No. 807,910. PATENTED DEC. 19, 1905.

J. BROWN.

FUMIGATING ATTACHMENT.

APPLICATION FILED JULY 13, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

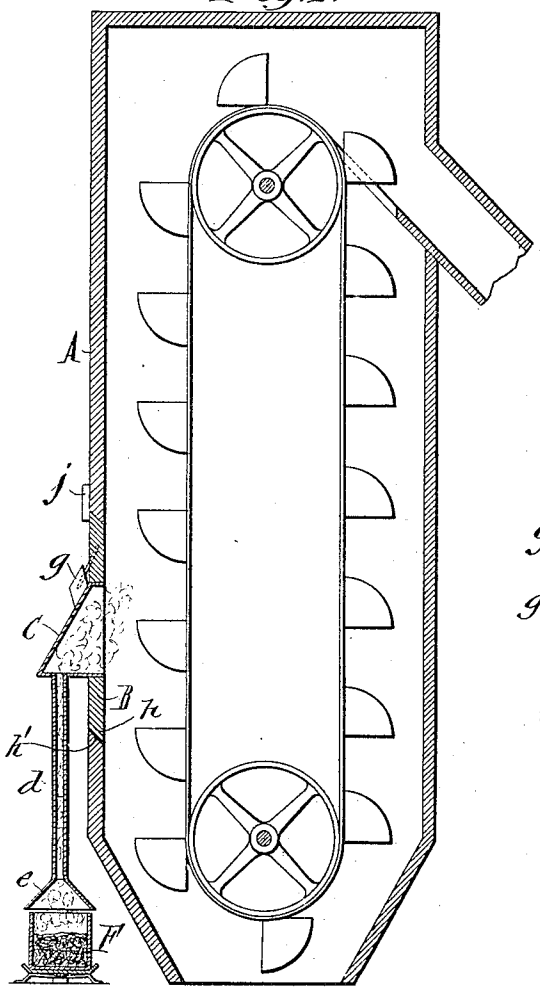


Fig. 2.

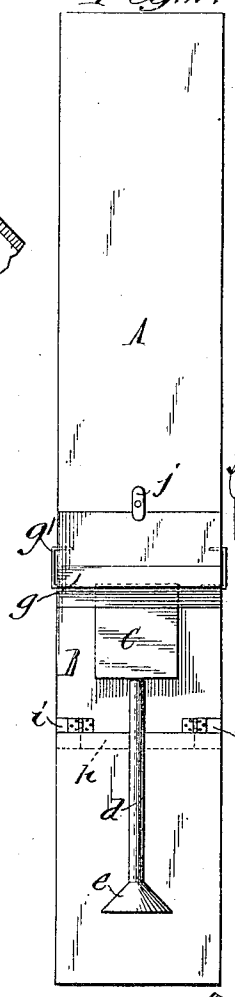


Fig. 3.

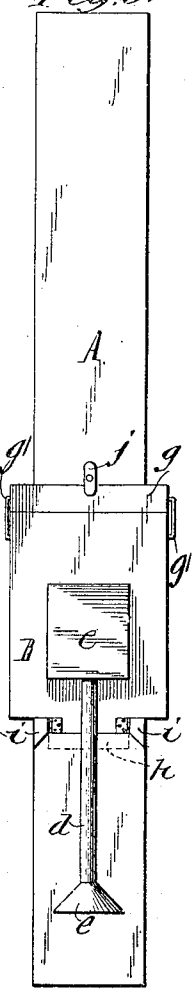
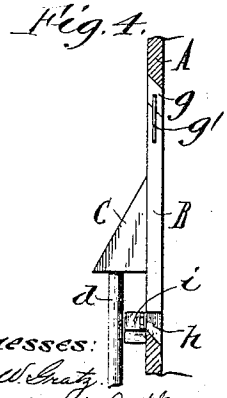
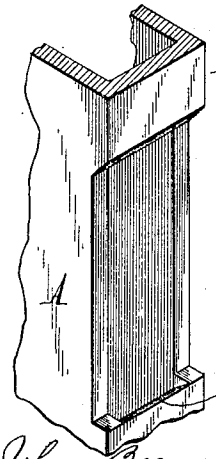


Fig. 4.



Witnesses:
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Fig. 5.



