

G. Hamel.
Cooking Stove.

N^o.
33,525. Fig. 1.

Patented Oct. 22, 1861.

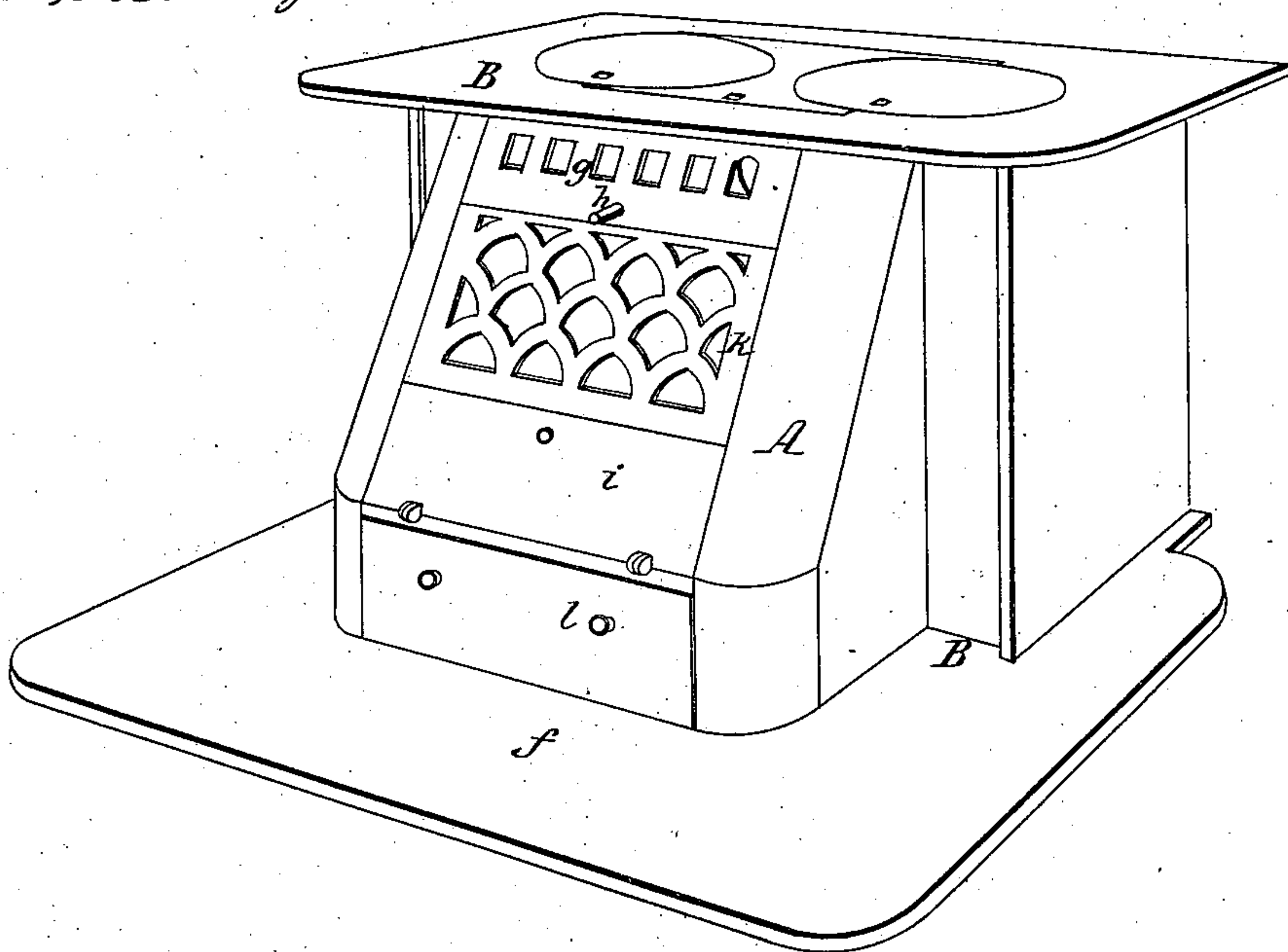
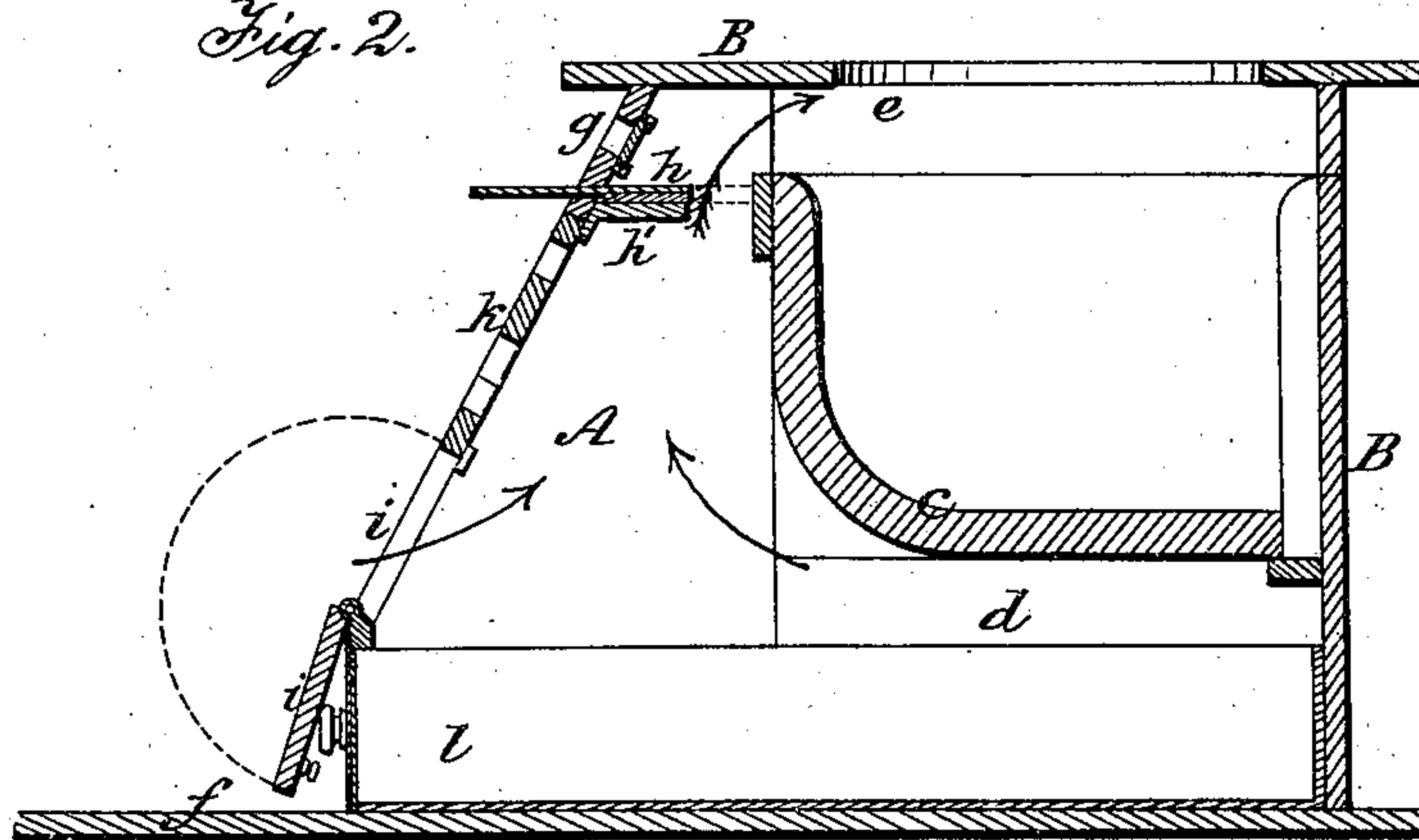


