

No. 615,600.

Patented Dec. 6, 1898.

W. WEWERS.
ANTICREOSOTING DEVICE.

(Application filed Mar. 3, 1898.)

(No Model.)

Fig. 1.

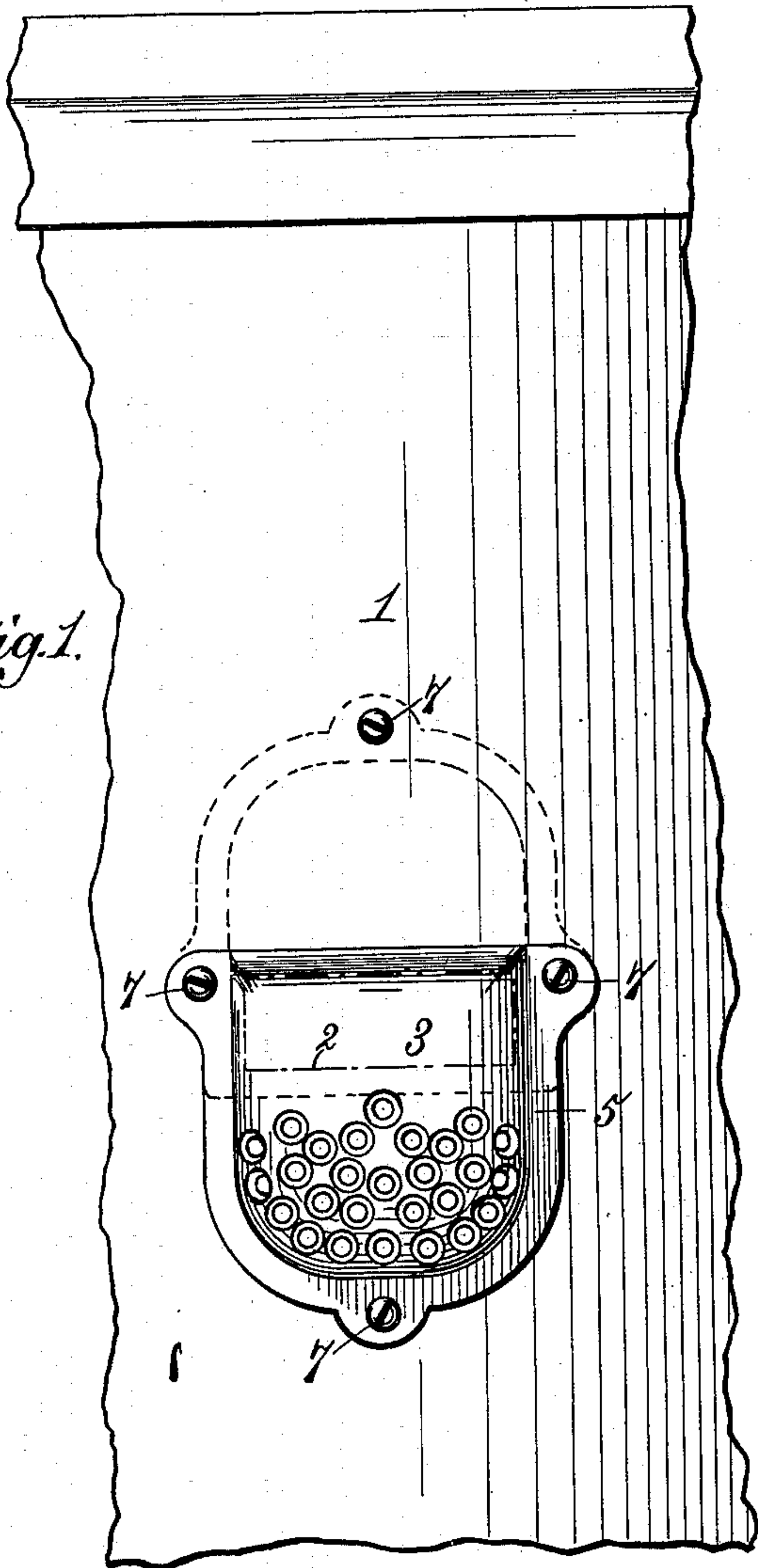
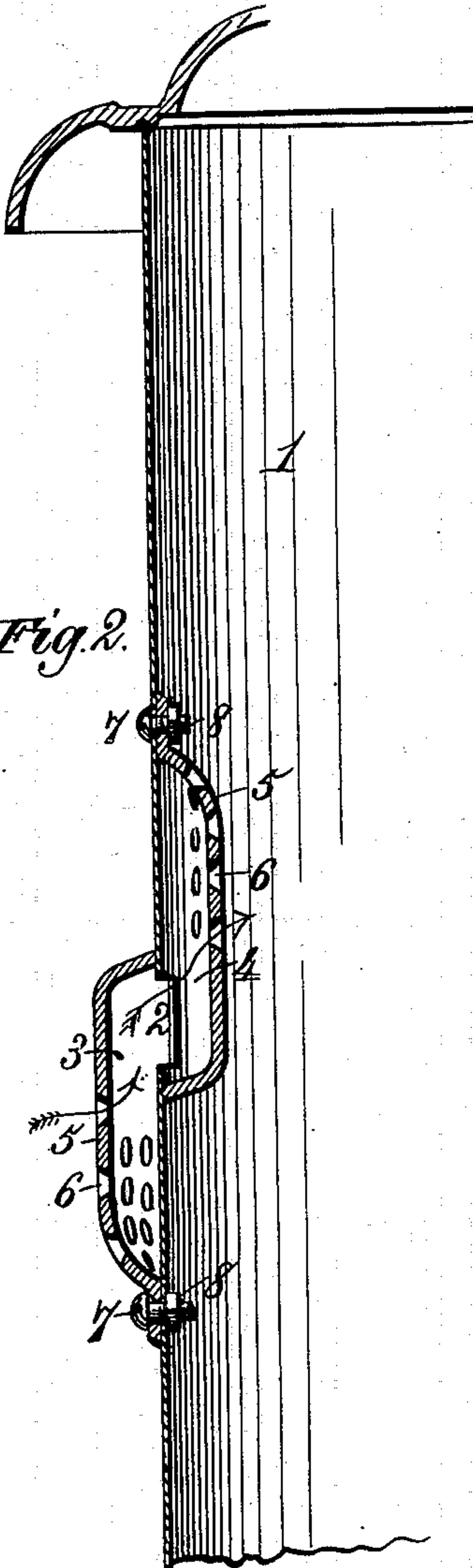


