D. B. LIVESEY.

FIREPLACE DAMPER.

APPLICATION FILED JAN. 4, 1909

926,266. Patented June 29, 1909.

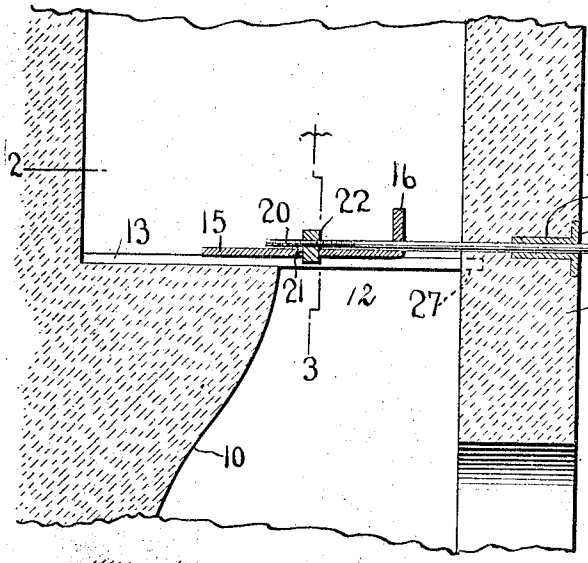
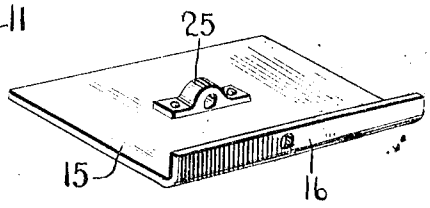


Fig. 1.

Fig. 4.



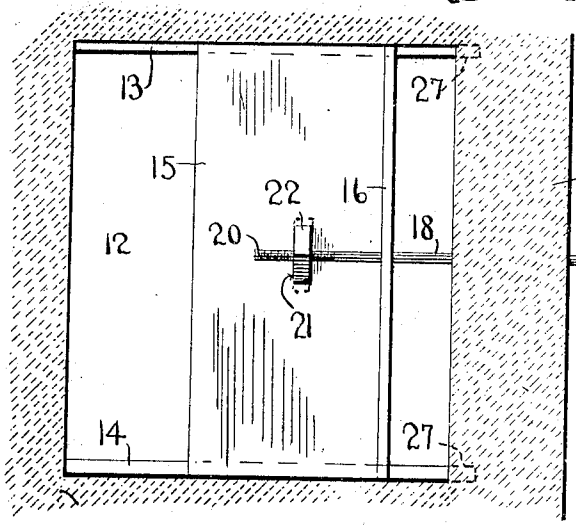


Fig. 2.

Fig. 5.

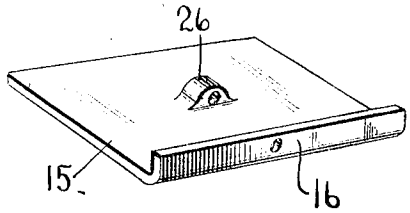
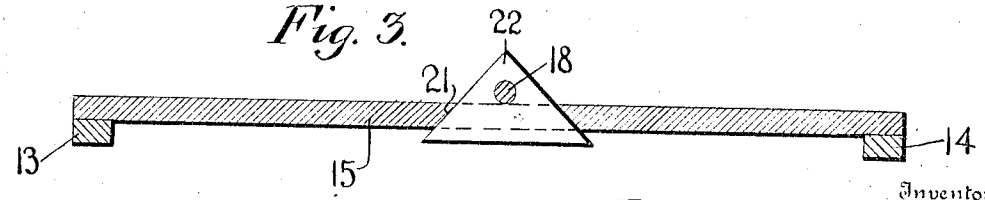


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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FIREPLACE-DAMPER.

No. 926,266. Specification of Letters Patent. Patented June 29, 1909.

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To all whom it may concern:

Be it known that I, DANIEL B. LIVESEY, a citizen of the United States, residing at Seattle, in the county of King, State of Washington, have invented certain new and useful Improvements in Fireplace-Dampers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fireplace dampers, and has for one of its objects to simplify and improve the construction and provide a device of this character which may be readily adapted to the flue portions of fireplaces of varying sizes, without structural changes either in the flue or in the damper devices.

