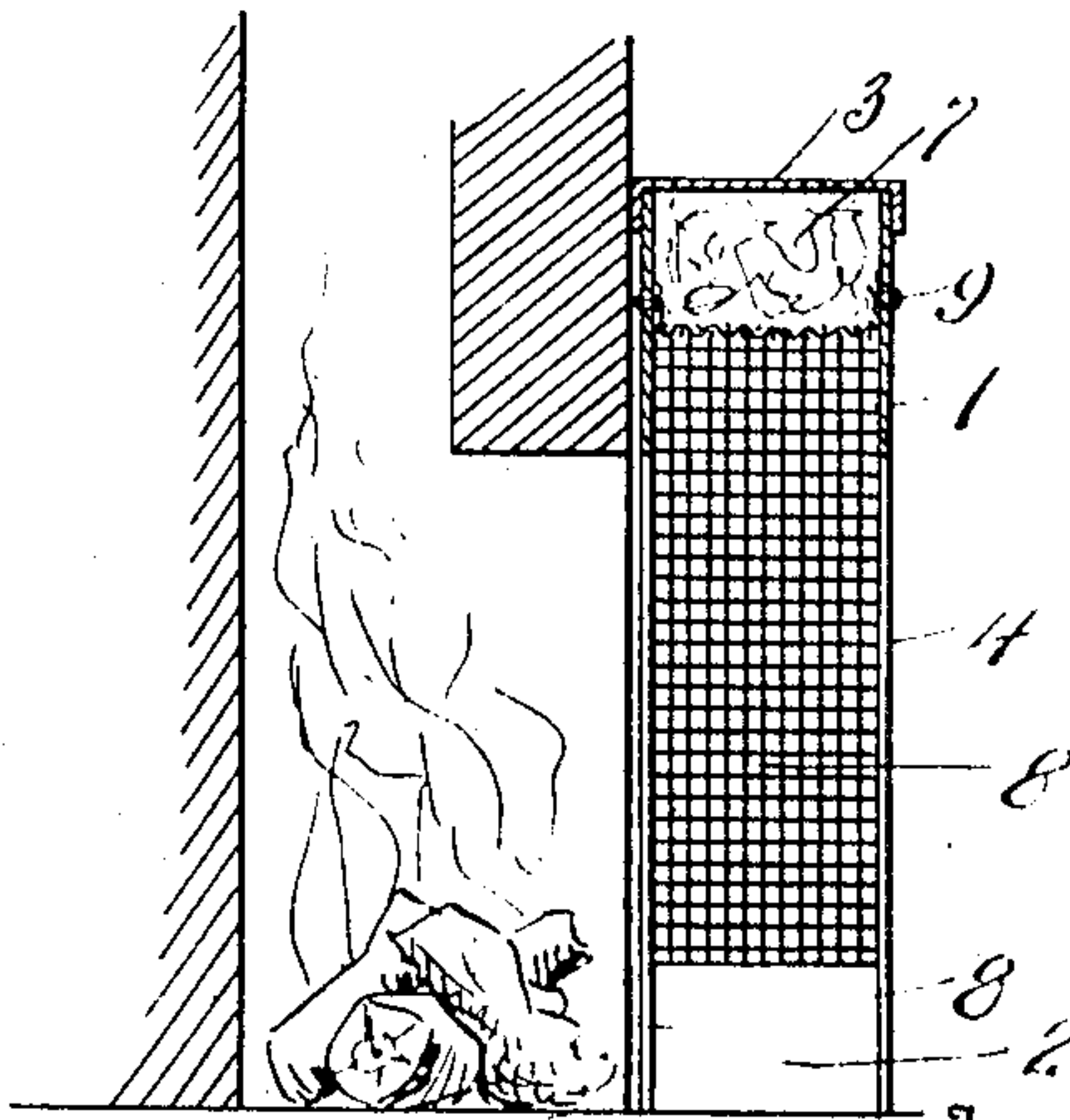