Fig. 2.



Witnesses:

Robert Grant.

J. B. Meeker

Inventor:

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By

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Atty

UNITED STATES PATENT OFFICE.

WILLIAM WEWERS, OF QUINCY, ILLINOIS, ASSIGNOR TO THE GEM CITY
STOVE MANUFACTURING COMPANY, OF SAME PLACE.

ANTICREOSOTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 615,600, dated December 6, 1898.

Application filed March 3, 1898. Serial No. 672,460. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WEWERS, a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented new and useful Improvements in Anticreosoting Devices, of which the following is a specification.

This invention has for its object to provide a novel, simple, efficient, and economical anticreosoter for admitting air into the upper part of a stove to consume the smoke and gaseous products of combustion, prevent the escape of gases into the apartment, and avoid the accumulation of soot in the stove and stove-smoke. To accomplish this object, my invention consists in the features of construction and the combination and arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation showing the upper part of a stove-body provided with my invention, and Fig. 2 is a vertical sectional view through the inner and outer perforated cup-shaped plates by which air is admitted into the upper part of the stove-body.

Referring to the drawings, the numeral 1 designates a portion of a stove drum or body. In an upper part of the stove-body, preferably at the back, there is formed a slot or port 2 for establishing communication between air-chambers 3 and 4, that are respectively external and internal.

Each of the air-chambers 3 and 4 is formed by a cupped or concaved metal plate 5, secured to the stove body or drum, one on the outside and one on the inside, in such manner as to lap by each other and inclose or cover the port 2, through which the chambers 3 and 4 communicate. The cupped or chambered plates 5 have their edges or margins bearing closely against the stove-body and they are provided with perforations 6, preferably so arranged that no perforations will be directly opposite the port 2, thereby preventing a direct draft through the port in the side of the stove-body. These chambered plates 5 may have any desired shape and dimensions and they can be fastened to the stove-body by means of bolts 7 and nuts 8, or otherwise. The cup-shaped plates are

separate and independent of each other, so that one can be attached to the outside and the other to the inside of the stove-body, as above stated, and when they are applied they constitute inner and outer air-chambers 3 and 4.

The ascending draft in the stove will cause air to be drawn into the perforated external air-chamber 3, through which it will pass upward, and thence flow through the port 2 into the internal air-chamber 4, and then issue in a divided form through the perforations of said inner chamber into the ascending smoke and gases in the upper part of the stove, preferably near the smoke-pipe. This steady intermingling of atmospheric air with the smoke and gases of combustion will rapidly oxidize or consume the same, so that escape of deleterious gases will be prevented and all accumulations of soot and tarry products will be avoided. By locating the external perforated air-chamber 3 at a lower level than the internal perforated air-chamber 4 the atmospheric air entering the external chamber must first rise and thence pass through the communicating internal air-chamber into the stove, while the arrangement of the inner chamber at a higher level than the outer chamber will obviate any passage of the gases of combustion outward through said chambers. The arrangement of imperforate portions of the plates 5 opposite the port 2 effectually prevents a direct draft through said port and gives an upward tendency to the currents of air admitted into the upper part of the stove.

What I claim as my invention is—

1. The combination with a stove-body having an air-port in its side, of two cup-shaped perforated plates arranged, respectively, inside and outside the stove-body, one of the cup-shaped plates being attached to the exterior of the stove-body with its upper end bearing against the same above the said air-port, and the other attached to the interior of the stove-body with its lower edge bearing against the same below the said port, substantially as described.

2. The combination with a stove-body having an air-port in its side, of two cup-shaped perforated plates secured, respectively, in-

side and outside of the stove-body and constituting interior and exterior air-chambers, each cup-shaped plate having an imperforate portion located directly opposite the said air-
5 port in the stove-body, and the internal plate being secured to the latter at a higher level than the external plate, substantially as and for the purposes described.

3. The combination with a stove-body having
10 an air-port in its side, of two separate and independent cup-shaped perforated plates secured, respectively, inside and outside the stove-body, and constituting inner and outer
15 air-chambers, one of the cup-shaped plates being attached to the exterior of the stove-

body, with its upper end bearing against the same above the said air-port and the other attached to the interior of the stove-body, with its lower edge bearing against the same below the said port, both plates having im- 20
perforate portions located directly opposite the air-port, substantially as and for the purposes described.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit- 25
nesses.

WILLIAM WEWERS.

Witnesses:

HERMAN HOENER,
WM. H. HEIDREDER.