

(No Model.)

B. MURPHY.
GRATE APPLIANCE.

No. 305,838.

Patented Sept. 30, 1884.

Fig. 1.

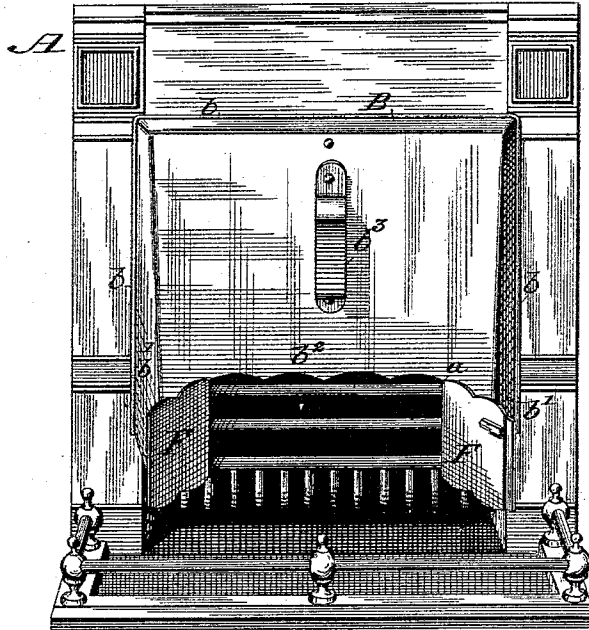
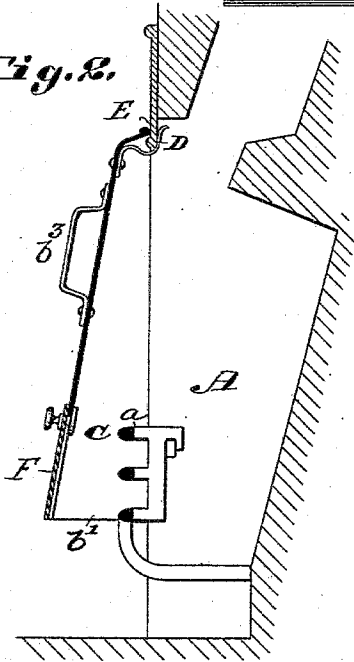
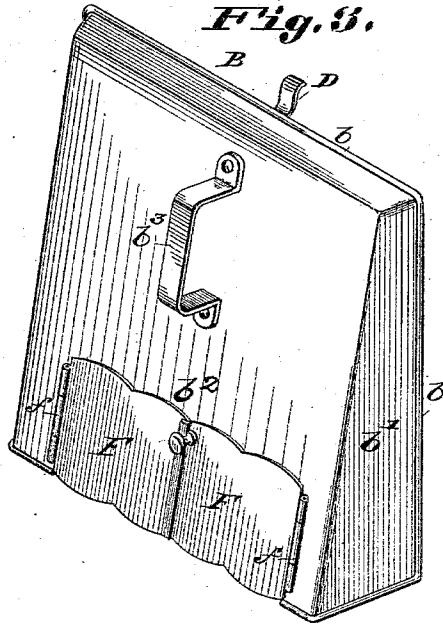


Fig. 2.



Attest
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Fig. 3.



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att'y

UNITED STATES PATENT OFFICE.

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GRATE APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 305,838, dated September 30, 1884.

Application filed February 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, BRIDGET MURPHY, of St. Louis, Missouri, have made a new and useful Improvement in Grate Appliances, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a front elevation showing the improvement in position; Fig. 2, a vertical section taken through a grate having the appliance, and Fig. 3 a view in perspective of the improvement.

The same letters of reference denote the same parts.

The aim and effect of the present improvement is, mainly, to provide means by which the dust incident to the agitation of a fire in an open grate may be prevented from escaping into the room, and instead thereof carried back into the fire-place again. At the same time the appliance can be used as a blower as well as a shield.

A represents an ordinary open grate.

B represents the improvement. It consists, substantially, of a hood or shield, which at its edges *b b b* is fitted to the grate-opening, and which toward its lower front is inclined, so as to stand out in front of the grate sufficiently to form a flue, C, between the extreme front of the grate and the hood or shield. At its sides *b'* *b'* the hood is extended, preferably, downward, so as to come considerably below the level of the top of the grate; but in front the hood is extended downward only to the level, or thereabout, of the top bar, *a*, of the grate. This enables the poker to be used in the ordinary manner for the purpose of agitating the contents of the grate. The dust, however, which escapes during the operation is caught, and, by means of the air-current passing upward in the flue-space C, is drawn and carried upward and backward into the fire-place above the grate. In this manner the dirt and annoyance incident to the escape of the dust of an

ordinary open grate is obviated, for the dust is, I may say, thoroughly prevented from passing out through the room.

To enable the appliance to be used as a blower, the hood is furnished with means by which the front *b'* of the hood can be extended below the level of the top of the grate, and for the time being made to inclose the grate downward to nearly the level of the bottom of the grate. The preferable mode of accomplishing this is to provide the hood with doors F F, which are hinged to the hood at *f* and made to open and close, as indicated in the two positions shown, respectively, in Figs. 1 and 2.

In Fig. 1 the appliance is shown as when used as a shield to prevent the escape of the dust.

In Fig. 3 the appliance is shown as when it is to be used as a blower.

The appliance is readily attached in position by means of the spring-catch D, Figs. 2, 3, which is made to catch under and around the lower edge of the arch E. The appliance is also provided with a suitable handle, *b'*.

I am aware that, as shown in McCarthy's patent, No. 134,556, draft-blowers adjustable toward and from the grate have heretofore been used. Such a construction would not answer my purpose, which is to provide a dust-shield as well as a blower, and which is attained by making the lower front of the blower removable.

I claim—

The herein-described dust-shield B, whose edges *b b b* are fitted to the grate-opening, and whose lower front is inclined outward to form the flue in front of the grate, and below the top of the grate is provided with the removable parts F F, as and for the purpose described.

BRIDGET MURPHY.

Witnesses:

C. D. MOODY,
C. E. HUNT.