

HARRIS & ZOINER.

Cooking Stove.

No. 8,332.

Patented Sept. 2, 1851.

Fig. 1.

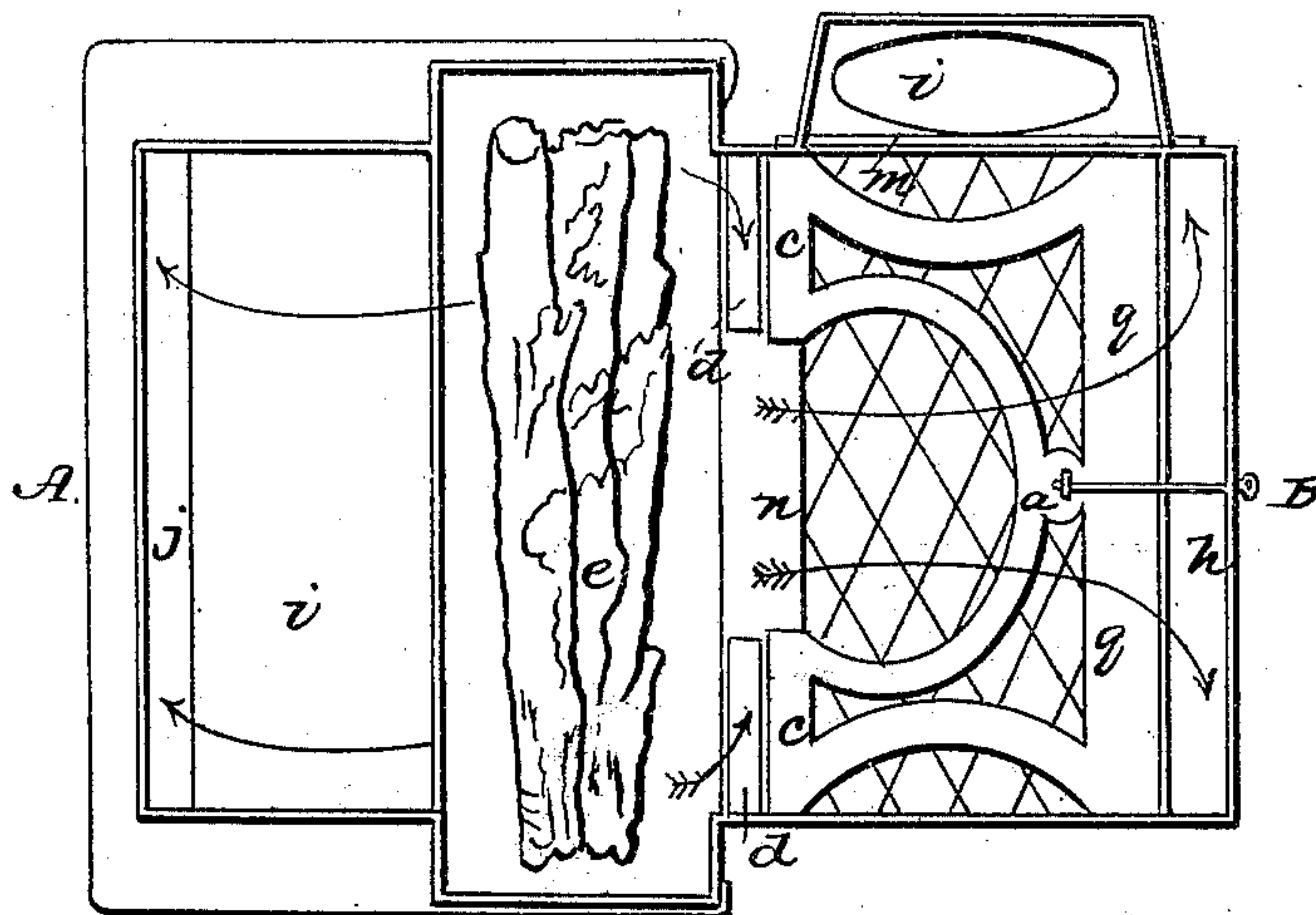


Fig. 2.

