

J. E. CHEESMAN.

LINT FLUE.

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Patented Oct. 29, 1912.

1,042,396.

Fig. 2,

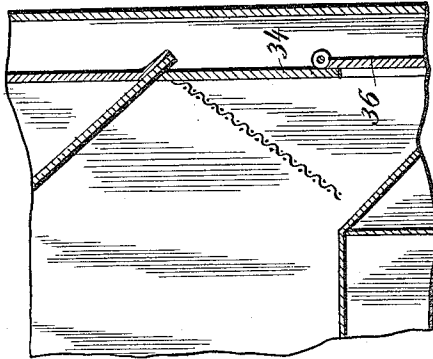


Fig. 1,



WITNESSES:

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LINT-FLUE.

1,042,396.

Specification of Letters Patent.

Patented Oct. 29, 1912.

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To all whom it may concern:

Be it known that I, JAMES E. CHEESMAN, a citizen of the United States of America, and a resident of South Orange, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Lint-Flues, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates to an improvement in lint flues.

The object of the invention is to improve the construction of lint flues by providing means whereby dirt, leaves, seeds, and other foreign matter freed from the lint will be discharged from the flue without loss of lint.

I will describe my invention in the following specification, and point out the novel features thereof in the appended claims.

In the accompanying drawing: Figure 1 is a longitudinal vertical section through a lint flue embodying the invention. Fig. 2 is a fragmentary vertical section on an enlarged scale of a modified construction.

Like characters of reference designate corresponding parts in all the figures.

As illustrated in the drawing, the flue follows a zig-zag course and may be composed of any desired number of turns. A series of horizontal plates 12 are affixed to vertical side plates 14 and are located so as to provide a space 15 at the opposite ends of consecutive plates thereby affording communication between the horizontal portions of the flue. A downwardly inclined end wall 16 is provided at one end of each horizontal plate 12. These inclined end walls are made of sheet metal plates which may be integral with the plates 12, or they may be made of separate plates. These downwardly inclined walls are located in staggered relation and form the upper portions of the bends in the flue.

The lower portions of the bends in the flue are formed by screens 18 which are inclined oppositely to the walls 16 and extend from the lower edges of said walls to a point just below the plane of next horizontal plate 12, but separated from the next inclined end wall 16 by a space or opening 20. The screens 18 may be provided at their lower edges with angle brackets 22 which are adapted to be removably held in clips 24 affixed to the inclined walls 16. The flue 10

is provided at its lower end with an inlet 26 and at its upper end with an outlet 28, thereby providing for the passage of air under pressure therethrough.

Adjacent to each bend in the flue is a dead air space 30 into which dust and lighter particles of dirt pass through the screens 18 while the heavier extraneous matter such as sand, leaves, seeds and other foreign matter removed from the lint is discharged through the spaces 20. The lint is blown through the turns in the flue and is deflected by the inclined reticulated end walls 18 and the inclined solid walls 16. The lower edges of the screens 18 being below the planes of the horizontal plates 12, prevent the lint from being blown down into the dead air space, but the other matter being heavier than the lint drops through the openings 20.

The vertical wall of each triangular space 30 may be formed by a hinged door 32 extending entirely across said space as shown in Fig. 1, or it may be composed partly of a stationary plate 34 and partly by a door 36, as shown in Fig. 2. The outer vertical end wall 40 of the casing inclosing the flue is preferably in the form of a hinged door. This peculiar construction is especially advantageous as the lint becomes more thoroughly cleaned than it does in passing through flues as heretofore constructed and as the heavier particles of refuse have a free outlet and do not clog up the screens.

What I claim is:

1. A lint flue, comprising a plurality of horizontal sections connected to form a zig-zag path, a reticulated inclined wall at one end of each horizontal section, the lower edge of said reticulated wall being below the plane of the bottom of the horizontal flue section and separated therefrom to provide an opening through which foreign matter separated from the lint may be discharged, and a chamber producing a dead air space communicating with said opening.

2. A lint flue comprising vertical side walls, a plurality of horizontal sheet metal plates affixed to said side walls providing a series of horizontal passages or flue sections, said horizontal plates being so positioned as to provide a space at alternate ends of said sections to produce a zigzag flue through which air under pressure may be forced, downwardly inclined sheet metal plates forming the upper portions of the ends of

the bends in the flue, and upwardly inclined
screens forming the lower portions of the
ends of the bends in the flue, the lower edges
of said screens being below the planes of the
5 contiguous horizontal plates and separated
from the corresponding inclined plates to
provide an opening through which foreign
matter separated from the lint may be dis-
charged, and a chamber containing a dead
air space communicating with said opening. 10
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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."