

W. McLUCAS:  
Sad-Iron Heater.

No. 94,427.

Patented Aug. 31. 1869.

FIG. 1

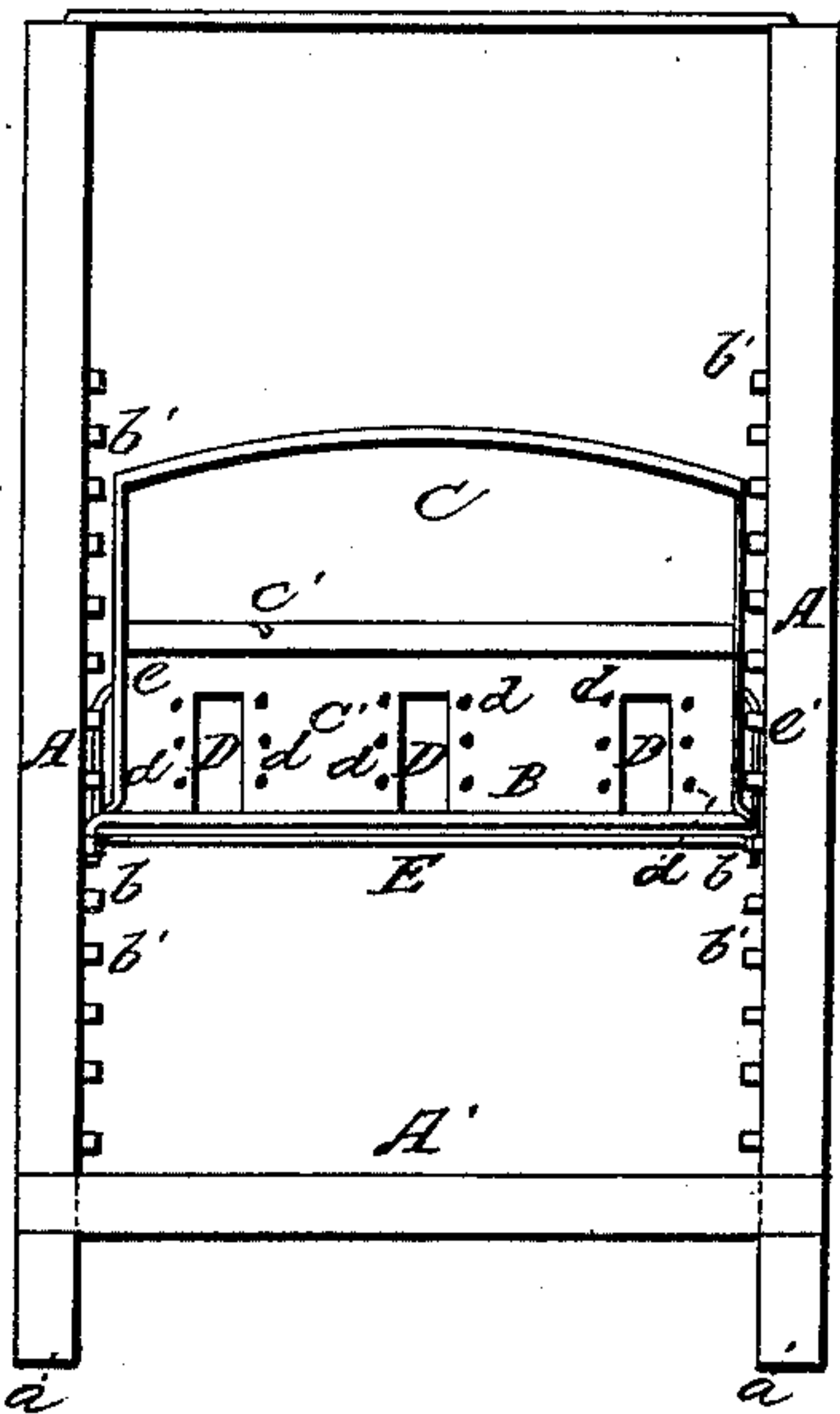


FIG. 2

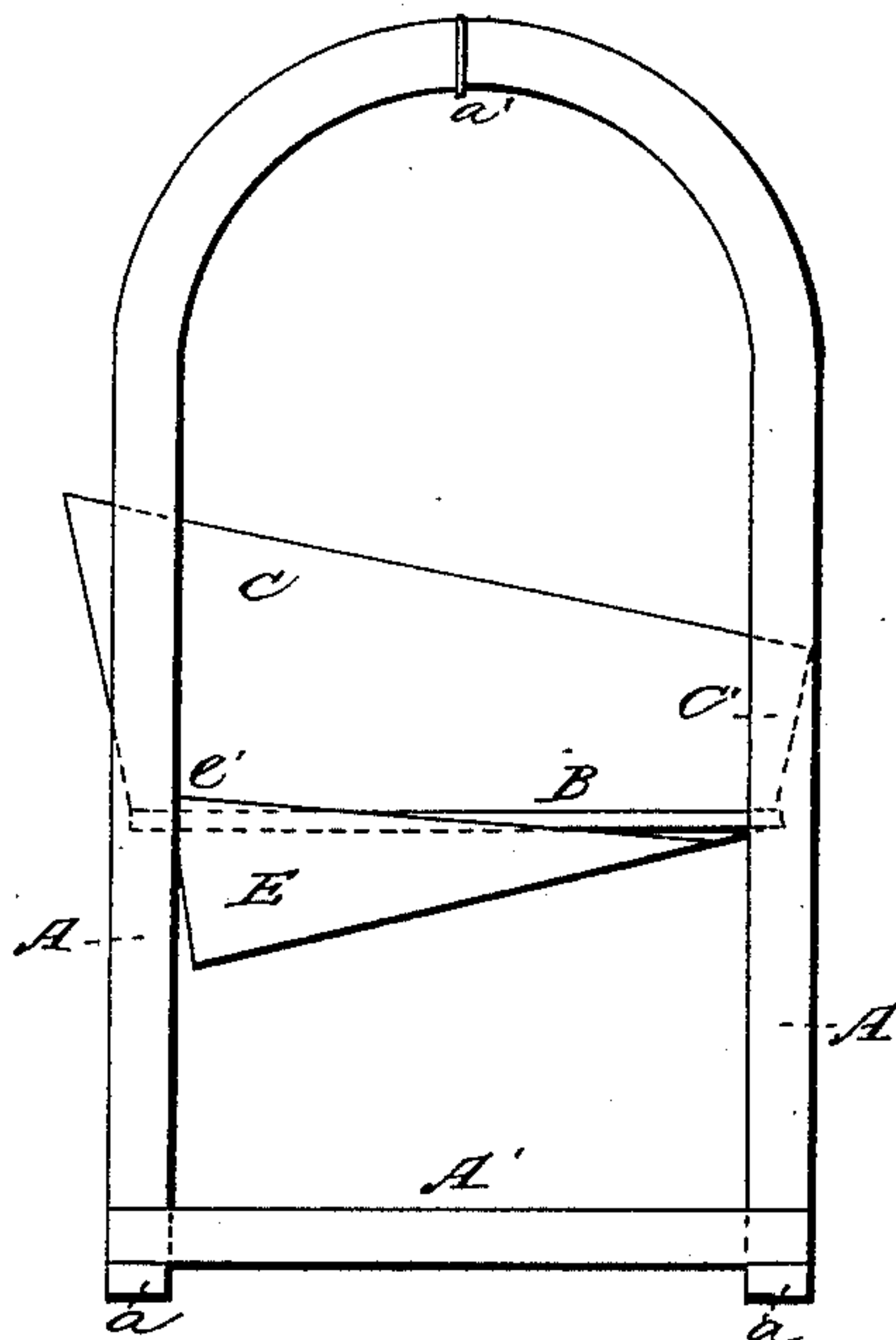


