(No Model.)

## J. KELLHOFER & J. J. EBERLE.

Open Fireplace.

No. 241,496.

Patented May 17, 1881.

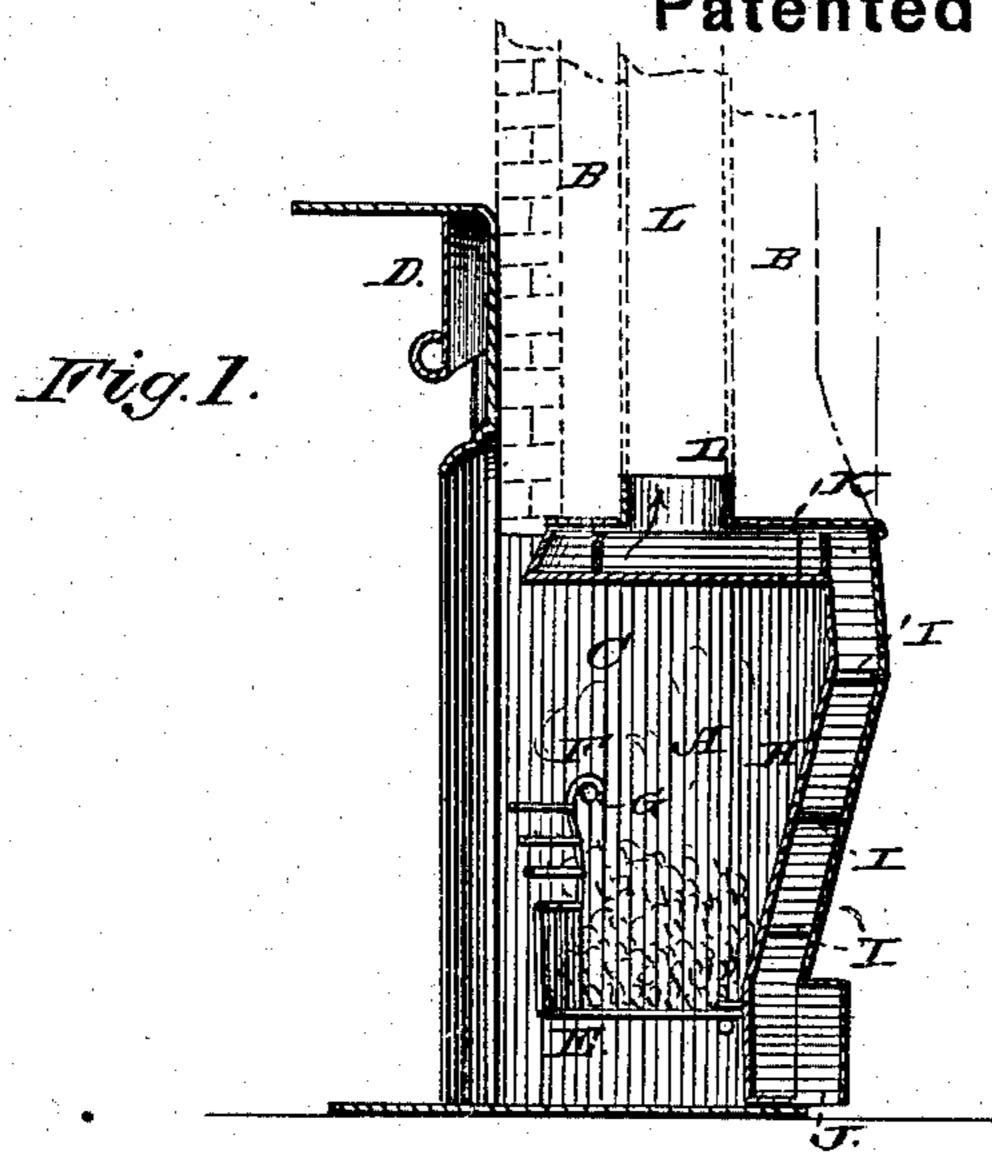


Fig. 2.