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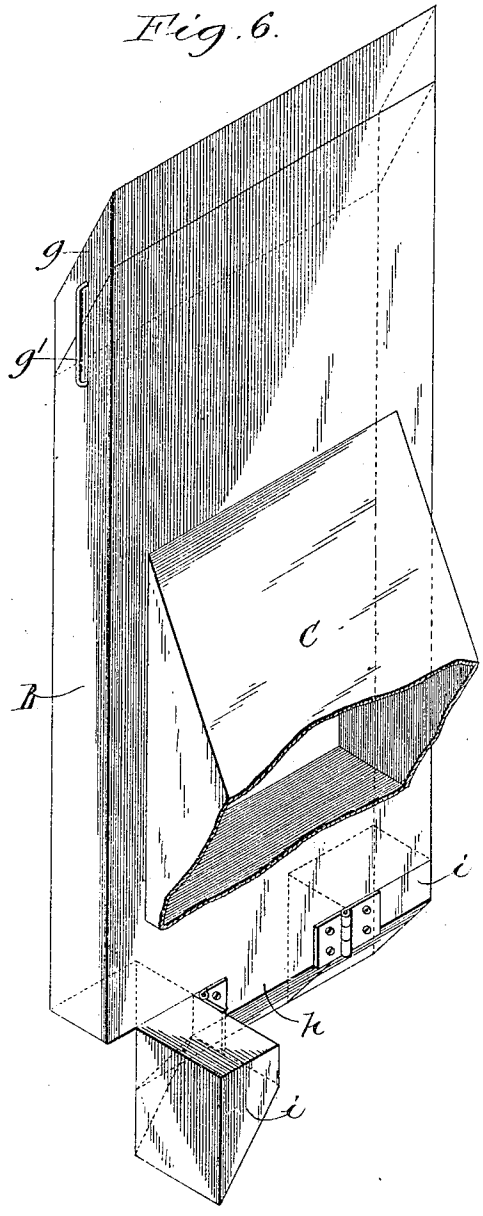
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2 SHEETS—SHEET 2.

Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN BROWN, OF NIAGARA FALLS, NEW YORK, ASSIGNOR OF ONE-HALF TO WILLIAM McLEAN, OF LOCKPORT, NEW YORK.

FUMIGATING ATTACHMENT.

No. 807,910. Specification of Letters Patent. Patented Dec. 19, 1905.

Application filed July 13, 1905. Serial No. 269,513.

To all whom it may concern:

Be it known that I, JOHN BROWN, a citizen of the United States, residing at Niagara Falls, in the county of Niagara and State of New York, have invented a new and useful Improvement in Fumigating Attachments, of which the following is a specification.

This invention relates to a fumigating apparatus designed to be used in connection with flour-mill elevators and other appliances for exterminating insects, and more especially the Mediterranean moth.

The legs of elevators are of different widths, and their doors vary in height; and it is the object of my invention to combine with the fumigating apparatus an adjustable door which is readily applicable to elevator-legs of different sizes.

In the accompanying drawings, consisting of two sheets, Figure 1 is a vertical section of an elevator provided with the improvement. Figs. 2 and 3 are side elevations of different-sized elevator-legs provided with the improved door. Fig. 4 is a side elevation of the door applied to a narrow leg, which latter is shown in section. Fig. 5 is a fragmentary perspective view of a narrow leg with the door omitted. Fig. 6 is an enlarged perspective view of the door with the hood partly broken away.

Similar letters of reference indicate corresponding parts throughout the several views.

A indicates an elevator-leg of ordinary construction, and B the improved door which closes the usual opening of the leg and forms part of the fumigating attachment.

C is a fumigating hood or chamber, preferably of sheet metal, secured in an opening of the door and projecting forwardly therefrom, the hood being open on its rear side, so as to communicate with the interior of the elevator-leg, as shown in Fig. 1. Extending downwardly from the closed bottom of the hood C is a spout *d*, terminating in a funnel *e*, under which is placed a furnace or heater F for burning sulfur or other suitable material the fumes of which are destructive to the Mediterranean moth and other insects infesting the elevators and other machines of flour-mills.

