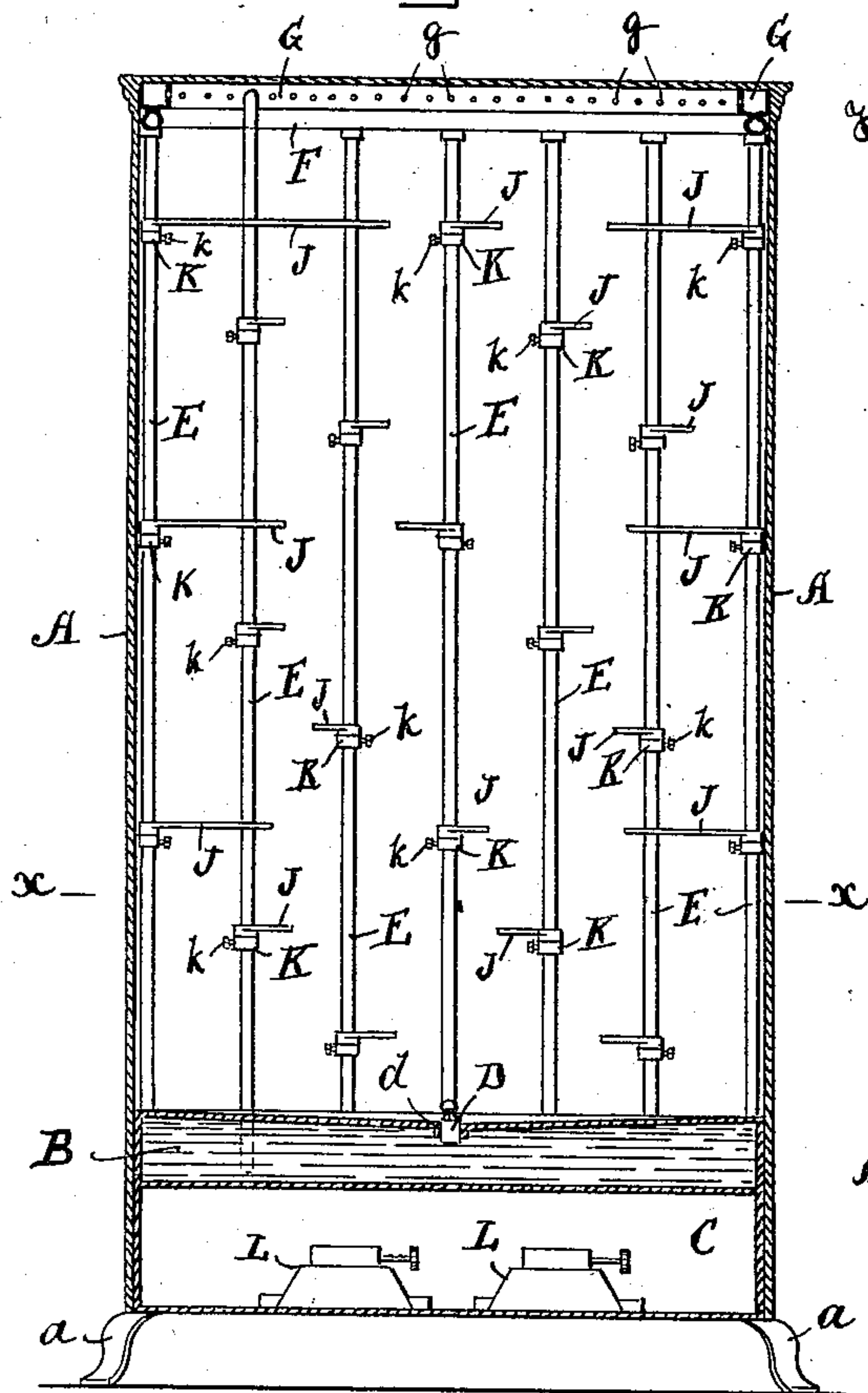


Fig. 2.