FIG. 3

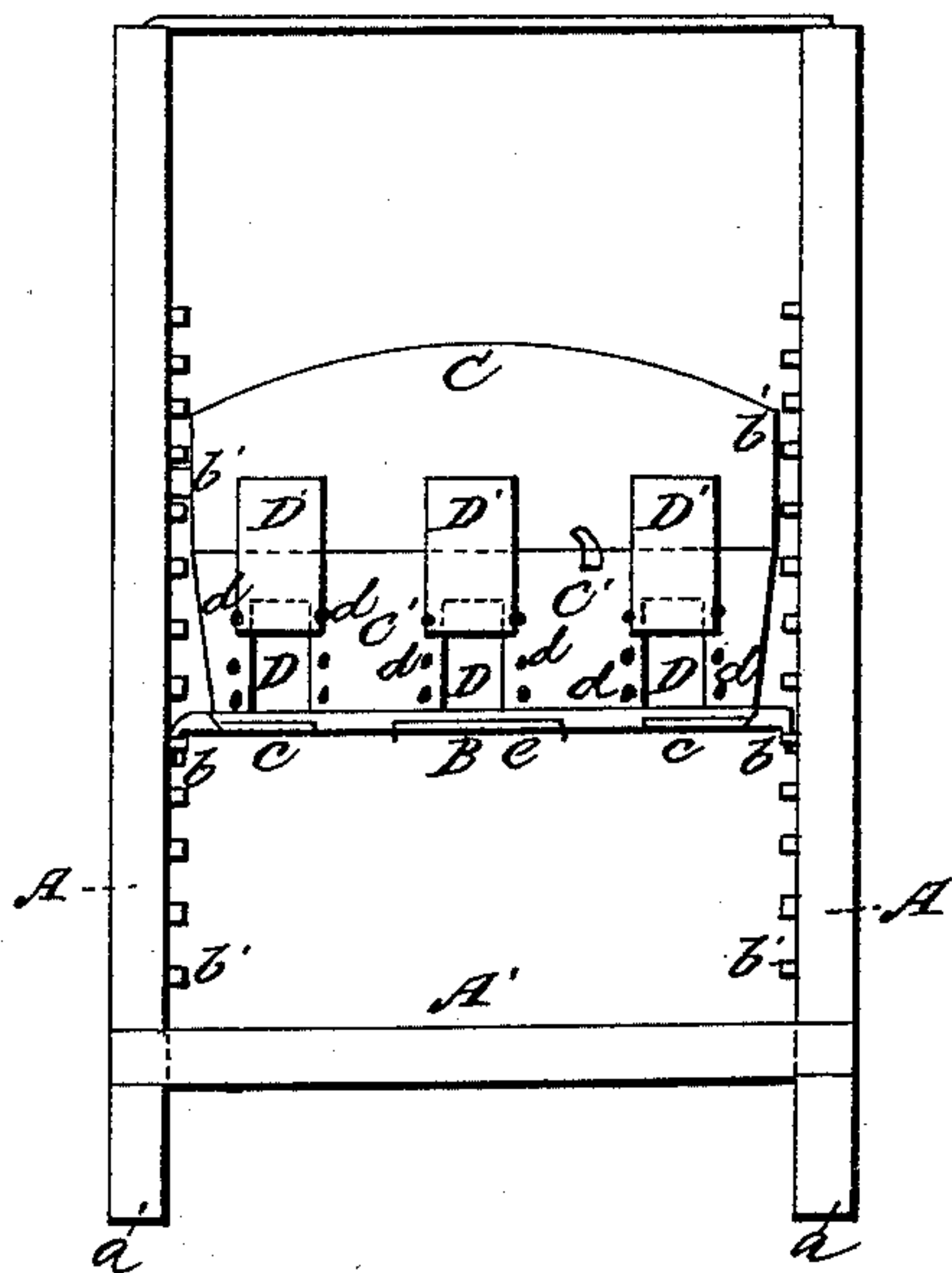
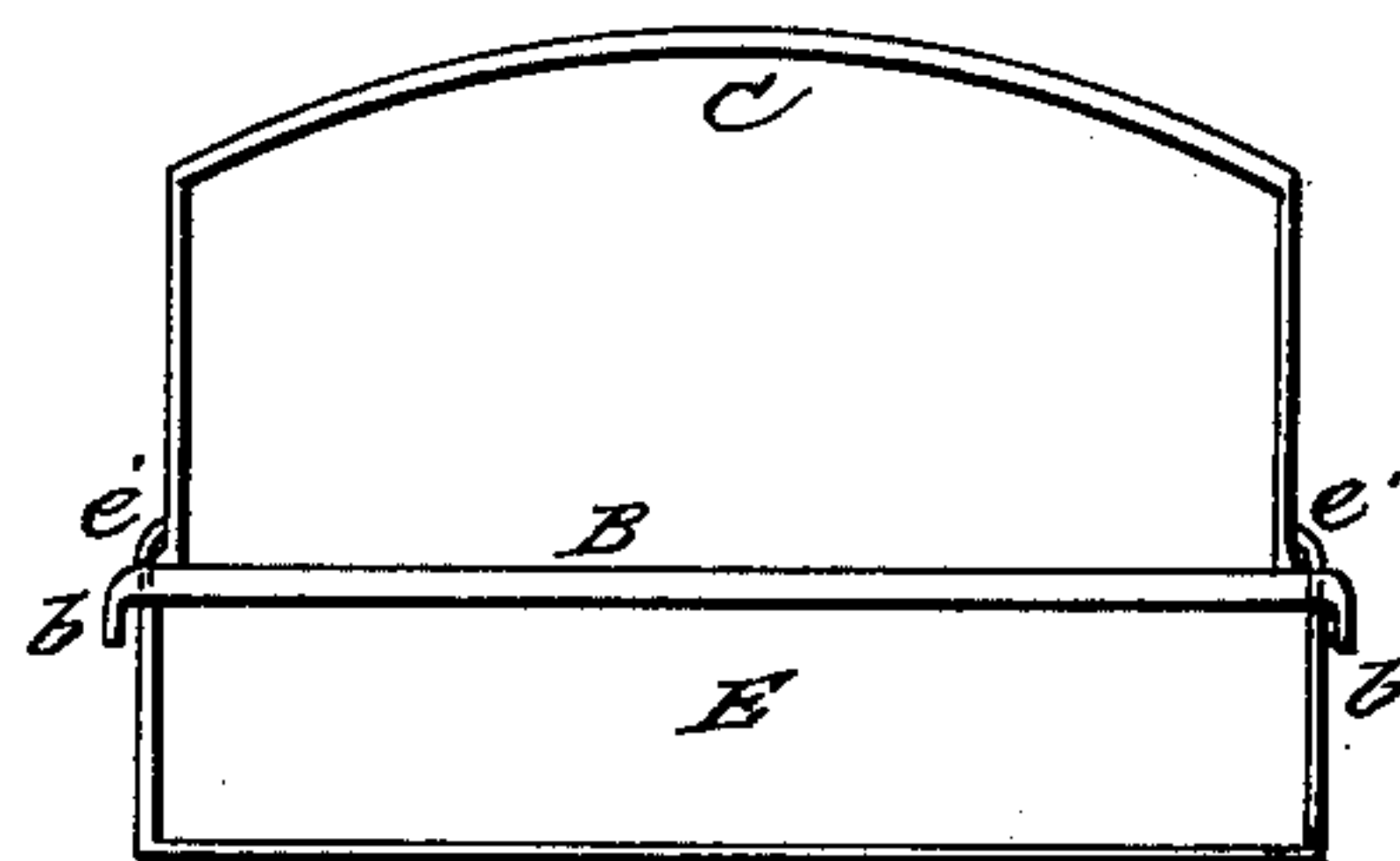