The door B is provided at its upper edge with a vertically-swinging extension *g*, connected therewith by lateral bails *g'* and adapted to be swung upwardly in line with the body of the door for lengthening the same, as shown in Figs. 3, 4, and 6, or downwardly below the upper edge of the door for shortening the same, as shown in Figs. 1 and 2. The upper edge of the door-opening is preferably beveled, as shown in Figs. 1, 4, and 5, and the upper edge of the door-body is correspondingly beveled to fit the same when the extension *g* is swung down to its inoperative position. This extension is as wide as the door, and its upper and lower edges are beveled to correspond to the bevel of the door-body and the upper edge of the door-opening, so that when the extension is swung up into line with the door it closely fits the latter and the door-opening, as shown in Fig. 4.

At its lower edge the door is provided centrally with a tongue or tenon *h*, which is beveled at it lower edge and adapted to interlock with the lower edge *h'* of the door-opening, which edge is correspondingly beveled and undercut. In wide elevator-legs this undercut edge preferably extends from side to side of the leg, as shown by the dotted line in Fig. 2, while in narrow legs said edge terminates short of the sides of the leg, as shown by full lines in Fig. 5 and by dotted lines in Fig. 3. The door is provided at opposite sides of the tenon *h* with laterally or horizontally swinging extensions *i i*, which are connected with the door by suitable hinges, as shown. These extensions when swung in line with the door extend to the lateral edges thereof. They are of the same length as the tenon *h* and beveled to correspond therewith, so that they practically form lateral extensions of the tenon and complete the width of the door at its lower end.

When the apparatus is to be applied to a wide elevator-leg having an opening of ordinary height, the lower extensions *i* are swung into line with the door and the upper extension *g* is swung down below its upper edge, as shown in Fig. 2, after which the lower edge of the door is interlocked with the undercut lower edge of the elevator-opening and its upper edge is secured in place by a turn-button *j* or other suitable fastening.

When the apparatus is to be attached to a narrow elevator-leg having a high or long opening, the lower extensions *i* are swung inwardly to permit the tenon *h* to engage be-

hind the undercut lower edge h' of the door-opening and the upper extension g is swung up into line with the door, as shown in Figs. 3 and 4, after which the door is secured by the turn-button, as before described.

In Fig. 6 one of the hinged extensions i is shown in line with the door and the other at right angles thereto.

After attaching the apparatus to the elevator a quantity of sulfur is ignited in the furnace F and the latter is placed under the funnel-shaped mouth of the spout or conduit d, the sulfur-fumes ascending through the spout into the interior of the leg and effectually exterminating all moths and other insects lodging therein.

I claim as my invention—

1. A fumigating attachment, comprising a door adapted to be applied to an elevator-leg or similar chamber and provided with movable end and side extensions, and a fumigating spout or conduit connected with said door and adapted to communicate with the interior of the elevator-leg, substantially as set forth.

2. In a fumigating apparatus, the combination of an elevator-leg or similar chamber provided with an opening having one of its horizontal edges undercut, a door provided at one end with a movable extension and at its opposite end with a tenon adapted to engage with said undercut edge and on opposite sides of said tenon with horizontally-swinging extensions, and a fumigating spout or conduit connected with said door and communicating with the interior of the elevator-leg, substantially as set forth.

3. A fumigating attachment, comprising a door adapted to be applied to an elevator-leg or similar chamber and provided at one end with a vertically-swinging extension and at its opposite end with a tenon and horizontally-swinging extensions arranged on opposite sides of the tenon, and a fumigating spout or conduit connected with the door and adapted to communicate with the interior of the elevator-leg, substantially as set forth.

4. In a fumigating apparatus, the combination of an elevator-leg or similar chamber having an opening provided with a beveled upper edge and a beveled undercut lower edge, a door applied to said opening and provided at its upper edge with a beveled extension, a vertically-swinging bail connecting said extension with the body of the door, the door being provided at its lower edge with a beveled tenon adapted to interlock with said undercut edge and on opposite sides of said tenon with horizontally-swinging extensions having beveled lower edges, and a fumigating spout or conduit connected with the door and adapted to communicate with the interior of the elevator-leg, substantially as set forth.

Witness my hand this 22d day of June, 1905.

JOHN BROWN.

Witnesses:
C. F. GEYER,
E. M. GRAHAM.