

(No Model.)

F. McCONNELL.
DAMPER FOR FIREPLACE CHIMNEY FLUES.

No. 475,985.

Patented May 31, 1892.

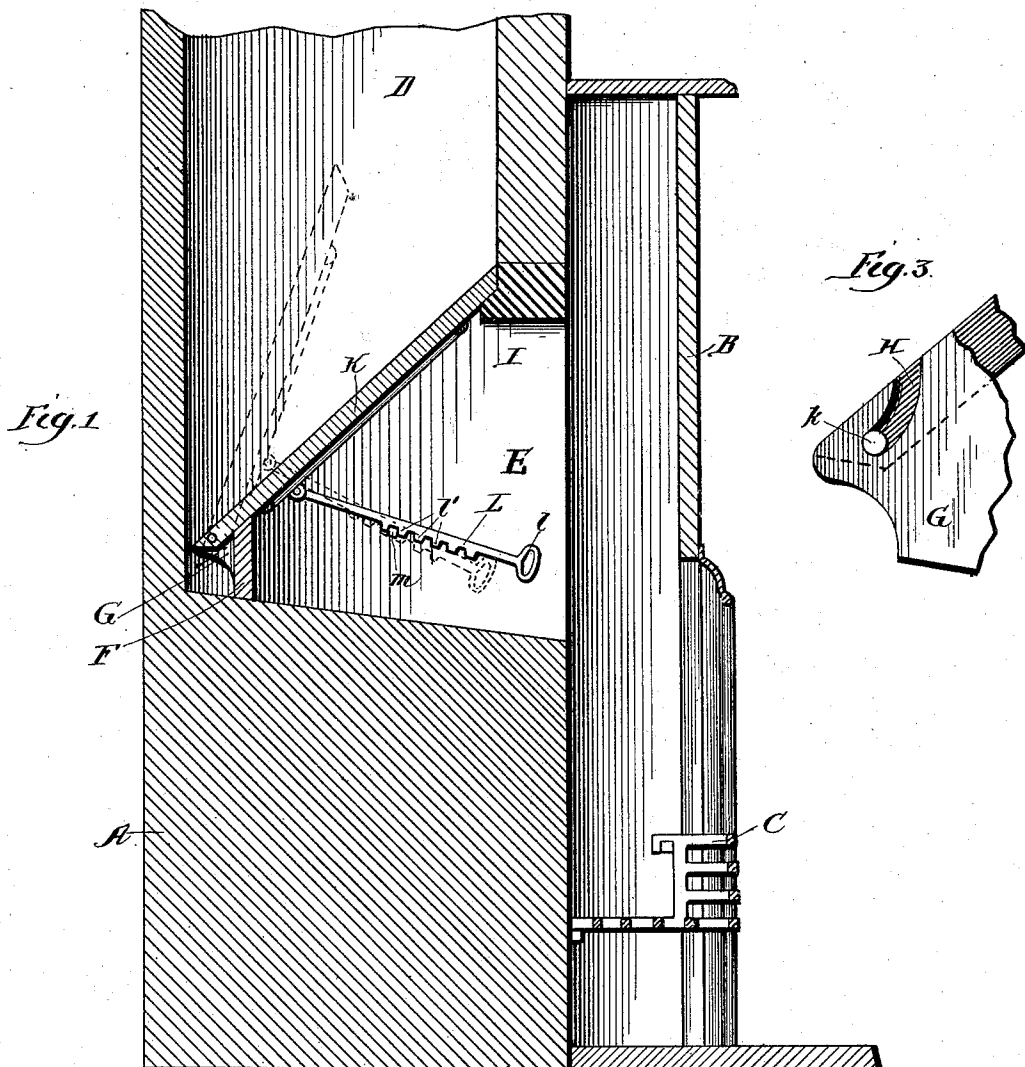


Fig. 3.

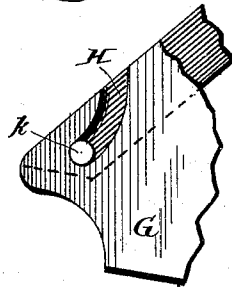
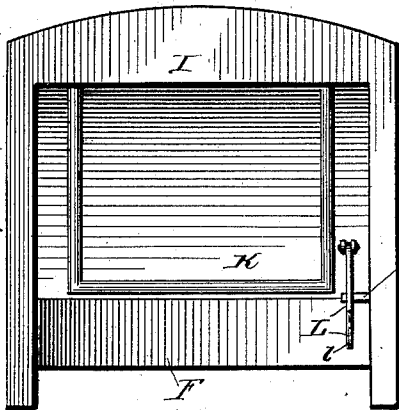


Fig. 2.



Witnesses:

John L. Jackson.
Ralph Vandyke.

Inventor:
Frank McConnell

by Bond Williams & Hickard
Attorneys

UNITED STATES PATENT OFFICE.

FRANK MCCONNELL, OF CHICAGO, ILLINOIS.

DAMPER FOR FIREPLACE CHIMNEY-FLUES.