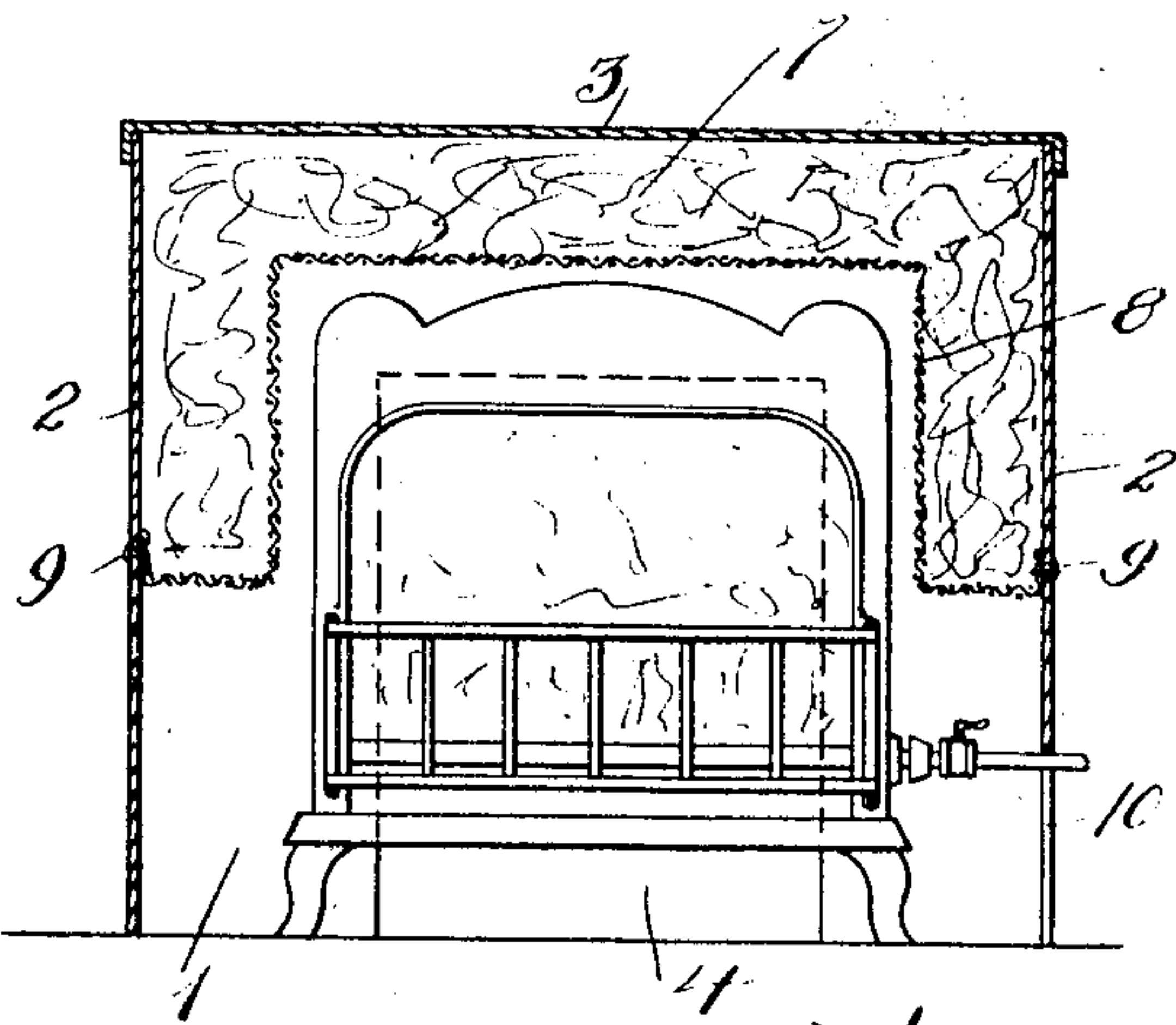
