(No Model.)

T. CONNOR.

CHUTE FOR ASHES.

No. 491,960. Patented Feb. 14, 1893.

Fig-1-

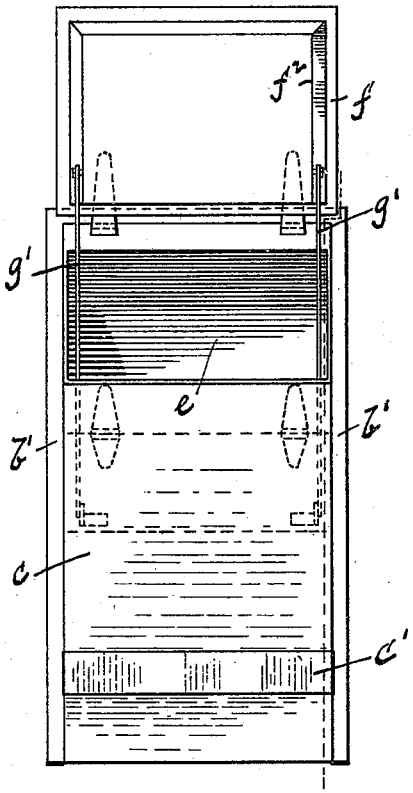
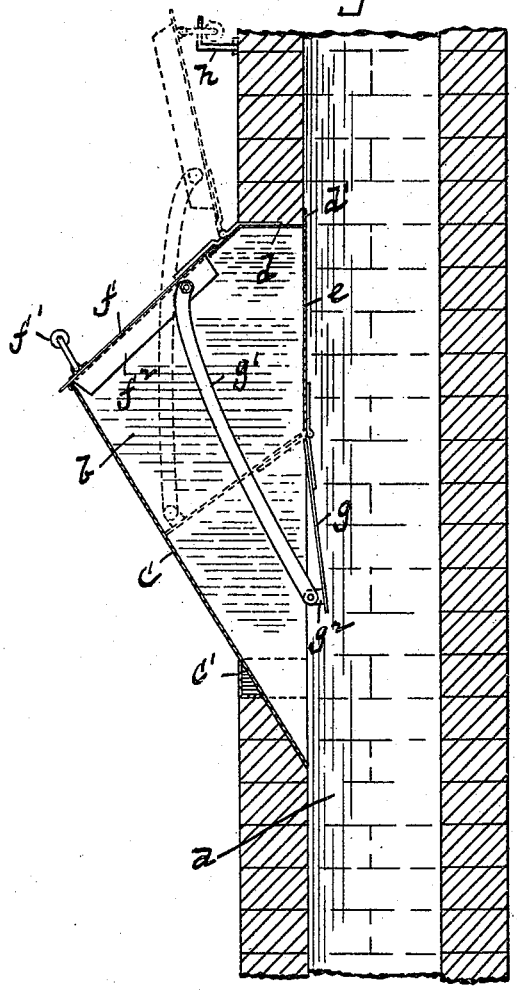


Fig-2-



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CHUTE FOR ASHES.

SPECIFICATION forming part of Letters Patent No. 491,960, dated February 14, 1893.

Application filed March 30, 1892. Serial No. 427,067. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CONNOR, of Holyoke, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Chutes for Ashes, &c., of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

My invention relates to chutes located in buildings and extending from the upper floors to the lower floor or cellar thereof, for conveying ashes and other refuse to the latter, and has for its object to provide an improved form of conductor for the ashes at the entrance to said chute, so constructed that when the same is open the upward draft of air therethrough will be nearly or quite shut off, thereby preventing the ashes and dust from being blown upwardly out of said conductor while being emptied into the chute.

To this end my invention consists in the conductor for ash chutes constructed and operating as hereinafter fully described and particularly pointed out in the claims.

Referring to the drawings, in which like letters designate like parts in the several figures, Figure 1 is a front elevation of a conductor embodying my invention. Fig. 2 is a vertical section thereof, showing the manner in which it is connected to the chute.