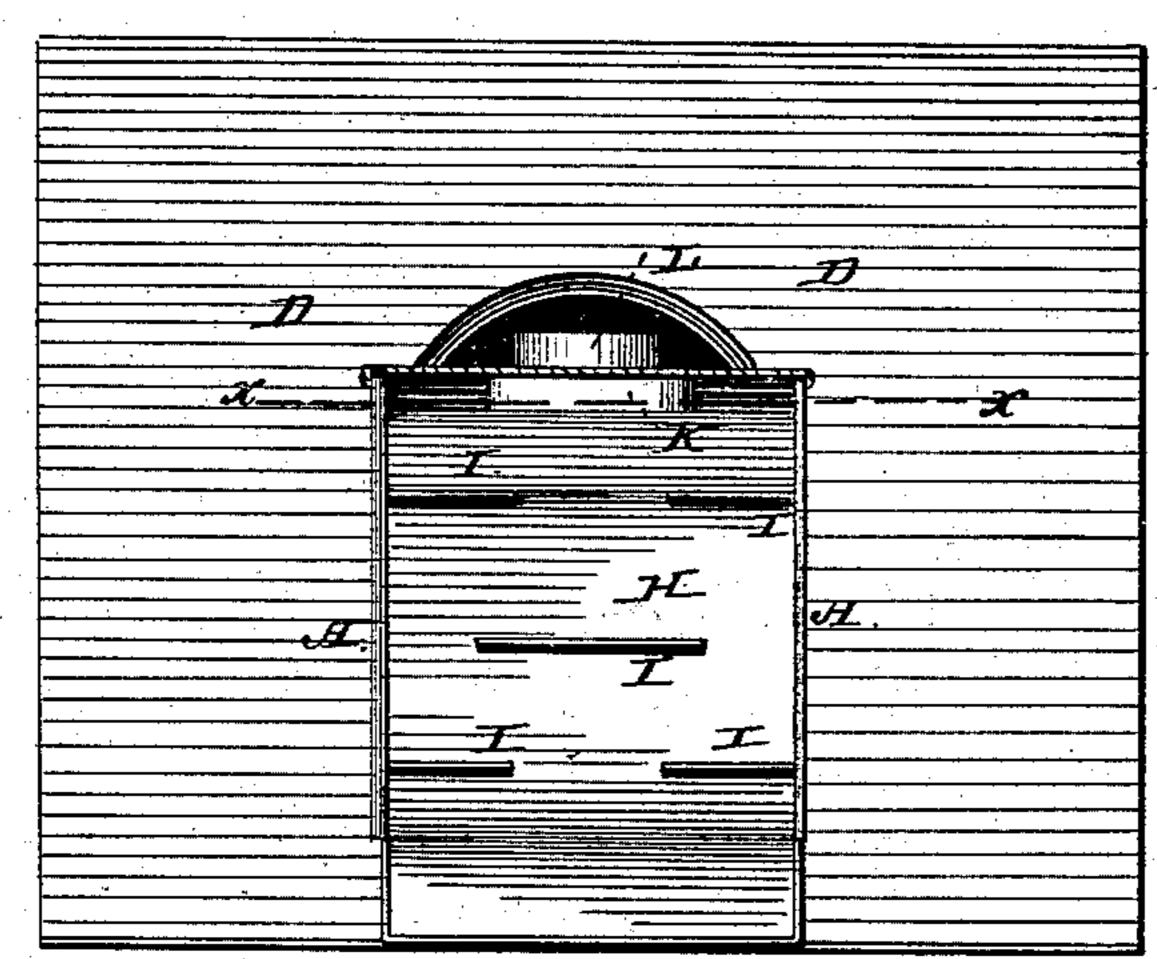
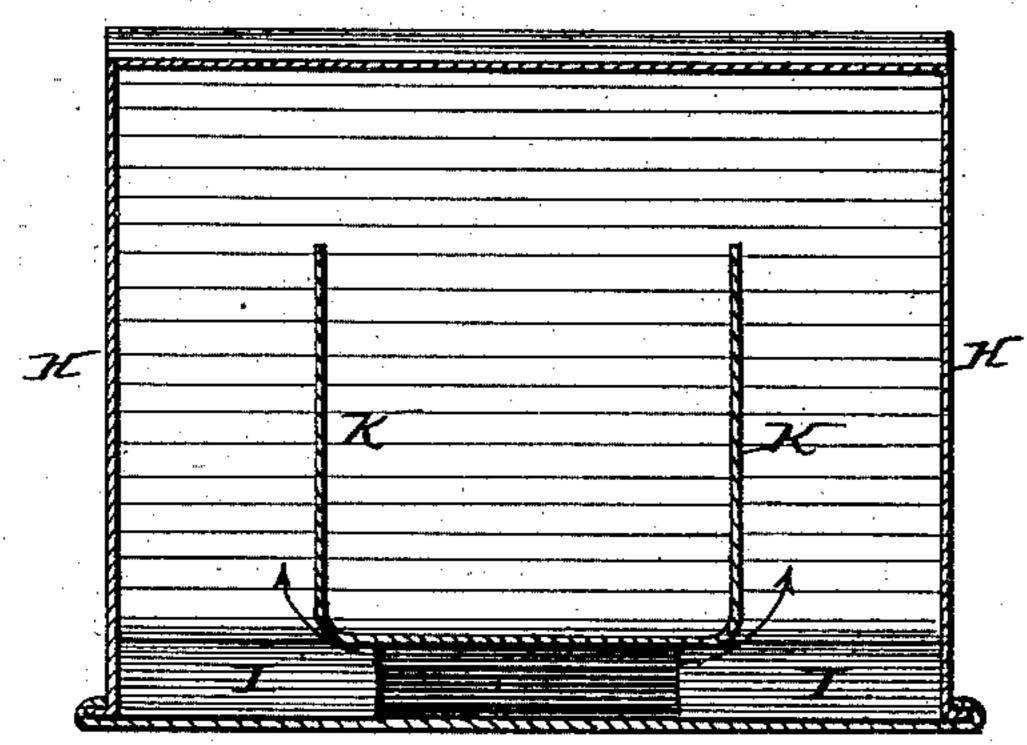


