

A. YOUNG.
Chimney Attachment for Heaters.

No. 196,281.

Patented Oct. 16, 1877.

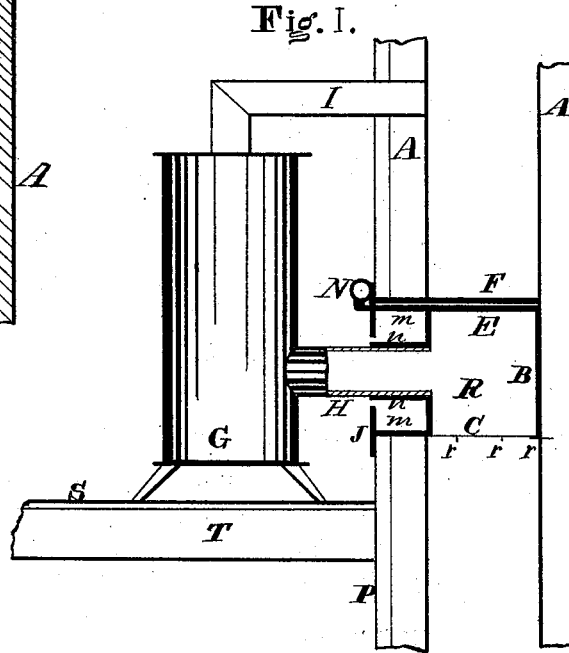
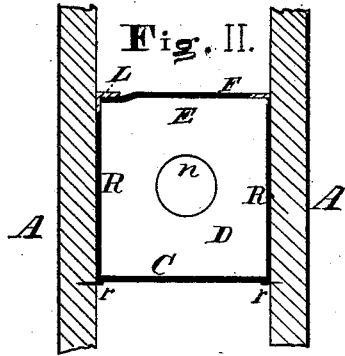
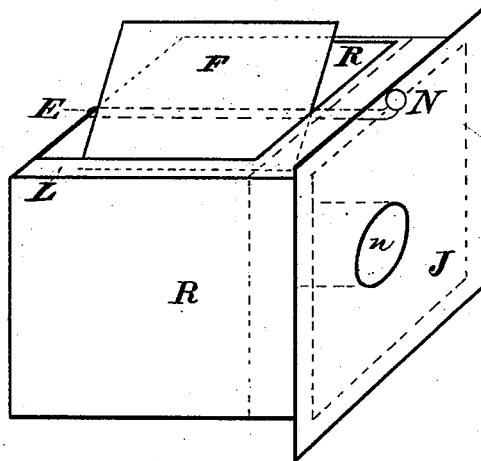


Fig. III.



Witnesses.

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IMPROVEMENT IN CHIMNEY ATTACHMENTS FOR HEATERS.

Specification forming part of Letters Patent No. **196,281**, dated October 16, 1877; application filed August 22, 1877.

To all whom it may concern:

Be it known that I, ALEXANDER YOUNG, of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Chimney Attachments for Heaters, of which the following is a specification:

The object of the present invention is, by safe and novel means, to take heat from a chimney or flue, and conduct it through a drum placed in an apartment for heating purposes.

The nature of the invention consists, in brief, of a metal case fitted to the four vertical walls of a chimney or flue, and provided with a damper at its upper end, and with a safety air-chamber in the inner wall of the chimney, whereby the taking fire of a room is prevented.

I am aware that dampers are old, and the taking of heat from pipes and turning it through drums is, by certain modes of construction, old for heating purposes. I therefore limit my invention substantially to the construction.

In the drawings, Figure 1 is a sectional elevation of a chimney or brick flue with my attachment placed therein, and a heating-drum attached; Fig. 2, a broken section of the end walls of the chimney. Fig. 3 is a perspective representation of the chimney attachment removed from the drum-pipe and chimney.

A represents the side walls of the chimney, and A' the end walls thereof, in which my attachment is placed, as follows: B D R represent an iron case, which is fitted to the back and end walls of the aforesaid flue. The front plate D of this case comes even with the inside of the front wall of the chimney, and the sides R connect with it and extend to the inner face of the plastering P, and a suitable hole is made through plate D, and to the metal margins thereof is secured a thimble, *n*, to connect with the pipe H of the drum G. This construction leaves an air-chamber, *m*, between the inside wall of the chimney and the thimble *n*, which chamber is inclosed by a plate, J, leaving a small opening between it and the thimble *n*, so that the pipe H may be put outside thereof, if desired, and to allow

cool air from a room to circulate therein and keep the parts cool, preventing fire.

On the top of the case B D R is hung a damper, F, by means of a rod, E, which extends through the finishing-plate J, so that the damper may be opened and closed. To insure the perfect shutting of the damper, one of the sides R of the case is provided with an inwardly-projecting flange, L, against which one edge of the damper shuts, the other and opposite edge shutting flat on the top edge of the opposite plate R, and is thus made to close the flue so closely as to turn nearly all the heat through a drum, G, placed in a room, T and S of which represent the joists and floor, the heat not radiated from the drum and smoke returning to the chimney or flue by means of a pipe, I.

In practice, in new chimneys, when being built, the attachment can be held by means of a flange, (dotted lines *x*,) extending into the joints of the brick; but when the device is to be put in a chimney already built, a hole is made opening into the entire flue-space, and the case B D R placed therein, and, if required to hold the parts in place, spikes *r* may be driven into the mortar-joints, and the space, if any, between the case and chimney-walls is to be filled with mortar or cement, to close the space in the flue when the damper F is shut.

The safety or face plate J is fast to the parts R R, and, when it is fitted to the face of the plaster P, makes the attachment safe and effectual in turning heat into the drum G.

I claim and desire to secure by Letters Patent—

The attachment B D R, inclosed by the four walls of the chimney A A', projecting through the front or inner wall of the chimney, and, by means of a safety face-plate, J, forming an air-chamber round the thimble *n*, the top of the attachment being provided with a damper for turning heat from the chimney into the drum G, as and for the purpose set forth.

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Witnesses:

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