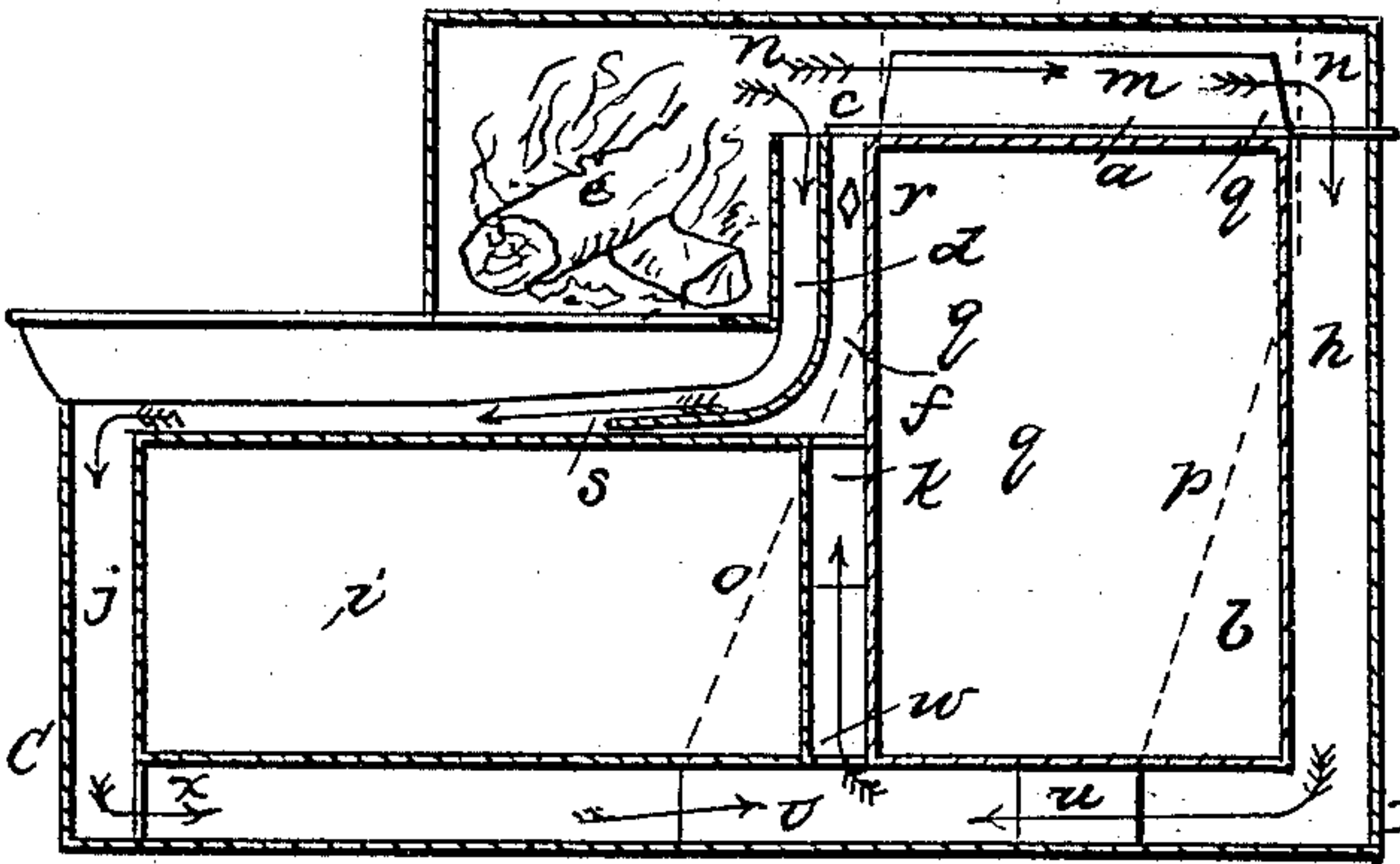


Fig. 4.