SPECIFICATION forming part of Letters Patent No. 475,985, dated May 31, 1892.

Application filed January 11, 1892. Serial No. 417,672. (No model.)

To all whom it may concern:

Be it known that I, FRANK MCCONNELL, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented certain new and useful Improvements in Dampers for Fireplace Chimney-Flues, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section through the chimney and fireplace. Fig. 2 is a front view of the opening in the chimney with my devices attached, and Fig. 3 is an enlarged detail showing the method in which the damper is pivoted in its place.

My invention relates to an improved damper for fireplace chimney-flues. It is well known that in open fireplaces soot and other dirt is apt to fall through the chimney and through the opening or throat of the fireplace into the room when fire is not being used in the grate. This is especially the case in large cities where the buildings are close together and where a building of lesser height is located near some building which overtops it. In such a case, when the wind blows from certain directions, currents of air are formed which descend upon the lower building, and, passing downward through the chimneys, carry with them large quantities of soot, dust, and dirt down the chimney-flues and out through the fireplace openings into the rooms below, thus causing damage to the carpets and furniture. At the same time it is desirable in fireplaces to provide a means by which the draft in the chimney can be regulated conveniently and at pleasure.

The objects of my invention are to provide a damper which will prevent the soot and smoke from falling into the room when the fireplace is not in use, and which can be readily opened when desired, and at the same time to provide a damper by means of which the draft in the flue can be regulated at pleasure. I accomplish these objects as hereinafter specified, and as illustrated in the drawings.

That which I regard as new will be pointed out in the claims.

In the drawings, A represents a chimney of ordinary construction, and B a fireplace of ordinary form, equipped with a grate C, also of the usual construction.

D indicates the chimney-flue, and E the communicating passage-way between the flue and the fireplace. At the bottom of the opening in the flue and near the end is placed a damper-supporter F, constructed of some material that cannot be destroyed by fire, and built across the flue of the chimney from side to side.

G indicates a projection or ear, which may be formed integral with the damper-supporter F, and extends backward from the rear of said damper-supporter. These ears are two in number and are placed one at each end of the damper-supporter F, so as to come against the side walls of the flue D.

H indicates an open-ended slot in each ear G, extending downward and backward from the top of the same.

I indicates a projection extending inward from the front wall of the chimney at the top of the opening E from the fireplace. The top of the damper-supporter F and the upper surface of the projection I are beveled, so as to be on a line with one another.

K indicates the damper, constructed of some material indestructible by fire. The damper K is provided at each end with a projecting-pin *k*, adapted to rest in the slots H of the ears G, so as to provide a means by which the damper may be readily taken out and removed when it is desirable to clean the chimney. The damper K is of such size and shape as to extend across the chimney-flue from side to side and to reach from the ear G forward and upward to rest upon the projection I.

L indicates a rod, preferably constructed of metal, and provided with a handle *l* and pivoted to the damper K at one side. The rod L is provided with ratchet-teeth *l'*, adapted to engage with a projecting pin *m*, which projects inward from one side of the chimney-flue.

When it is desired to close the flue to prevent soot and dust from falling into the room, the damper K is allowed to fall forward, so that it rests upon the projection I, thus completely closing the opening from the flue into the fireplace. When it is desired to open the damper to afford passage for the products of combustion from the grate when the same is in use, the rod L is lifted by means of the handle *l*, so as to disengage the ratchet-teeth

l' from the pin *m*, and the damper K is pushed backward and upward as far as it may be desired to lift the same, when it is held in the desired position by dropping the rod L, so that the ratchet-teeth l' may again engage with the pin *m*.

The dotted lines in Fig. 1 indicate one position which the damper may assume when it is raised. It is obvious that the damper may be raised more or less and held in the desired position, so as to regulate the draft from the fireplace through the chimney-flue, as may be desired.

That which I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a chimney-flue and a fireplace having a communicating passage-way with the chimney-flue, of a damper-support F, arranged at the rear of the communicating passage-way and provided with rearward projecting ears G, having open-ended slots H, the damper K, provided with pins *k*, removably arranged in the open-ended slots of the ears, the rod L, pivoted to the damper and provided with ratchet-teeth l',

and the stationary pin *m* for engaging with the ratchet-teeth of the rod, substantially as described.

2. The combination, with a chimney-flue and a fireplace having a communicating passage-way with the chimney-flue, of a damper-support F, arranged at the rear of the communicating passage-way and provided with rearward projecting ears G, having open-ended slots H, the damper K, provided with pins *k*, removably arranged in the open-ended slots of the ears, the rod L, pivoted to the damper and provided with ratchet-teeth l', the stationary pin *m* for engaging the ratchet-teeth of the rod, and the support I, extending backward into the chimney-flue and arranged at the top portion of the communicating passage-way between the chimney-flue and the fireplace to constitute a support for the upper edge of the damper, substantially as described.

FRANK MCCONNELL.

Witnesses:

JOHN L. JACKSON,
NELLIE McKIBBEN.