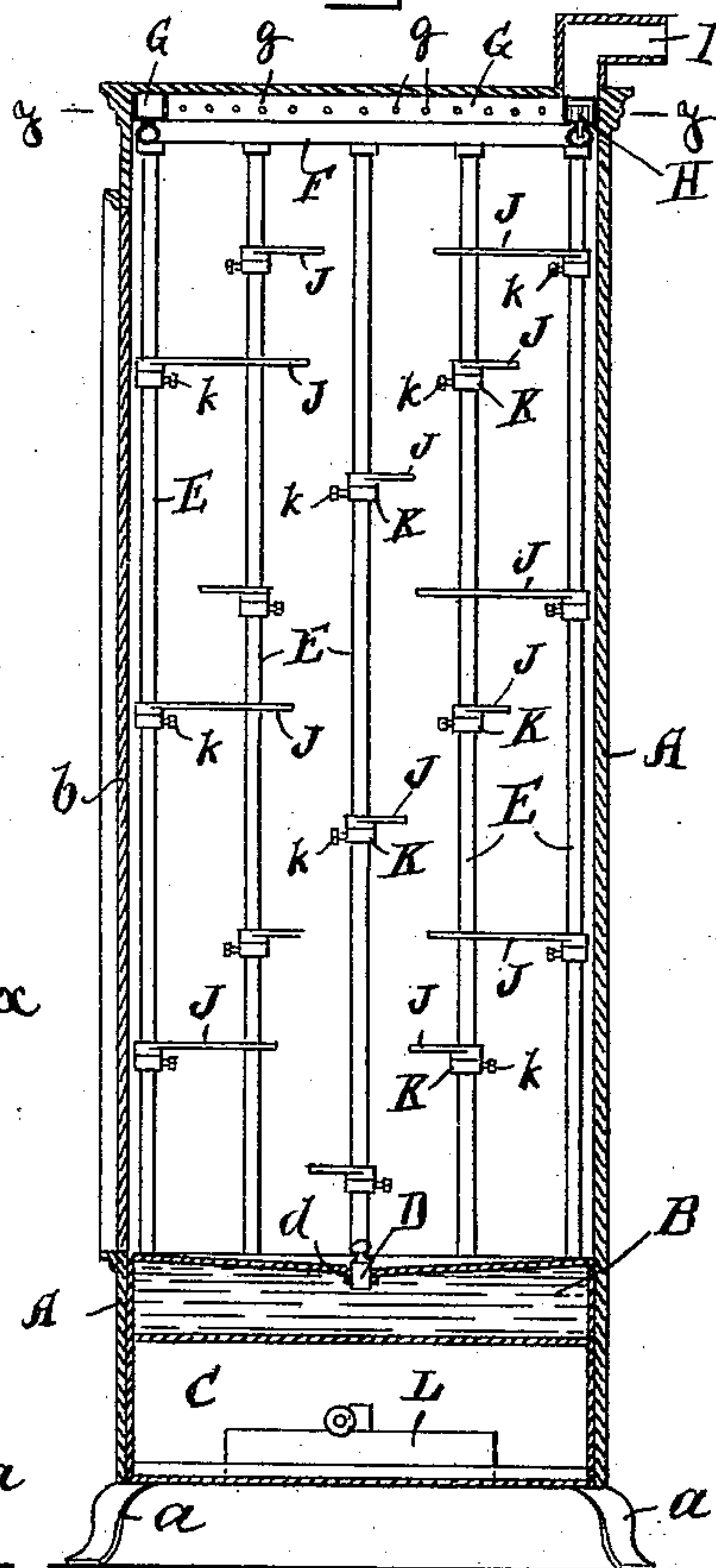


Fig. 3.

