

P. MIHAN.
CHIMNEYS.

No. 195,382.

Patented Sept. 18, 1877.

Fig. 1.

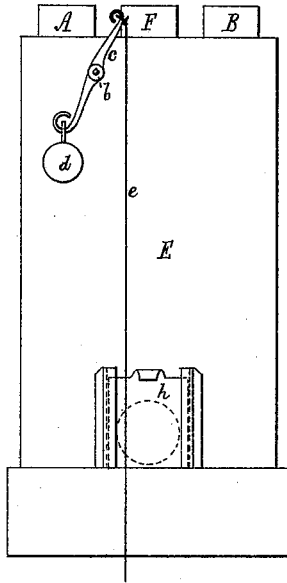


Fig. 3.

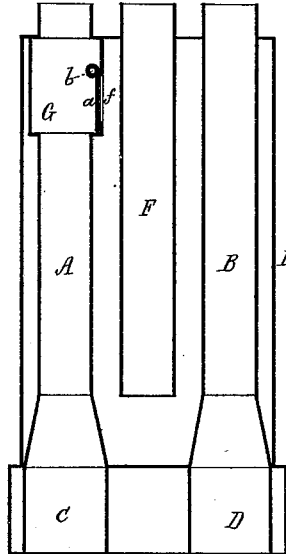
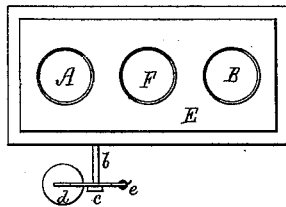


Fig. 2.



Witnesses.

L. W. Miller.
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UNITED STATES PATENT OFFICE.

PATRICK MIHAN, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN CHIMNEYS.

Specification forming part of Letters Patent No. **195,382**, dated September 18, 1877; application filed September 7, 1877.

To all whom it may concern:

Be it known that I, PATRICK MIHAN, of Cambridgeport, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Chimneys; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 a top view, and Fig. 3 a longitudinal section, of my additions to a chimney and its flues.

My invention is to improve the draft of the several flues, and particularly such as may be used for the ventilation of apartments.

In carrying out my said invention, I inclose the eduction-pipes A B of the chimney-flues C D in a chamber or case, E, and cause each of such pipes to open out of the top of the said case. I also extend down within the case, from its top nearly to its bottom, another pipe or educt, F, which also opens out of the top of the case.

Within a quadrilateral enlargement, G, of the upper part of the pipe A, I arrange a damper or valve, *a*, fixed to a spindle, *b*, extending horizontally through the pipe and out of the case E, such spindle being provided with a lever, *c*, having a weight, *d*, suspended from one arm, and a rope, *e*, fixed to the other arm. The weight is to effect the downward motion of the valve toward an opening, *f*, in the side of the said enlargement.

When the valve is horizontal it stops the emission of smoke or waste hot gases from the top of the flue-pipe A, and causes such smoke to pass into the case and around the other discharge pipe or pipes leading up

through it, the smoke and gases finally escaping by the eduction-pipe F. In circulating within the case, the smoke and hot gases will heat the outer surfaces of the flue-pipes. The heat abstracted by such pipes will be conducted into the air within them, which, being rarefied, will ascend, and cause an upward draft or current within the flues.

If we suppose the flue C to be that of a fire-place in which combustion of fuel is usually maintained for most if not all of the day, the heat which would otherwise be lost by being discharged from the educt A directly into the atmosphere may by my invention be utilized or employed to improve the draft of one or more other flues of the chimney, whether such be used for the discharge of smoke from other fire-places or for ventilation of one or more apartments.

In the lower part of one side of the case E there may be an opening, provided with a cover or door, *h*, such opening serving to enable the case to be cleared of soot that may be deposited in it.

By means of the rope hereinbefore mentioned a person may operate the damper.

I claim—

The combination of the case E and its eduction-pipe F with two or more discharge-pipes, A B, of a chimney, and with a damper, *a*, and side opening *f*, arranged in one of the said pipes A B, all being substantially as and for the purpose and to operate as set forth.

PATRICK MIHAN.

Witnesses:

R. H. EDDY,
S. N. PIPER.