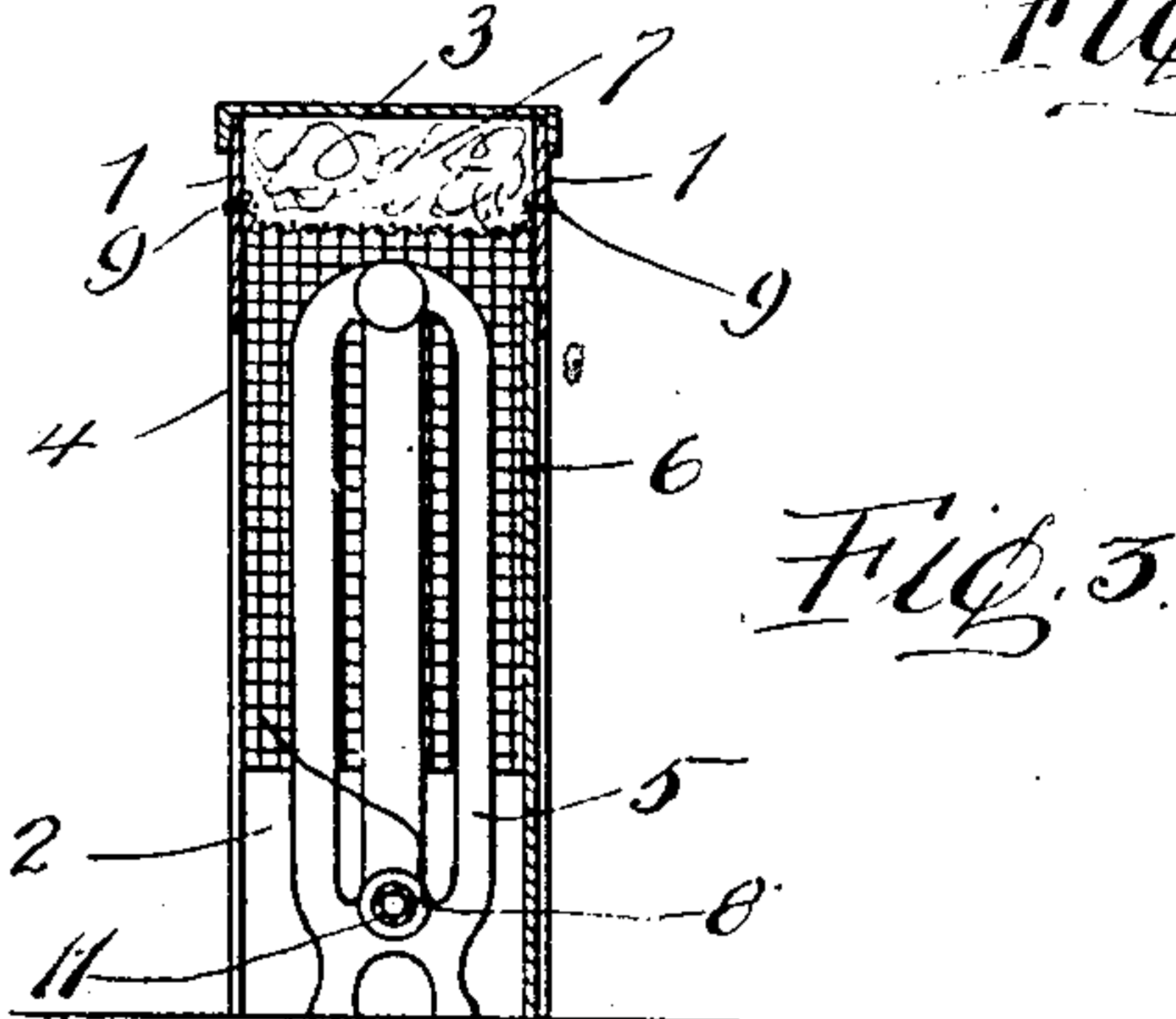