Fig. 2.



Witnesses.
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IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 33,525, dated October 22, 1861.

To all whom it may concern:

Be it known that I, GEORGE HAMEL, of Abington, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 a vertical section of the same applied to a cooking-stove.

Like letters indicate the same parts when in both figures.

The nature of my invention consists in the application of a permanently-fixed dust chamber or conductor to the grate-front of a stove, substantially in the manner hereinafter described, for the purpose of preventing the ash-dust which arises from the act of "raking the fire" from escaping into the room in which the stove is located by causing it to be conducted over the top of the fire to the direct-draft or chimney flue.

In the drawings, A is the dust-chamber permanently attached to the front of a cooking-stove B, of which latter *c* is the fire-grate; *d*, the ash-space; *e*, the direct-draft flue, and *f* the hearth.

The chamber A is formed by constructing the front plate of the stove to extend outward, so as to produce around the front of the grate *c*, ash-space *d*, and draft-entrances a close chamber A, communicating by an adjustable opening *g*, damper *h*, and door *i* with the interior and exterior of the stove, so that the draft-air may be directed either through the fire in the usual manner or over its upper surface, carrying with it the ash-dust which arises in raking the fire, or to cut off the fire-draft, as occasion may require. Part of the front plate of the said chamber A is in this instance inclined toward the top of the stove B, the slide-opening *g* and damper *h* being at the upper and the door *i* at the lower part of the same, as seen in the drawings. The part *k*, which is between the said slide and door, is made with a series of openings of an ornamental character fitted or closed with mica plates, so that the light of

the grate-fire may be seen through them. This middle part of the plate may be either fixed or made removable, so as to allow of the introduction into the chamber A of meat or other articles of food that may require to be cooked in front of the grate *c*.

Beneath the door *i* an ash-drawer *l* is adjusted to slide in and out beneath the grate to receive and convey the coarse ashes and cinders.

The damper *h* is adapted to slide upon a fixed plate *h'* in the chamber, so as to enable the operator to either open or close communication between the lower part of the chamber and the mouth of the direct flue *e*, as occasion may require.

Operation: Suppose it is desired to rake the fire. The operator closes the opening *g*, draws forward the damper *h*, and opens the door *i* to afford access with a poker to rake the fire, and the draft-air, entering through the opening of the door *i*, will now carry the ash-dust up over the top of the fire, through the damper-opening, into the direct flue *e*, and so prevent the escape of any ash-dust into the room. The raking being finished, the operator pushes back the damper *h*, so as to cause the air-draft to be directed through the fire in the usual manner. To "keep the fire over night," the door *i* is intended to be closed and the slide *g* opened, so as to produce a moderate flow of air over the top of the fire only, as heretofore in stoves provided with a slide-opening opposite to the direct flue.

Having thus fully described my improvement and shown its utility, what I claim as new therein of my invention, and desire to secure by Letters Patent, is—

The application of a permanently-fixed dust-chamber A to the grate-front of a stove, the said chamber being open to the ash-space below and being provided at its upper part with an adjustable opening *g* and a damper *h* and at its lower part with a door *i*, the whole being constructed and arranged to operate substantially in the manner described and set forth, and for the purpose specified.

GEORGE HAMEL.

Witnesses:

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