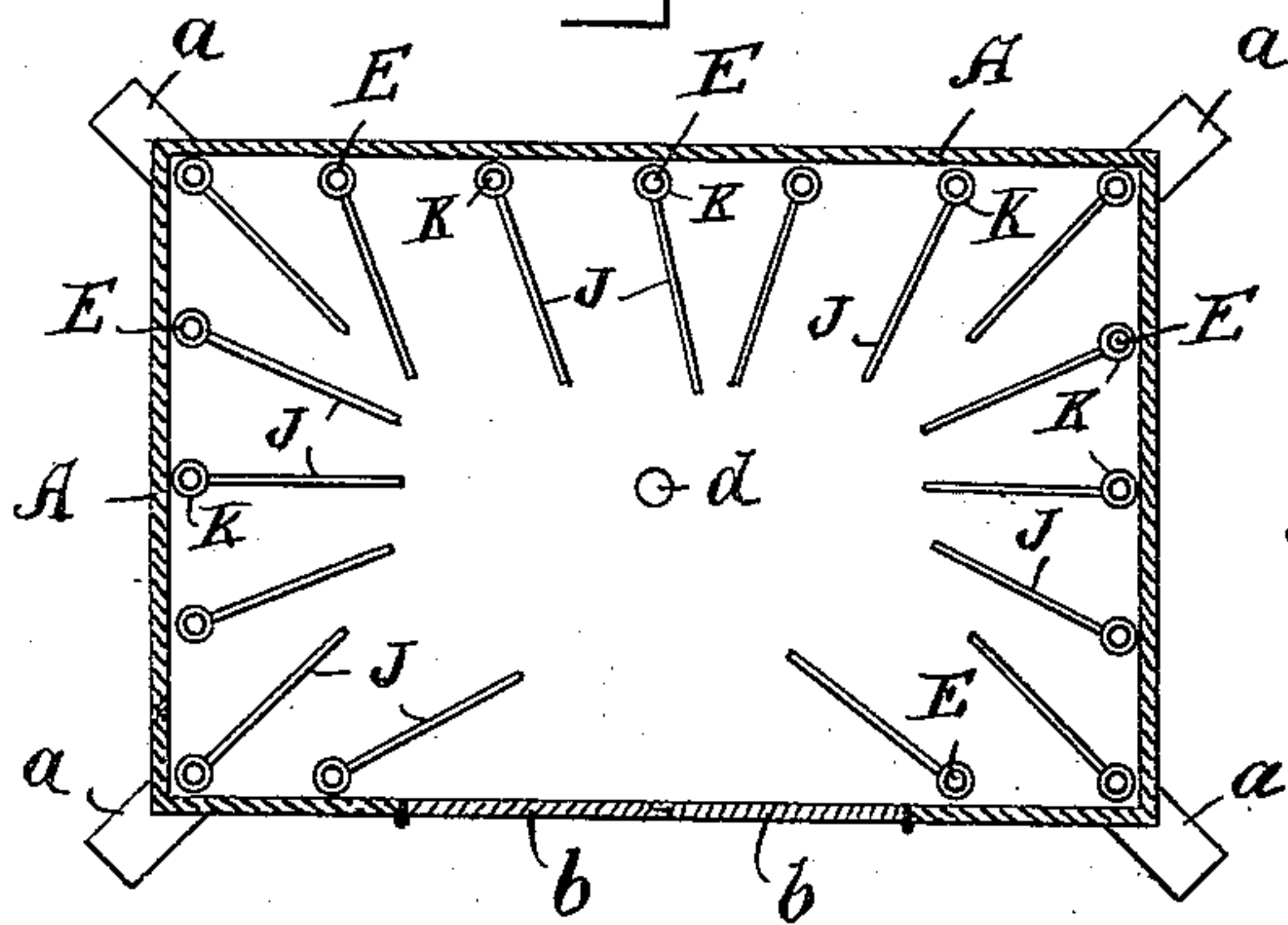