FIG. 4



WITNESSES:

Edwin James  
H. G. Holmead

INVENTOR:

William M<sup>c</sup>Lucas  
per J. E. J. Holmead  
Attorney

# United States Patent Office.

WILLIAM MCLUCAS, OF WOOD GROVE, OHIO.

Letters Patent No. 94,427, dated August 31, 1869.

## IMPROVEMENT IN SAD-IRON HEATER-OVENS.

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, WILLIAM MCLUCAS, of Wood Grove, in the county of Morgan, and State of Ohio, have invented certain new and useful Improvements in Sad-Iron Heaters, which I call "The Great American Iron-Heater;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and making part of this specification, in which—

Figure 1 is a front view of the heater, with the lower reflector up.

Figure 2 is a side view of the heater, with the lower reflector down.

Figure 3 is a rear view of the heater.

Figure 4 is a front view of the upper and lower reflectors, the latter being extended.

The object of my present invention is to furnish a portable sad-iron heater, wherein the irons can readily be heated, and always kept smooth and clean.

The nature of my invention consists in securing, in an open cast-iron frame, consisting of four standards or uprights firmly connected, a flat metal plate. Each of these standards is cast with a series of staples, and the plate with a hook at each corner. The plate is inserted at right angles to the uprights, and is firmly held by the staples and hooks.

Thus it will be observed, that the plate is secured, as it were, in purely adjustable bearings, the distance of the same from the floor being regulated at pleasure, and by means of which the heater can be readily made to accommodate itself to the height of the grate, or other open fire.

This plate is provided with two reflectors, one above and one below, the former being stationary, and the latter hinged, so as to be opened and closed at pleasure. The upper reflector is provided with a hinged back plate, by means of which every facility is afforded for introducing the irons, without either moving the heater or bringing the hand in uncomfortable contact with the fire.