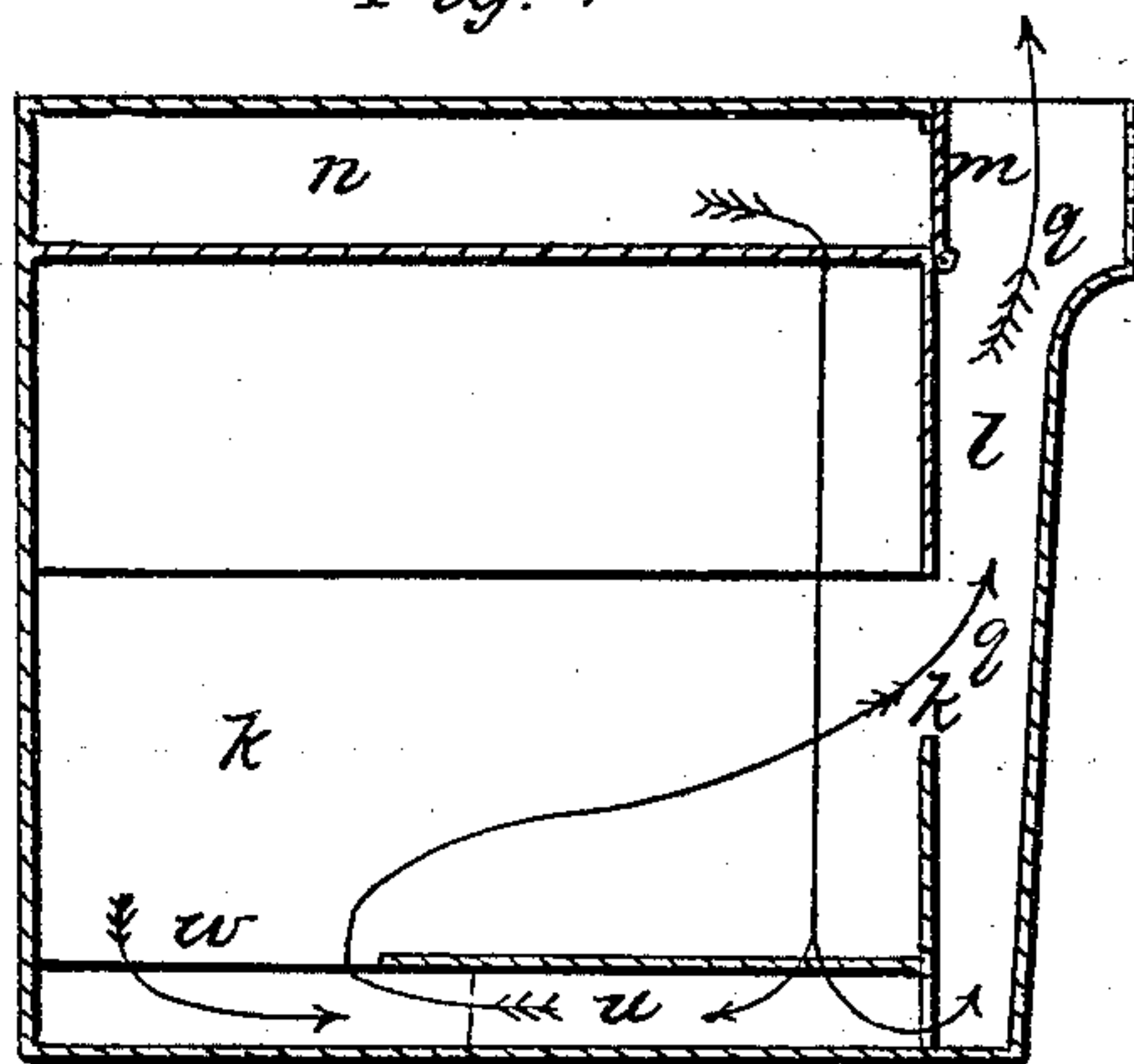


Fig. 3.