Fig. 3.



WITN'ESSES:

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JOHN KELLHOFER AND JOHN J. EBERLE, OF CHILLICOTHE, OHIO.

## OPEN FIRE-PLACE.

SPECIFICATION forming part of Letters Patent No. 241,496, dated May 17, 1881.

Application filed March 2, 1881. (No model.)

To all whom it may concern:

Be it known that we, John Kellhofer and John Jacob Eberle, of Chillicothe, in the county of Ross and State of Ohio, have invented 5 certain new and useful Improvements in Open Fire-Places; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a vertical sectional view. Fig. 2 is a rear view, part of the hot-air conductor being broken away to show the construction; and Fig. 3 is a section on line x x, Fig. 2.

Similar letters of reference indicate corre-

sponding parts in both figures.

This invention relates to that class of open grates or heaters which are provided with a double back or casing for the passage of a current of air, which is thus heated and conducted to an apartment on the upper floor, where it may be discharged through a register; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described with reference to the drawings, in which—

A A represent the brick wall, and B the

32 chimney.

Crepresents the fire-place, D the ornamental mantel, and E the fire basket or grate, which is provided with hooks F, by which it is hung and supported upon suitably-arranged studs G upon the sides of the fire-place.

H is a double casting or casing, adjusted at the rear end of the fire-place and forming the

back and top of the latter.

I I are transverse plates, arranged horizon-40 tally in the rear or vertical section of the casing H, to force the cold air, which is admitted through a slit or opening, J, at the bottom of

the casing, to ascend in a zigzag course. The upper or horizontal portion of casing H is provided with a vertical U-shaped partition, K, 45 serving to divide the current of air, as indicated by the arrows, before reaching the centrally-located flue or opening L conducting upward through the chimney to the register located in an upper apartment, which may in 50 this manner be heated.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of our invention will be readily understood. It is simple, inexpensive, effective in heating the upper apartment as well as the room in which the grate is located, and easily applied in fire-places of the

ordinary construction.

We are aware that it is quite common in hot- 60 air fire-places to provide the conducting-flues with horizontal plates to insure a zigzag course of the hot-air current; but we are not aware that the herein-described arrangement of the horizontal plates I, in combination with the U- 65 shaped vertical plate K, has been ever before known or used.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

The combination, with an open fire-place, of the double casing H, having opening J, horizontal plates I, and vertical U-shaped partition K, and the flue L, all arranged and operating substantially as and for the purpose here- 75 in shown and specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JOHN KELLHOFER.
JOHN JACOB EBERLE.

Witnesses:

WM. V. LAWRENCE, JOHN B. SMITH.