

(No Model.)

I. A. SHEPPARD.
Damper for Cooking Stove.

No. 231,625.

Patented Aug. 24, 1880.

FIG. 2.

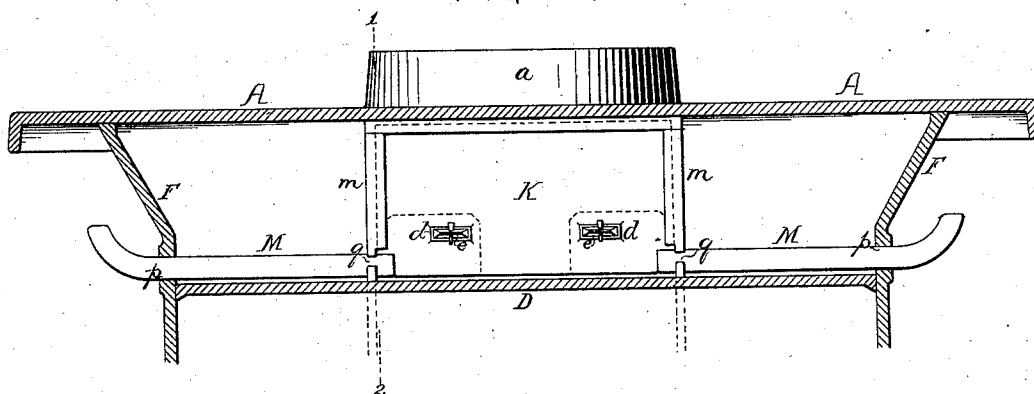


FIG. 3.

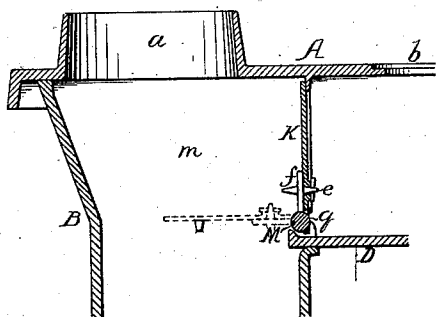


FIG. 5.

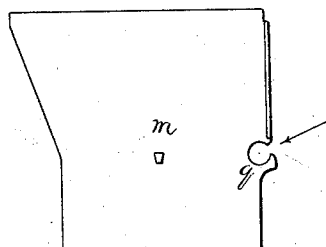


FIG. 4.

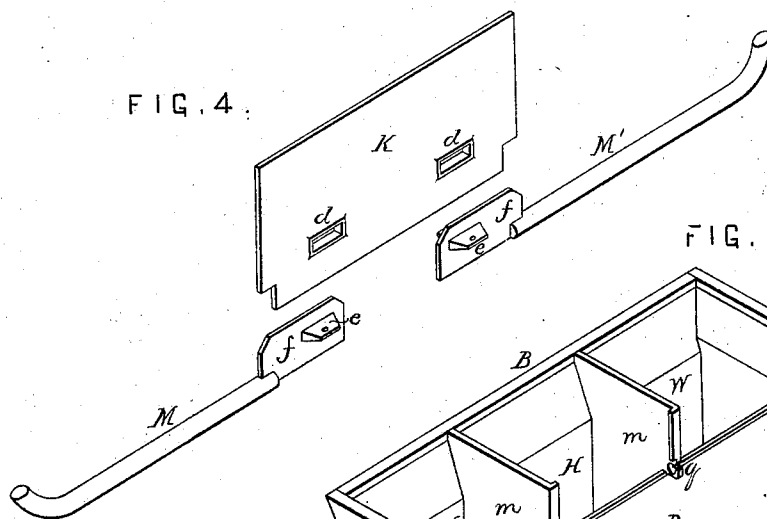
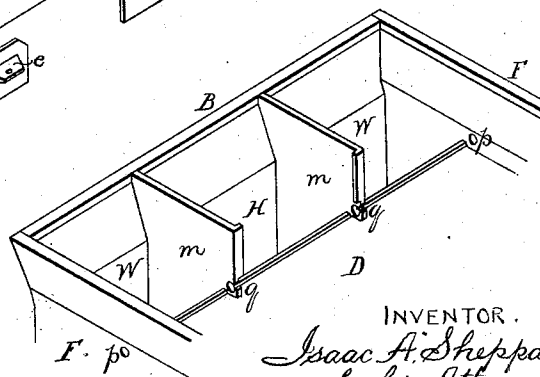


FIG. 1.



