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1,504,428

O. G. BYERS

FLUE STOPPER

Filed April 21, 1923

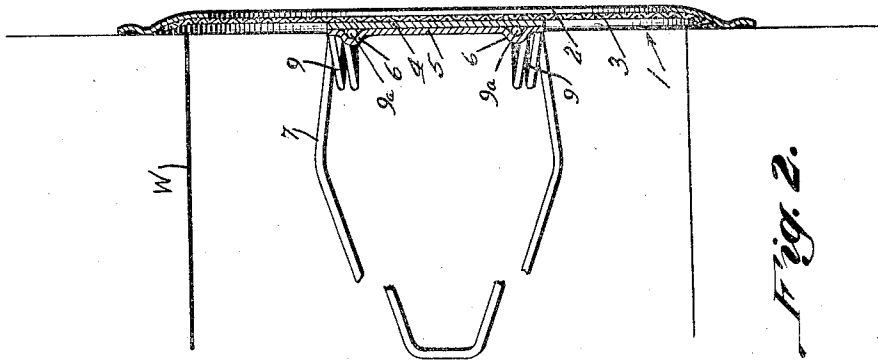


Fig. 2.

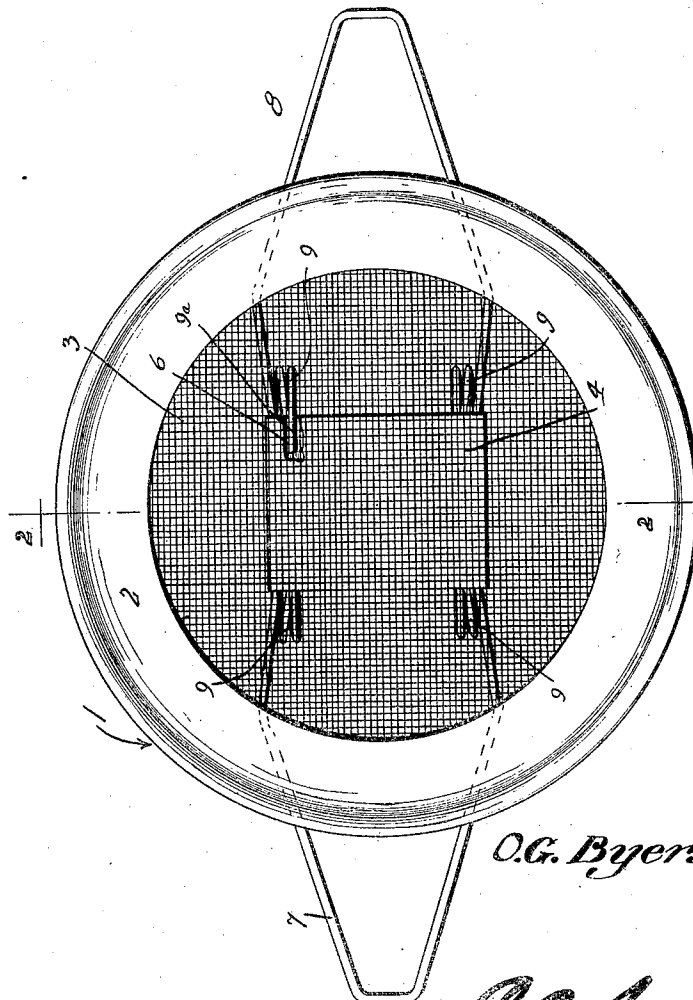


Fig. 1.

O.G. Byers,

Inventor.

By *Chas. H. Co.*
Attorneys

UNITED STATES PATENT OFFICE.

OREN G. BYERS, OF TULSA, OKLAHOMA.

FLUE STOPPER.

Application filed April 21, 1923. Serial No. 633,748.

To all whom it may concern:

Be it known that I, OREN G. BYERS, a citizen of the United States, residing at Tulsa, in the county of Tulsa and State of Oklahoma, have invented new and useful Flue Stoppers, of which the following is a specification.

This invention relates to flue stoppers.

The object of the invention is to provide a device of this character which while closing a flue opening, will provide a ventilator for the room in connection with which it is used.

Another object is to provide a device of this character with simple and efficient means for yieldably holding it within a thimble of common form positioned through the partition between the flue and the inner walls of the room.

Another object of the invention is to provide a stopper of this character with attaching spring fingers which may be readily removed when desired so that the stops may be packed one on the other for shipping or storing and occupy a minimum amount of space, the securing devices being packed in a separate container.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what its claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 represents a front elevation of a flue stop constructed in accordance with this invention.

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1 showing the devices applied.

In the embodiment illustrated, the stopper 1 constituting this invention comprises an annular sheet metal plate 2 to the inner or rear face of which is secured a foraminous covering 3 which extends over the opening in said plate and is here shown formed of screen wire, although obviously it may be formed of any other perforate material.

A small metal plate 4 is attached to the rear face of the cover 3 by soldering or otherwise and has secured thereto another plate 5 provided with spaced longitudinally extending sockets 6 to receive the ends of retaining members 7 and 8.

The retaining members 7 and 8 are exactly alike in form and each comprises a bail-shaped spring wire member having coils 9 formed in the legs thereof intermediate their ends, their terminals 9^a being inserted in the sockets 6 as shown in the drawings, and whereby the retainers are detachably held engaged with the stopper.

Normally, these retainers 7 and 8 when the device is not in use, lie in the position shown in Fig. 1, their ends projecting beyond the perimeter of the plate 2.

When it is desired to remove the stopper, obviously all that is necessary is to grasp the plate 2 and pull it outward, the coiled springs 9 permitting the retainers to yield for this purpose.

These retainers 7 and 8 may, if desired, be removed by slipping their ends or fingers out of the sockets 6 so that the stoppers or caps may be positioned in superposed relation for storage or shipment, and when assembled for use, the retainers 7 and 8 are inserted in the manner above set forth.

Various changes in the form, shape, proportion and other minor details of construction may be made without departing from the principle or sacrificing any of the advantages of the claimed invention.

I claim:—

A combined flue closure and ventilator comprising an annular sheet metal plate having a foraminous covering secured to its inner face, a small metal plate attached to the rear face of said covering, another plate superposed on said first mentioned small plate and having spaced sockets, and substantially bail-shaped retainers having the legs thereof provided with spring coils and inserted in said sockets.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

OREN G. BYERS.

Witnesses:

R. W. MONROE,
N. LE ROY SMITH.