The letter *a*, in Fig. 2, designates an ash chute such as is usually built into the wall of apartment and other buildings, for conveying ashes and other refuse from an upper floor to the basement or cellar. Heretofore the entrance to said chute has consisted of a simple door hinged at the side of an opening in the front wall of the chute, or of an iron, box-like conductor projecting from said front wall and having a door or cover arranged at an angle to said wall. In either case, the upward draft of air, when the door is opened, renders the operation of emptying ashes into the chute a very unpleasant one, the ashes being blown into the face and over the clothing, and about the room from which the entrance to the chute leads. For the purpose of obviating such objection, I have devised the form of conductor herein shown, which is preferably made of galvanized iron or other sheet metal, and is composed of two side-pieces *b*, provided with laterally projecting flanges *b'*, an outwardly and upwardly inclined front *c*, a horizontally disposed top-piece *d* having an upwardly extending flange *d'*, and a back *e* which extends downwardly from said top-piece for substantially one-half the distance to the bottom of the conductor. The top-piece *d* projects outwardly from the back *e* for a distance corresponding substantially to the thickness of the front wall of the chute *a*, say four inches, and to its front side is hinged the door *f*, which extends between said top-piece and the upper edge of the inclined front *c*, and is provided with a suitable handle *f'* to enable it to be conveniently opened and closed. Said conductor is placed within the opening in the front wall of the chute, as shown in Fig. 2, with the flanges *b'* and *d'* overlapping the inner edges of said opening to prevent outward movement thereof, and with its inclined front *c* extending to the inner side of said wall at its lower end, as shown. To provide a secure vertical support for the conductor, I secure to the front *c* an angle-piece *c'*, which rests upon the brickwork at the bottom of the opening in the wall, as shown. When thus set in the front wall of the chute, the conductor is securely held in position, and, by opening the door *f*, ashes and other refuse can be emptied therein, the same passing through the open passage-way in the back of the conductor, beneath the back-piece *e*, into the chute. The downwardly projecting back-piece *e* serves, of itself, to greatly lessen the upward draft of air through the conductor when door *f* is opened, but in order to entirely cut off said draft I hinge to the lower end of said back-piece a damper-plate *g*, which is of such length and width as to form a closed bottom to the conductor when swung to a position substantially perpendicular to the front *c*, as shown by broken lines in Fig. 2. In connection with said damper-plate I provide means whereby it is automatically operated by the movement of door *f*, which means, as herein shown, consist of two connecting strips *g'*, which may be made flat as shown or in the form of round rods. Said strips are pivotally connected at their lower ends to ears g^2 on the damper-plate, at each end of the latter,

and at their upper ends are provided with holes to enable them to be passed over the ends of studs projecting laterally from flanges f^2 on the cover f, which studs are threaded at their outer ends to receive nuts, whereby said strips are held thereon. It follows from such intermediate connections between the cover and damper-plate that, when the former is swung upwardly to its open position, the latter will be swung to a position to close the passage-way through the conductor, and, when the former is swung to its closed position, the damper-plate will be swung to a substantially vertical position, as shown by full lines in Fig. 2, thereby leaving an open passage-way into the chute beneath its lower end. Any suitable means for retaining the cover in its open position while pouring ashes into the conductor can be employed, the means herein shown consisting of a hook h projecting from the wall over which the handle f' is caught, as represented in Fig. 2.

The operation of the conductor thus constructed will be obvious from the foregoing description. When it is desired to empty a hod of ashes, for example, into the chute, the cover f is raised and fastened in its open position, and the ashes are poured into the conductor, falling upon the damper-plate and being retained thereon, said plate, by completely shutting off the upward draft of air, preventing any upward diffusion of ashes or dust from such cause. The cover f is then swung to its closed position thereby causing the damper-plate to dump the ashes into the chute, the cover f then preventing any escape of dust into the room. By loosening the nuts which hold the upper ends of the strips g' upon the studs on the cover, and slipping said ends from said studs, the cover can be fastened in its open position and the damper-plate also left in its open position, for the purpose of cleaning the chute a or other purpose.

The conductor thus constructed is simple and inexpensive in its nature, and entirely obviates the objections incident to such devices as heretofore constructed, as above stated.

I do not wish to limit myself to the precise shape and proportions herein shown as the same can be greatly varied within the spirit of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with an ash-chute of an ash conductor projecting outwardly therefrom and forming a passage-way into the chute, said conductor having at its front side a swinging door or cover and at its rear side a swinging damper-plate, said door or cover and said damper-plate being positively connected with each other, whereby they are caused to swing in unison, substantially as and for the purpose described.

2. The chute conductor herein described having the inclined front c provided with the angle-piece c', top-piece d, door f hinged to said top-piece, back-piece e, and an open passage-way beneath said back-piece, substantially as set forth.

3. The chute conductor herein described, having the door f, damper-plate g, strips g' pivotally connected at their opposite ends to said door and damper-plate respectively, and an open passage-way beneath said damper-plate, substantially as set forth.

THOMAS CONNOR.

Witnesses:
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