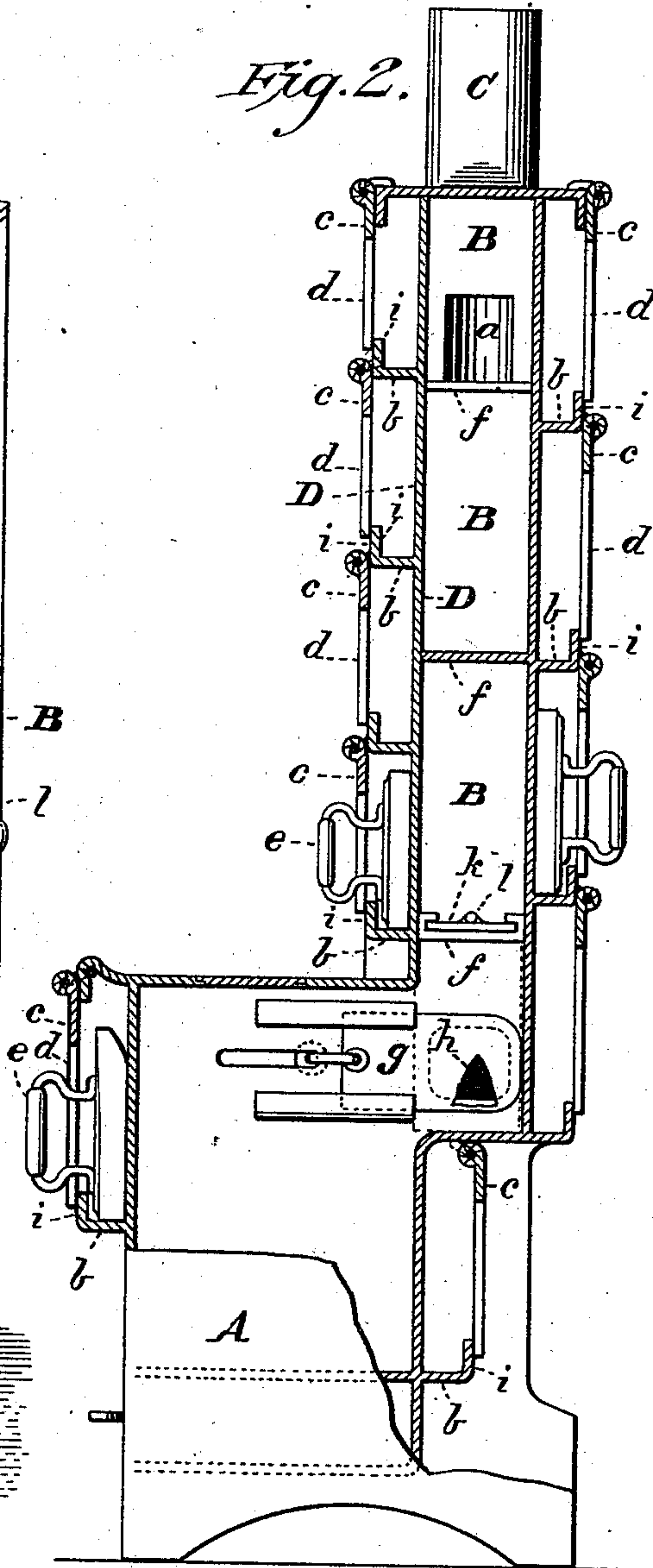
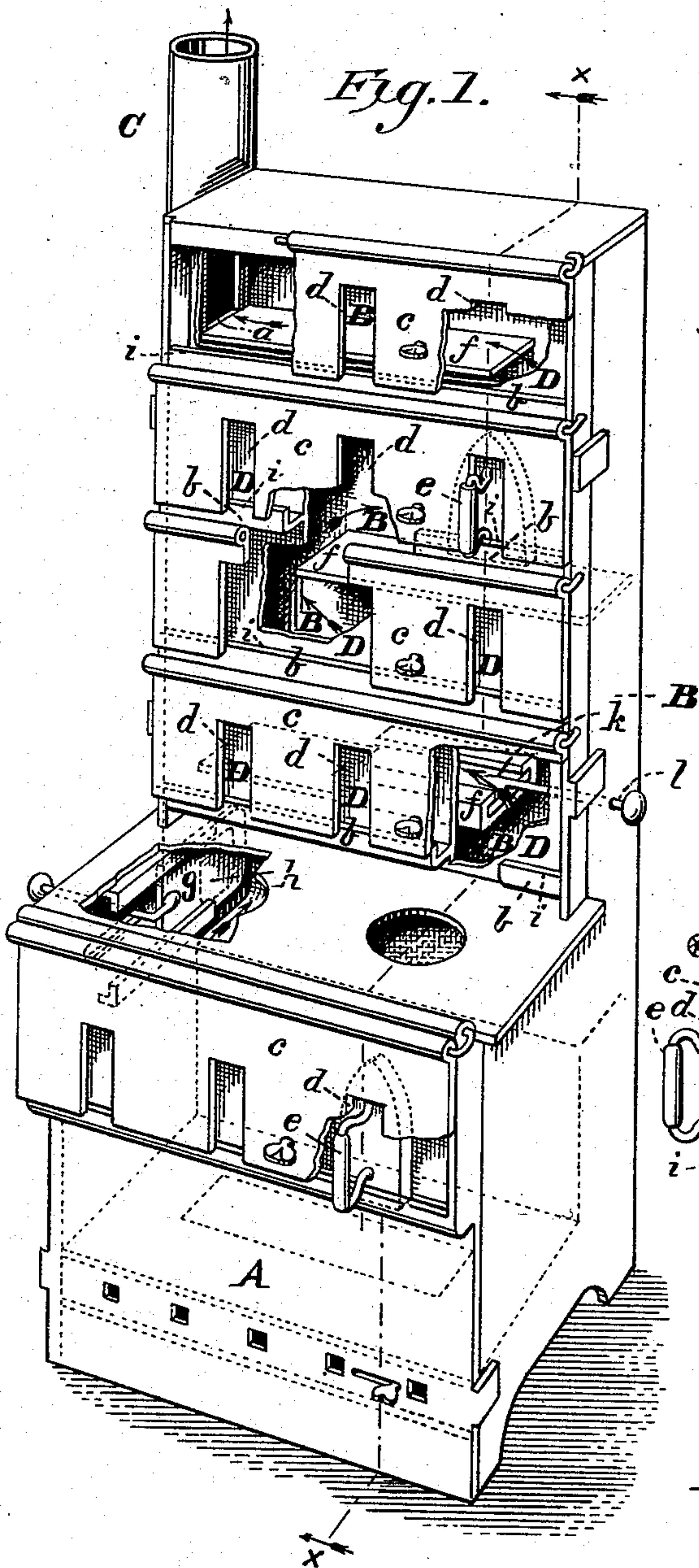