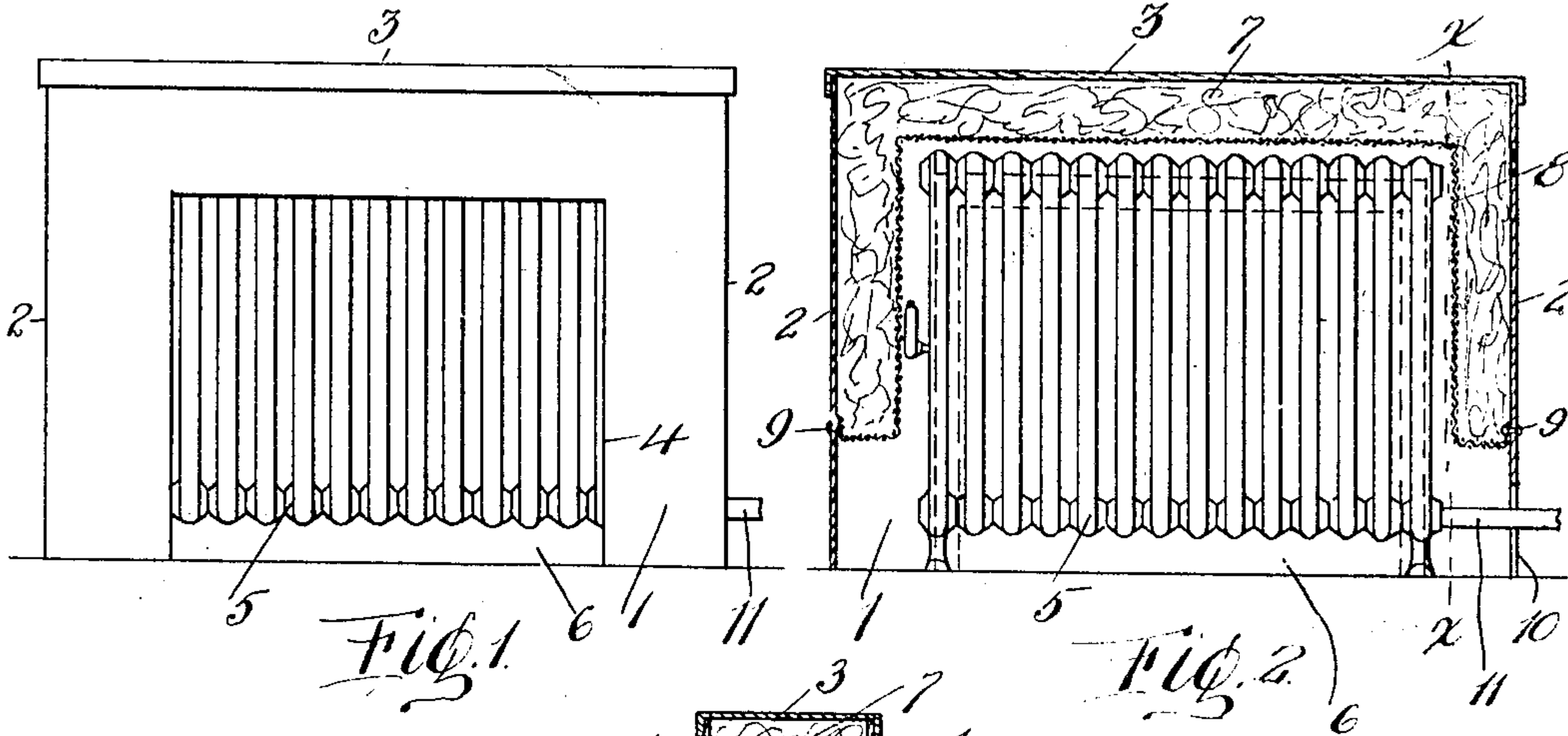