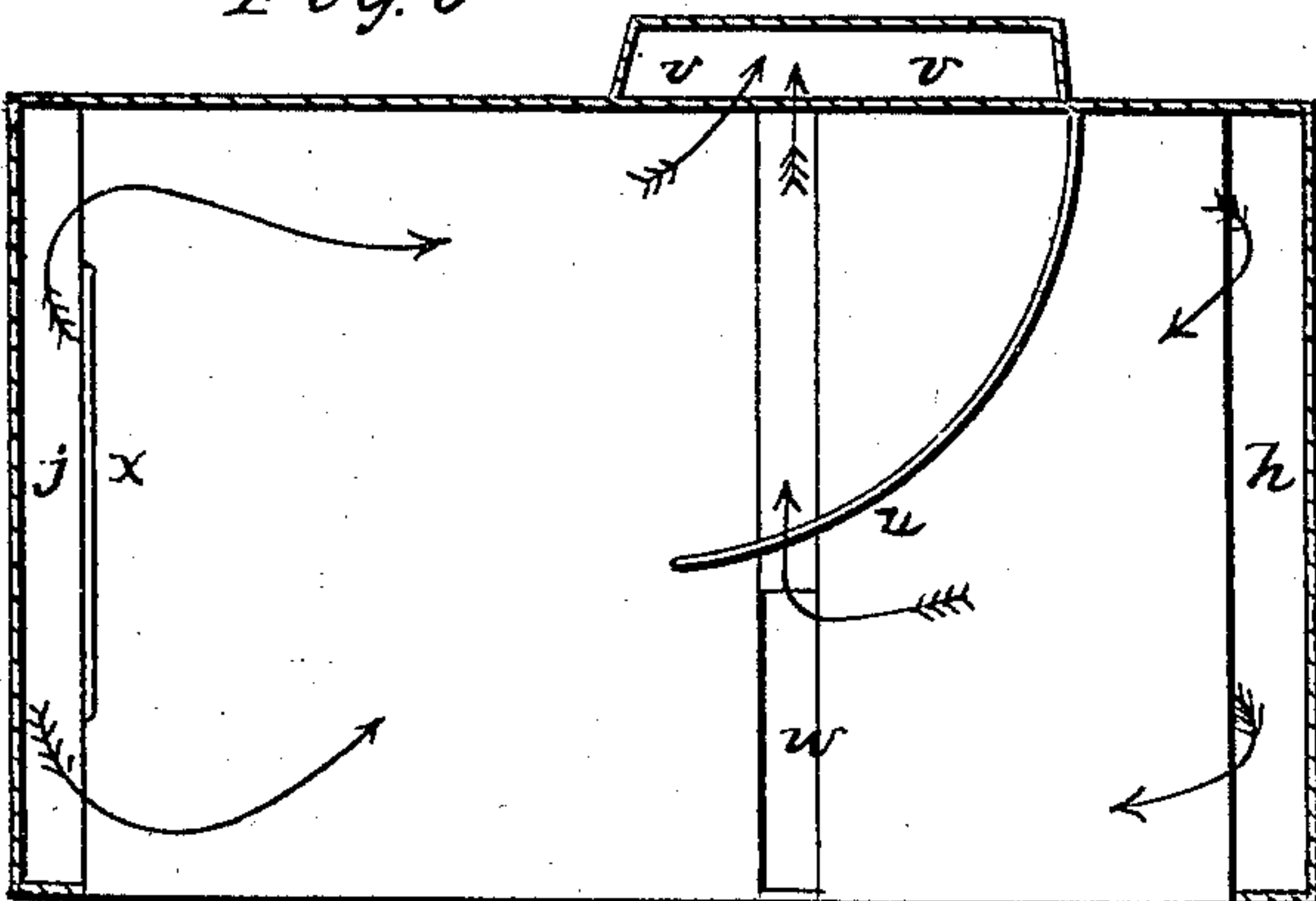