With this and other objects in view the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a vertical section of a fireplace including a portion of the flue with the improved damper structure applied. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section enlarged, on the line 3—3 of Fig. 1. Fig. 4 is a perspective view of the damper, illustrating a modification in the construction. Fig. 5 is a perspective view illustrating another modification in the construction.

The improved device is adapted to be located at the throat portion of a fireplace, the rear wall of the fireplace being indicated at 10 and the front wall or breast at 11, the latter depending below the upper end of the rear wall and producing the contracted throat 12, of the usual form.

Arranged at the outlet of the throat 12 are spaced horizontal bars 13—14, the bars embedded in the inner face of the breast portion 11 of the chimney, as shown at 15, while the opposite ends of the bars rest upon the chimney structure rearwardly of the throat, as shown. The bars 13—14 provide supports for the damper which consists of a sheet metal plate 15 having an upturned forward edge 16, the plate being of sufficient width to entirely close the throat 12 when located in one position, and to entirely uncover the throat when located in another position.

Inserted in the breast portion 11 of the chimney structure is a sleeve 17 through which a rod 18 is slidably arranged, the rod having an operating knob 19 at its outer end and with the inner end threaded, as shown at 20. The rod 18 passes through an aperture in the upturned portion 16 of the damper plate 15, and is thus both rotative and slidable through the sleeve 17 and the upturned portion 16, as shown.

The plate 15 is provided with a slot 21 and fitting upwardly through this slot is a triangular member 22, the member 22 being provided with a threaded aperture. The slot 21 will be of sufficient size to permit the member 22 to project a sufficient distance above the plate 15 to receive the threaded portion 20 of the rod 18, the rod thus serving to prevent the member 22 from passing downwardly through the slot, while the projecting ends of the member prevent it from moving upwardly through the plate. By this means when the rod is connected to the member 22 and the latter located in the slot 21, it will be obvious that the member 22 will be held from movement in all directions, while at the same time the rod may be readily rotated to adjust the plate 15—16 nearer to or farther from the inner face of the chimney structure or from the sleeve 17. By this means the plate 15 may be adjusted relative to the rod and sleeve, to adapt it to the throat 12. The throat opening may thus be readily controlled to any required extent, and thus control the draft from the grate, as will be obvious.

The sleeve 17 will be embedded in the brick work of the breast 11, and may be provided with a lateral flange 24 to assist in holding the sleeve, and to form a "finish" to the outer end of the sleeve.

The upturned portion 16 of the plate 15 is an important feature of the invention and performs two important functions; first, as a means for assisting in supporting the rod 18, and second, to constitute a portion of the throat 12 and to confine the products of the combustion, and thereby increase the efficiency of the "draft".

A damper thus constructed forms a novel and effective means for controlling the air currents passing upwardly from the grate, and is capable of being readily adjusted to suit the varying conditions of the weather, and also performs the usual function of regulating the amount of draft for the proper combustion of the fuel in the grate.

In Fig. 4 is shown a slight modification in the manner of constructing the nut attachment to the plate 15 to receive the threaded portion of the rod 18, consisting in a plate 25 having a threaded aperture and riveted or otherwise secured to the plate 15.

In Fig. 5 is shown another modification in the construction consisting in a projection 26 extending from the plate 15 and provided with a transverse threaded aperture to receive the threaded portion of the rod 18, but it is obvious that these slight modifications would not constitute a departure from the principle of the invention or sacrifice any of its advantages.

What is claimed, is:—

1. In a fireplace damper structure, spaced bars adapted to be supported above the throat of a fireplace, a plate slidable upon said bars and with its forward edge upturned and provided with a transverse aperture, said plate having a longitudinal slot, a nut member having a threaded aperture and of greater length than the slot and located therein with its wider portion below the plate and its threaded aperture above the plate, and a rod slidable through the aperture in the upturned portion of the plate and adapted to be slidably arranged through a chimney breast and with a threaded portion engaging the threaded aperture of the nut member.

2. In a fireplace damper structure, spaced bars adapted to be supported above the throat of a fireplace, a plate slidable upon said bars and with its forward edge upturned and provided with a transverse aperture, said plate having a longitudinal slot, a nut member connected to the plate, a rod extending through the aperture in the upturned portion of the plate, with its threaded portion engaging the threaded aperture of the nut member, and a guide sleeve adapted to be embedded in a chimney breast and through which the rod slidably operates.

In testimony whereof, I affix my signature, in presence of two witnesses.

DANIEL B. LIVESEY.

Witnesses:
D. G. O'Brien,
W. A. Rogers.