(No Model.)

D. E. BANGS.  
SAD IRON HEATER.

No. 412,585.

Patented Oct. 8, 1889.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

DAVID EGBERT BANGS, OF MEDFORD, MASSACHUSETTS.

## SAD-IRON HEATER.

SPECIFICATION forming part of Letters Patent No. 412,585, dated October 8, 1889.

Application filed May 31, 1889. Serial No. 312,792. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID EGBERT BANGS, a citizen of the United States, and a resident of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Sad-Iron Heaters; 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 this invention, and is a perspective view broken away in several places to show the interior. Fig. 2 is a vertical section taken where the broken line *xx* is marked on Fig. 1. This invention relates to heaters for sad-irons; and it consists in the novel construction and combination of parts, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the base or fire-box of the stove, and B the heating-flue rising vertically from the back portion of the fire-box. This flue is quite narrow from before backward and wide from side to side, as shown.

C is the smoke-pipe, which rises at the side of the stove and bounds one side of the flue B, with which it communicates at the side near the top by the opening *a* and near the bottom by the lateral opening *h*.

D represents the plain front of the heater, which is provided with a series of transverse rests or shelves *b*, arranged one above the other to receive the irons to be heated. The intervals between the shelves form receiving-chambers, which are provided with gravitating doors *c*, hinged at their upper edges and having open end slots *d*, through which the handles *e* of the irons project when the doors are closed. The back of the flue, which is also plain and parallel to the front wall, may be provided, like the front, with receiving-shelves and doors to increase the capacity of the heater. The hollow vertical flue, which separates the front and back receptacles for the irons, is constructed of thin sheet metal, and

said flue measures about one and a half inch between its front and rear walls, in order to readily effect the radiation of heat to both front and back receptacles. The flue is provided with a series of transverse horizontal partitions or guides *f*, arranged one above the other, said partitions having their opposite ends alternately open, in order that the heated air and products of combustion shall be carried in a zigzag manner across the flue, when the damper *g* is closed to cut off direct communication between the stove and lower opening *h* of the smoke-pipe. The front and back of the base of the stove are usually provided with shelf-receptacles and slotted doors for sad-irons.

When it is desired to cut off communication between the heating-flue and the base, as in starting the fire, a damper *k*, operated from the outside by rod *l*, is drawn across the open end of the lower partitions of the flue, and the side damper to the smoke-flue is opened to afford direct communication with the chamber below the lower partitions. The doors which close the sad-iron receptacles being hinged above, are retained in closed position by their own weight and are provided with suitable handles, whereby they may be raised. The sad-irons are placed in rows in their receptacles, point upward, and rest by their broad ends upon the shelves. The faces of the irons in the back receptacle rest against the back of the flue, and the faces of those in the front section rest against the front wall D of the flue. The irons are prevented from slipping out of position by the guard-flange *i* extending along the front of each shelf. This guard is usually formed by bending up the metal of the shelf in front, so that a groove of sufficient width to accommodate the thickness of the irons is formed. The slotted doors provide for the outward projections of the handles of the irons, in order that they may not become heated to any great extent.

The heater-flue may be attached to any stove, the smoke-pipe being connected with the chimney or extended through the window.

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



1. The sad-iron heater consisting of the fire-box having the central flue and front and rear receiving-chambers, said central flue having compartment-chambers opening alternately at opposite ends, and the slotted doors hinged at the open sides of the receiving-chambers, substantially as set forth. 20
2. The sad-iron heater consisting of the compartment or subdivided central flue, the front and rear walls of which are provided with shelves having at their forward or outer edges guard-flanges, and the drop slotted doors hinged at their upper edges to the top edges of said shelves, substantially as set forth. 25
3. The sad-iron heater consisting of the fire-box having the central flue, the front and rear receiving-chambers, said central flue having compartment-chambers opening alternately at opposite ends, the slotted doors hinged at their upper edges and at the open sides of said receiving-chambers, and the transverse horizontal partitions or guides, one having a damper closing the opening of the bottom one of said compartment chambers, substantially as set forth.

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

DAVID EGBERT BANGS.

Witnesses:

C. A. KEITH,  
WM. F. GRUBB.