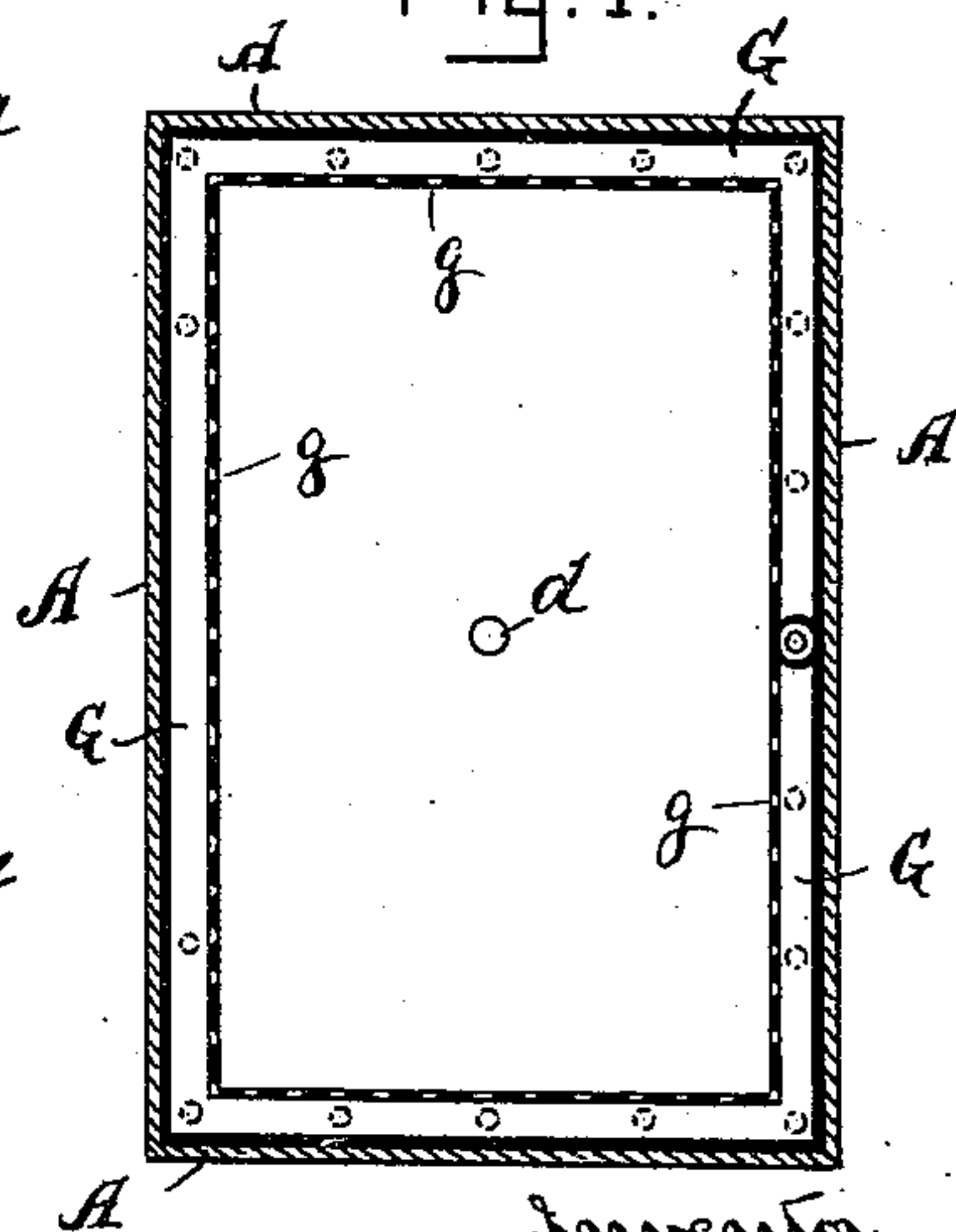