WITNESSES

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UNITED STATES PATENT OFFICE.

ISAAC A. SHEPPARD, OF PHILADELPHIA, PENNSYLVANIA.

DAMPER FOR COOKING-STOVES.

SPECIFICATION forming part of Letters Patent No. 231,625, dated August 24, 1880.

Application filed May 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, ISAAC A. SHEPPARD, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improvement in Dampers for Cooking-Stoves, of which the following is a specification.

My invention relates to the door or damper by which the passage of the products of combustion over and around the oven of a cooking-stove to the outlet is regulated; and the object of my invention is to so construct a door of this class and so combine it with operating-rods that the said door can be removed and replaced without disturbing the top plate of the stove.

In the accompanying drawings, Figure 1 is a perspective diagram of the upper and rear portion of a cooking-stove from which the top plate has been removed for the purpose of illustrating the parts to which my invention is applied. Fig. 2 is a vertical section of the rear portion of a cooking-stove with my improved damper; Fig. 3, a section on the line 1 2, Fig. 2; Fig. 4, a perspective view of the damper and operating-rods detached from each other; and Fig. 5, a portion of one of the stove-plates, showing the manner of hanging the damper-rods.

Referring to the perspective diagram, Fig. 1, from which the top plate, A, Figs. 2 and 3, has been removed, B is the rear plate of the stove; F F, the opposite side plates; D, the top plate of the oven; *mm*, plates which separate the diving-flues W W from the central vertical flue, H, all of which parts are common to ordinary cook-stoves, as is also a door or damper, on opening which the products of combustion can take a direct course over the oven to the central flue, H, and thence to the outlet branch *a*, Fig. 2, the said products, when the door is closed, being compelled to pass down the diving-flues, thence beneath the oven, and through a return-flue to the above-mentioned central flue, H. It is the peculiar construction of this door and its connections to which my invention relates.

An ordinary door, hung in the usual manner, must be put in place before the top plate of the stove is secured in position, and the removal of the door cannot be accomplished without detaching the top plate—a tedious operation, and one which involves the disturb-

ance of the entire structure. In order to obviate this difficulty I introduce the door K through the outlet branch *a* and hang it in the peculiar manner which I will now proceed to describe.

The said door K has two elongated slots, *d* *d*, one slot being adapted to a projection, *e*, on the flattened end *f* of a rod; M, and the other slot of the door being adapted to a similar projection on the flattened end of the rod M'. Each of these rods M M' has one bearing, *p*, Fig. 2, in a side plate, F, of the stove, and another bearing, *q*, in the edge of one of the flue-plates *m*, the latter bearing being formed by making through the plate a hole, which communicates with a slot extending to the edge of the said plate, so that the flattened portion of the rod can be introduced into the bearing in the direction indicated by the arrow, Fig. 5, and the rod then moved longitudinally until the round portion of the same occupies the bearing. Each rod is fitted into its place by passing it, curved end first, through one of the usual boiler-holes *b* in the top plate, A, the said curved end being introduced into its bearing *p* in one of the side plates, and then the rod is fitted to the other bearing, *q*, in the manner set forth. When the two rods are in their places the door K is passed through the outlet branch *a*, Fig. 2, and fitted against the flattened ends *f f* of the two rods, the projections *e* on which pass through the elongated openings of the door, after which small keys are driven through openings in the said projections, when the door will be firmly secured to the rods.

Whenever the door has to be removed to make way for a new one or for repairs the removal can be easily accomplished without disturbing the top plate, and after first withdrawing the keys from the projections *e* of the rods.

It will be observed that the flattened end *f* of each of the rods M M' has a projection, *e*, on each side. The object of this is to render each rod M or M' either right or left handed—that is to say, capable of use either on the right-hand side of the stove or on the left-hand side, thereby avoiding the necessity of having a special rod for each side.

I claim as my invention—

1. The combination, in a cook-stove, of the

outlet-opening *a*, the flue-plates *m*, and the bearings *q* therein with the door *K*, of such dimensions that it can be passed through the said outlet-opening, and with the rods *M M'*,
5 detachably secured to the door and adapted to the said bearings, all substantially as set forth.

2. The combination of the door having elongated openings *d d* with the rods *M M'*, each

provided with a flattened end, *f*, with perforated projection or projections *e*, as set forth. 10

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

ISAAC A. SHEPPARD.

Witnesses:

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HARRY SMITH.