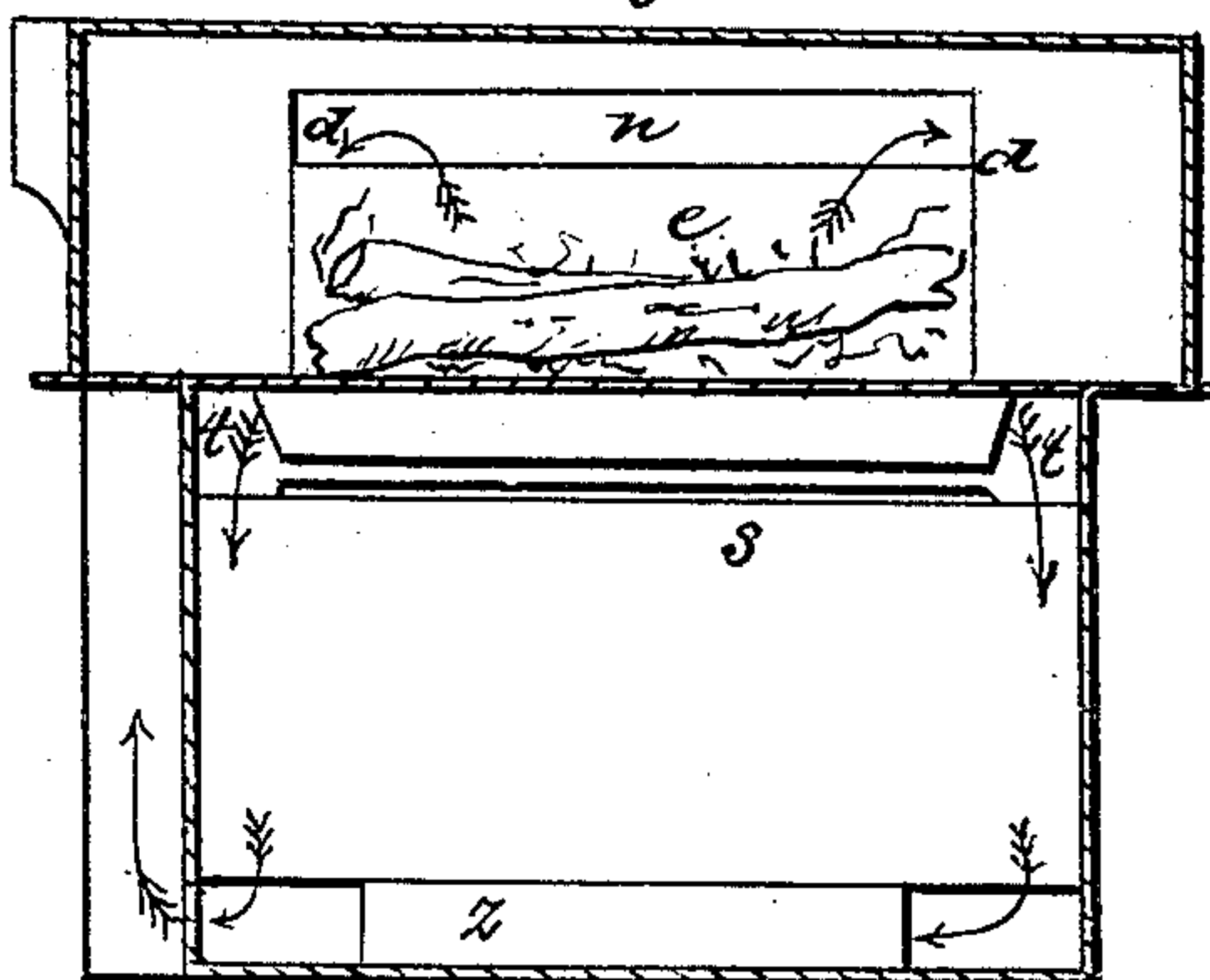