W. F. DIEM.  
SMOKE AND DUST COLLECTOR.  
APPLICATION FILED JULY 10, 1908.

904,941.

Patented Nov. 24, 1908.



Witnesses

Samuel Payne  
N. H. Butler

Inventor  
W. F. Diem  
By H. Evert & Co.  
Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM F. DIEM, OF PITTSBURG, PENNSYLVANIA.

## SMOKE AND DUST COLLECTOR.

No. 204,941.

Specification of Letters Patent.

Patented Nov. 24, 1903.

Application filed July 10, 1902. Serial No. 442,341.

*To all whom it may concern:*

Be it known that I, WILLIAM F. DIEM, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Smoke and Dust Collectors, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to smoke and dust collectors for radiators, gas stoves, and fire places, and the primary object of my invention is to provide a novel hood to be easily mounted over a radiator for collecting dust set in motion by the heat emitted by the radiator.

Another object of this invention is to provide a simple and inexpensive device that can be located in proximity to a gas stove or fire place for collecting smoke, dust and particles of dirt ejected by a stove or fire place.

With the above and other objects in view which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be presently described and then specifically pointed out in the appended claims.

Referring to the drawings:—Figure 1 is an elevation of a smoke and dust collector mounted over a radiator, Fig. 2 is a longitudinal sectional view of the collector, Fig. 3 is a cross sectional view of the same taken on the line *x—x* of Fig. 2, Fig. 4 is a longitudinal sectional view of the dust and smoke collector as mounted over a gas stove, and Fig. 5 is a cross sectional view of the collector located at a fire place.

In the accompanying drawings, 1 designates the side walls of a dust and smoke collecting hood, and 2 the end walls thereof, while 3 designates a cover or cap adapted to fit upon the upper edges of the side and end walls. The side walls 1 are cut away, as at 4, to provide a window or opening, and when the collecting hood is used in connection with a radiator 5 that is located near a wall (not shown), the side wall 1 confronting the wall is closed by a plate 6, best shown in Fig. 3 of the drawings. This plate prevents the wall from being affected by the heat emitted by the radiator 5, while the opposite wall allows the heat to escape.

In the casing formed by the walls 1 and 2

and the cap 3 is arranged a collecting material 7, such as mineral wool or fine asbestos. This material is supported by a wire screen or gauze 8, suitably secured to the side walls and end walls as by rivets 9. The wire gauze or screen 8 supports the wool in proximity to the radiator 5, and collects dust and dirt set in motion by the heat emitted by the radiator. The wire gauze or screen 8 in connection with the side and end walls form what may be termed a compartment for the collecting material. The collecting material can be readily renewed by removing the cap or cover 3. One of the end walls 2 of the hood is cut away, as at 10, to provide clearance for the radiator pipe 11.

In Fig. 4 of the drawings, I have illustrated a collecting hood similar to the hood of Figs. 1 to 3 inclusive, with the exception that the collecting material at the end walls 2 is supported at a higher elevation. This collecting hood is placed down over a gas stove or burner, and as these stoves or burners are generally supported a considerable distance above the floor, I have found that the collecting hood is applicable to various types of stoves and burners by locating the collecting material in the position illustrated in Fig. 4 of the drawings.

The application of my collecting hood as applied to a fire place is clearly shown in Fig. 5 of the drawings where it will be observed that the screen 8 can extend downwardly similar to the hood illustrated in Fig. 2.

I reserve the right to arrange the screen 8 and the collecting material according to the shape of the radiator, stove or fire place in connection with which the same is used. The collecting hood is made of light and durable non-fusible material, and the simplicity of construction permits of the same being manufactured at a comparatively small cost.

Having now described my invention what I claim as new, is:—

1. A smoke and dust collecting hood comprising side and end walls, said side walls cut away to provide openings, a plate abutting against one of said side walls for closing the opening therein, a relatively narrow flat strip of foraminous material interposed between the side walls and having its ends secured to the end walls, said strip of material in connection with said walls forming a compartment, a collecting material

within said compartment, and a cover adapted to fit upon the upper edges of said side and end walls closing said compartment.

2. A smoke and dust collecting hood comprising side and end walls, said side walls cut away to provide openings, a relatively narrow flat strip of foraminous material interposed between the side walls and having its ends secured to the end walls, said strip  
10 of material in connection with said walls forming a compartment, a collecting mate-

rial within said compartment, and a cover adapted to fit upon the upper edges of said side and end walls closing said compartment.

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

WILLIAM F. DIEM.

Witnesses:

MAX H. SROLOVITZ,  
A. J. TRIGG.