No. 656,959. Patented Aug. 28, 1900.

W. B. FOWLER.

DRAFT REGULATOR.

(Application filed Feb. 16, 1900.)

(No Model.)

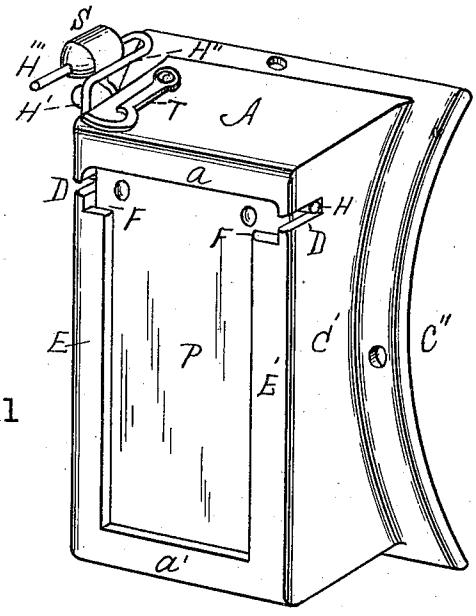


Fig. 1.

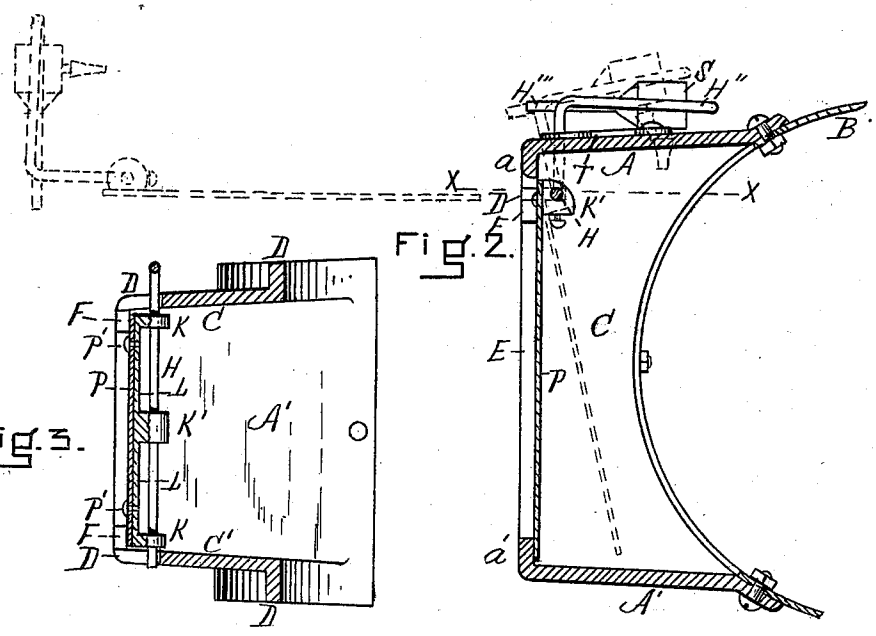


Fig. 2.

Fig. 3.

WITNESSES

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WALTER B. FOWLER, OF LAWRENCE, MASSACHUSETTS.

DRAFT-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 656,959, dated August 28, 1900.

Application filed February 16, 1900. Serial No. 5,471. (No model.)

To all whom it may concern:

Be it known that I, WALTER B. FOWLER, a citizen of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Draft-Regulators, of which the following is a specification.

This draft-regulator is intended to be applied to a pipe or flue opening into the chimney and connected with the stove, furnace, or other heating apparatus or to the chimney itself, and it is an improvement upon the draft-regulator described and illustrated in Letters Patent of the United States, numbered 560,264, and granted to me May 19, 1896.

The principal object of this improvement is to enable the blind or vertically-hanging metallic plate to be removed from the rest of the structure without any necessity of taking it apart or removing any screws or bolts. This is of advantage, inasmuch as it is desirable to remove the dampers in the summer, and by means of this improvement they can be removed without exposing the bolt-holes and rendering them likely to become rusted. Moreover, the facility with which the blind can be drawn out renders it easily cleaned and relieved from soot, and in shipping they can be packed separately from the rest of the structure, thus economizing space and rendering the transportation safer. The peculiar shape of the weighted wire allows the weight to be brought farther forward than in the patent above referred to, so as to regulate a very light draft.

The nature of the invention is fully described in detail below and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a draft-regulator embodying the present improvement. Fig. 2 is a central vertical section of the device, showing a portion of the flue to which it is attached. Dotted lines show the blind partially open and other dotted lines illustrate it in the horizontal position in which it is drawn out or removed. Fig. 3 is a horizontal section taken on line X, Fig. 2.

Similar letters of reference indicate corresponding parts.

The frame of the draft-regulator comprises the upper and lower walls A A′, the side walls C C′, a flange integral with the frame and of shape to fit against and be screwed to a pipe or flue B, the flanges *a a′* extending downwardly from the upper wall A and upwardly from the lower wall A′, respectively, and the flanges E E′ extending inwardly from the side walls C C′, respectively. These side walls C C′ are provided with the horizontal slots D similar in shape and size and open at their outer ends, and the upper ends of the flanges E E′ are recessed below the slots at F.

Supported by the frame within the slots D is a rod H, said rod extending through the ears K K and the central ear K′, all of which are integral with and extend rearwardly from the bar L, to which is secured by bolts or rivets P′ the blind or thin metallic plate P, of size and shape to lie behind the flanges E E′ *a′* and with its upper edge near the lower edge of the flange *a*, thus closing the opening. The rod H is extended beyond one of the slots D into the vertical portion H′, is thence bent rearward into the horizontal portion H″, and thence forward into the parallel portion H‴, which supports adjustably a weight S.

When it is desired to remove the blind for the winter in order to prevent it from becoming rusted or to remove it for the purpose of cleaning it, it is swung up into a horizontal position, in which position the upper edge of the blind is just above the bottom of the recesses F. It is then drawn out horizontally, as illustrated by dotted lines in Fig. 2, there being room enough between the bottoms of the recesses F and the lower edge of the flange *a* to allow the blind P and the bar L, with its ears K, to be drawn through. When the blind is in any position except the horizontal one indicated, the rod H is held in its position in the slots D and prevented from slipping out of said slots by the flanges E E′, which overlap the blind, and the bar L and blind are prevented from lateral movement by the ears K, which are wider than the slots D. Thus the blind can be removed without operating any bolts or screws or exposing bolt-holes to the action of rust, as is the case with my invention described in the patent above referred to. By bending the wire forward into the portion H‴ and extending the end of such portion beyond the vertical portion H′, I am able to move the weight S farther forward, so as to obtain a very light

draft or for purposes of ventilation in summer. The hook T is pivotally secured to the upper side of the frame in order that the wire or rod H may be locked, and hence the blind held closed in case a full draft is desired for the purpose of driving a low fire.

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

In a draft-regulator of the character described, the frame A, A′, C, C′ formed with the inwardly-extending flanges E, E′ said frame being provided with the substantially-horizontal slots D; the blind P; the horizontal bar L rigidly secured to the upper end of the rear surface of the blind and provided with suitable ears; and the horizontal rod or pivot H supported in said slots D and rigidly secured in said ears and thus offset from the plane of the rear face of the blind, whereby said blind is confined in the frame when in any other than a horizontal position but adapted to be removed therefrom when swung into a horizontal position without the necessity for removing bolts, screws or any other contrivance for confining the blind, substantially as described.

WALTER B. FOWLER.

Witnesses:
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JOHN P. SWEENEY.