Fig.4.



Witnesses.

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UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 533,993, dated February 12, 1895.

Application filed December 16, 1893. Serial No. 493,851. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Clothes-Driers, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a drier that can be employed indoors for clothes and other such like articles.

The invention consists of a body or chamber divided into three compartments, viz:—a drying compartment, a water reservoir, and a lamp chamber, a series of pipes arranged within the drying chamber, said pipes extending from the water reservoir to a pipe at the upper end of the said drying chamber to which pipes are secured bars or rods to receive the clothes to be dried, and in certain details of construction as hereinafter fully described and pointed out in the claims.

Referring to the accompanying drawings:—

Figure 1— represents a longitudinal vertical section of a clothes drying apparatus embodying my invention. Fig. 2— is a transverse vertical section of the same. Fig. 3— is a horizontal section taken on line *x, x*, of Fig. 1. Fig. 4— is a similar section taken on line *y, y*, of Fig. 2.

A, represents an outer rectangular body or casing which may be of wood or other suitable material and preferably supported upon legs *a*. The front of this casing is provided with a door or doors *b*, that extend nearly the whole length of the front of the casing. In the lower portion of this casing is an inner metal casing divided into two other compartments viz: a water reservoir B, and a lamp chamber C. The upper surface of the water chamber is formed converging toward the center and has a hole *d*, therein so that when it is desired to fill the water chamber the water is poured on the upper surface and runs down and through the opening *d* into the water reservoir which is then closed by a plug D. To the upper surface of this water reservoir are secured pipes E, that extend to near the top of the casing and are there connected to a pipe F, that extends around the said casing. The pipe F is at about the center of its rear side fitted with a pop safety valve H which

discharges directly into a pipe I, attached to the top of the casing A, and which leads to a flue or other place.

Upon each of the upright pipes E, are a number of arms J, that are free to be turned in any desired direction and each of them being adjustable as to height by means of a collar K, and set screw *k*.

Between the under side of the top of the casing and the pipe F, is fitted a trough or gutter G, having a series of small holes *g*, around its inner side to communicate with the interior of the casing A. The trough or gutter is also in communication with the pipe I, to allow the vapor from the clothes to pass off to the flue, and in order to carry off any products of condensation that may accumulate in said trough or gutter one of the pipes E, is extended up and connected to said trough. The lower end of said pipe extends down nearly to the bottom of the water reservoir to prevent steam from the reservoir entering same.

In the lamp chamber C, is or are arranged one or more lamps L.

The operation is as follows:—The clothes to be dried are hung upon the arms J, and the lamp or lamps L, lighted, which causes the water in the reservoir to become heated and the steam passes up through the pipes E, thus highly heating the compartment in which the clothes are hung. The steam then passes through the pipe F at the top of the chamber and should the pressure become too great it will raise the pop valve H, and allow the steam to escape out of the pipe I. The vapor from the clothes that are being dried passes through the holes *g*, in the sides of the trough or gutter G, and passes through the pipe I, to a flue or other place. The steam from the reservoir B, as it passes up the pipes E, and through the pipe F will be condensed and will then pass down the pipes E into the reservoir B, there to be again converted into steam.

If desired in places where there is hot water service the pipes in the drying chamber might be connected therewith thus forming a portion of such hot water system; or if desired hot air might be employed instead of steam.

What I claim is—

1. A clothes drier consisting of an outer

casing in the lower portion of which is arranged a water reservoir, and a lamp chamber, a series of vertical pipes connected at their lower ends to the top of the reservoir, and at their upper ends with a horizontal pipe extending around the top of the casing, and means for carrying off the steam substantially as set forth.

2. A clothes drier consisting of a drying compartment, a water reservoir and a lamp chamber, a series of vertical pipes arranged within the drying chamber, said pipes extending from the water reservoir to a pipe at the upper end of the drying chamber, a trough or gutter above said pipe, and rods or bars secured to the vertical pipes substantially as set forth.

3. A clothes drier consisting of a drying chamber A, water reservoir B, lamp chamber C, vertical pipes E, supporting rods or bars J,

a horizontal pipe F, trough or gutter G, and a safety valve H, all arranged and operated substantially as set forth.

4. A clothes drier consisting of a drying chamber, a series of vertical pipes arranged therein and connected at their lower ends with a water reservoir and at their upper ends with a pipe extending around the top of said drying chamber, and rods or bars secured to said vertical pipes as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 17th day of February, A. D. 1893.

HOSEA W. LIBBEY.

Witnesses:

WINIFRED G. KERWIN,
EDWIN PLANTA.