Fig. 5.



UNITED STATES PATENT OFFICE.

C. HARRIS AND P. W. ZOINER, OF CINCINNATI, OHIO.

DOUBLE-OVEN STOVE.

Specification of Letters Patent No. 8,332, dated September 2, 1851.

To all whom it may concern:

Be it known that we, CONRAD HARRIS and PAUL W. ZOINER, of Cincinnati, Ohio, have invented new and useful Improvements in Double-Oven Cooking-Stoves; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which drawings—

Figure 1 is a bird's-eye view, the stove top being removed, showing more especially the damper arrangement, as the damper (*a*) lies on the top of the back oven (*b*) and shown also in Fig. 2, the damper consisting of a single plate and having leaves (*c*) to project when desired over the diving flues (*d*) which are immediately back of the fireplace (*e*) and between said fire place and the cold-air chamber (*f*) and shown also in Fig. 2, which lies athwart the stove and arranged so as to protect the ovens from too great heat at the adjacent portion of their outlines. The damper has also a leaf (*g*) which extends athwart the stove, to project when desired over the descending flue (*h*) which is in the rear of the back oven. The damper, by the handle projecting through the rear plate of the stove can thus be made to cover the diving flues (*d*) or the descending flue (*h*) at pleasure and thus enable a person to use the front or the back oven as may be desirable. Fig. 1 also exhibits the fireplace (*e*) and (the drop and a portion of the hearth plate being removed) the top-plate of the front oven (*i*) and the front descending flue (*j*).

Fig. 2 is a central and vertical section in the line A, B, of Fig. 1. In this figure another peculiarity of our invention is shown and this consists in the flue (*k*) which lies between the front and back ovens and opens directly in the exit flue (*l*) of the stove. To effect this purpose the exit flue (*l*) is removed from the actual position it holds in the rear of stoves, and is taken up at the side of the stove as seen in Fig. 1. A damper (*m*) is made to close the communication between the boiler flue (*n*) and the exit flue as seen both in Figs. 1 and 2. The dotted lines (*o*) (*p*) and arrows (*q*)

indicate the mode shown in Figs. 2 3 and 5 of taking up the exit flue. The flue (*k*) is between the ovens and below the cold-air chamber (*f*) the bottom plate of which chamber is on a level with the top of the front oven, the said chamber projecting over the same and also under the hearth of the fire place; receiving cold air through openings (*r*) in the side plates of the stove and discharging the same at (*s*) into the flue (*t*) under and aside of the hearth shown in Figs. 5 and 2. The main draft of the stove passes by the boiler flue down the rear descending flue and thence along the bottom of the back oven, a portion passing up the flue (*k*) and into the exit flue (*l*) shown in Fig. 4 as described and the remainder passing around the curved plate (*u*) as seen in Figs. 2, 3, and 4 and being discharged at (*v*) as seen in Fig. 2 into the exit flue (*l*).

Fig. 3 is a horizontal section in the line, C, D, of Fig. 2 (the stove being turned bottom upward) and shows the curved plate (*u*), the opening (*w*) up to the flue (*k*) shown more clear in Fig. 4 and the plate (*x*) which is also seen in Figs. 2 and 5 and which forces the draft (this plate is also shown in Fig. 3) of the front flue (*j*) to the corners of the stove for the purpose of equalizing the heat, before the draft is led to the issue (*v*) to be discharged into the exit flue.

The drawings sufficiently illustrate in general the construction of the stove and as it assimilates in other respects to other double oven stoves, the front oven of which extend under the hearth, it is unnecessary minutely to describe parts and points not claimed.

Therefore having thus fully clearly and exactly described our joint invention and improvement in double oven stoves wherein the front oven extends under the fire-place or fire place and hearth as may be desired, what we claim therein as new and desire to secure by Letters Patent is—

1. The damper (*a*) constructed and arranged as described so that one or both ovens may be used at pleasure.
2. We also claim the flue (*k*) between the

ovens substantially as constructed and arranged to communicate directly with the exit flue (7).

3. We also claim projecting the cold air
5 chamber into the flue under the fireplace and there discharging the received air so as to protect the oven from being over heated at that point.

In testimony whereof, we have hereunto set our hands before two subscribing witnesses. 10

CONRAD HARRIS.

PAUL WILLIAM ZOINER.

Witnesses:

THOS. G. CLINTON,
LESTER OAKLEY.