In this hinged back plate is cut a series of oblong slots, through which protrude the handles of the irons, and by means of which the same are prevented from being unduly heated.

These slots are furnished with sliding doors, by means of which they can be closed when the device is intended to be used for other purposes than the heating of sad-irons.

This heater is also admirably adapted for the purposes of baking bread, &c., and roasting meats, in which case the lower reflector is opened, which insures the thorough heating of the bottom of the plate.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

The frame is of cast-iron, or any other suitable metal, and is rectangular in form. It consists of four uprights or standards A A, firmly united and held together by cross-bars A' A'.

These standards are cast in pairs, their lower ends being left perfectly free, so as to form independent feet *a a*, for the heater to rest on, and are united at their upper section by circular or bow-shaped connection *a'*.

B is a flat metal plate, and is provided with four hooks *b b*, one at each corner.

These hooks enter and are held in staples *b' b'*, arranged along the face of the uprights A A.

It will be observed that each of these standards is cast with a series of staples, *b' b'*, so that the plate B may be inserted and securely held at any desired point.

Instead of the staples *b'* and hooks *b*, the standards may be cast with a series of holes, and the plate with short straight pins, by which means the plate can also be safely secured, and its height adjusted at pleasure.

C is a reflector, and is made of tin, or any other sheet-metal, and is firmly secured to the upper surface of the plate B by bolts, rivets, or any other suitable means. This reflector C may be made of any desired form. The one represented, and which practical experience has shown to be admirably adapted for the purpose intended, is in the shape of the ordinary buggy-top. The sides are straight and nearly parallel to each other, their upper surfaces tapering from their forward toward their rear end, while its top is arched in form, and slightly circular.

The rear end or back of this reflector consists of a plate or door, C', firmly hinged or pivoted at *c*, and which is securely fastened by means of a hook, *c'*.

In this plate C' is cut a series of oblong slots, D D. Three are shown in the drawing, but, of course, they can readily be multiplied at pleasure. As they are intended for the handle of the sad-iron to protrude through, to prevent the same from becoming unduly heated, their number will be regulated by the size of the heater and number of irons used.

These slots or openings D D are closed by means of sliding doors D' D', working in suitable bearings *d d*, arranged along the sides of the slots or openings.

E is a movable reflector, and is so secured in suitable hinged bearings *e*, at the rear of the plate B, that it can be opened, as shown in fig. 2, or closed, as shown in fig. 1, at pleasure. This reflector E, like the reflector C, is made of sheet-metal, and may be of any desired shape. I usually construct it with angular or tapering sides and a flat bottom. The upper and forward points of the sides are turned down at right angles to the same, so as to furnish lips *e' e'*. When the reflector E is opened, these lips *e' e'*, resting on the plate B, support the reflector and hold it in proper position, as shown in fig. 4.

From the foregoing description, the operation of the



heater will be readily understood. When intended for the purpose of heating sad-irons, the reflector E is closed and fastened up against the bottom, as shown in fig. 1, where it can be conveniently secured by means of a hook, pin, or any other like simple device. The heater is then placed before a grate or other open fire, and by means of the staples and hooks the plate and reflector can readily be so adjusted as to suit the height of the fire.

When it is desired to either introduce or withdraw the irons, you have simply to unfasten the hook e, and the door or plate O' is opened, while simply by elevating the sliding doors D', you have the slots D D all opened for the handles to pass through, whereby they are prevented from being unduly heated.

When it is desired to use the heater for culinary purposes, such as baking, cooking meats, &c., the lower reflector is opened, which throws the hot air against the bottom of the plate B, which soon becomes heated to the proper degree. The articles to be baked or cooked are introduced from the rear through the opening covered by the door or plate C'.

The great advantages of this heater will readily sug-

gest themselves to any one. It is cheap, durable, and by means of its adjustable feature, can be so arranged as to operate most successfully before any open fire.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent of the United States, is—

1. The uprights or standards A A, when they are provided with a series of staples, b' b', plate B, and reflector C, when the latter is provided with a hinged back, C', with or without the openings or slots D D and doors D' D', substantially as described.

2. The uprights or standards A A, having staples b' b', plate B, stationary reflector C, and movable reflector E, when the same are so combined and arranged as to operate substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM McLUCAS.

Witnesses:

ERASTUS SEARS,  
J. B. McLUCAS.