

(No Model.)

C. H. SCHOLLE.
FLUE STOPPER.

No. 503,388.

Patented Aug. 15, 1893.

Fig. 1.

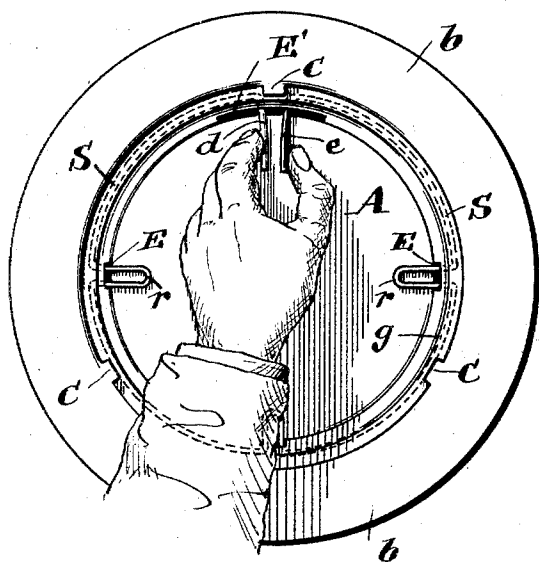


Fig. 2.

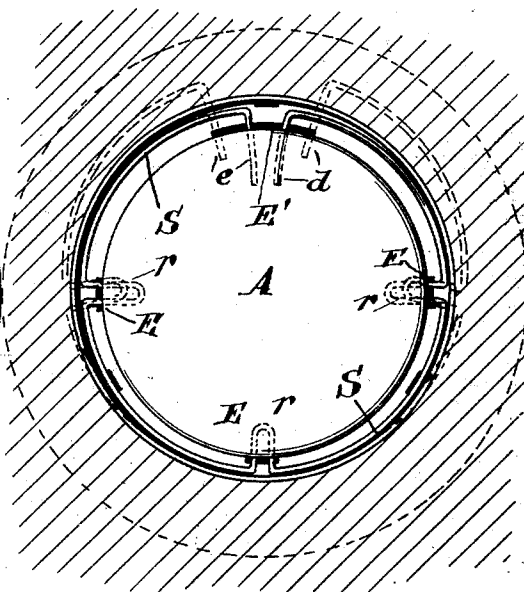


Fig. 3.

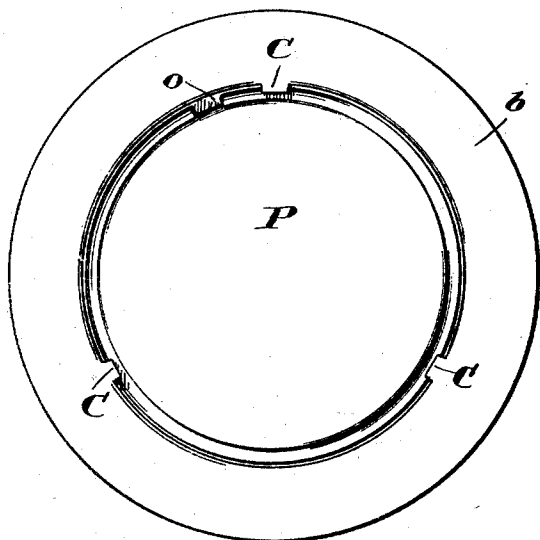
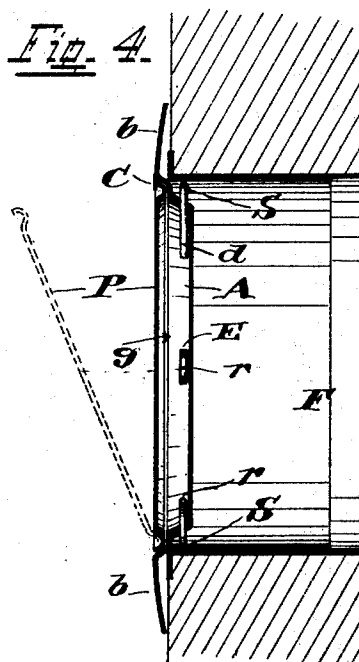


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES H. SCHOLLE, OF CINCINNATI, OHIO.

FLUE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 503,388, dated August 15, 1893.

Application filed January 11, 1893. Serial No. 458,009. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SCHOLLE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Flue-Stoppers, of which the following is a specification.

The object of my invention is to provide a flue-stoppper which can be easily secured in place and when so secured and covered with wall-paper or other ornamental design will prevent said paper or design from being scorched by the heat, if not ignited, thereby securing the same from damage and averting the danger of fire. This I accomplish by providing a double cap, as it were, that is, an inner and outer plate secured to a flange, a space being left between them, so that whatever fire or heat strikes the inner plate it will not affect the outer one, the heat generated from whatever cause passing out or escaping through a convenient vent, thus permitting the plate that is flush with the wall to be always of a temperature to effect the required results.

My invention will be more fully understood from the description herein contained, and by reference to the accompanying drawings forming part of my application, in which—

Figure 1 is a front view of my flue-stoppper, the outer or front cap being removed in order to show the inner plate and the arrangement of the spring which holds the stopper in place in the flue. Fig. 2 is a rear view of the inner plate with the retaining spring in position, the solid lines indicating such position, while the dotted lines show it just about ready for insertion in its proper quarter. Fig. 3 is a front view of the stopper as a whole, that is, as it appears so as to be flush with the wall. Fig. 4 is a vertical central section of the stopper, the solid lines indicating its position in the flue, the dotted lines indicating its outer plate as it appears just before its attachment to the inner portion.

The letter A indicates the inner plate. This is formed by a die so that a dished configuration is obtained. In other words it is so formed integrally that a flange *b* is secured, which abuts against the outer surface of the wall, while the dished, or hollowed-out, portion projects into the flue.

C are retaining lugs, formed integrally on the inner rim of the said flange, and serve to hold or release the outer plate P. These lugs are circumferentially equi-distant, and their number may be varied. I have shown but three, deeming that number sufficient for the purpose.

E are apertures or slots formed around the lower portion of the flange *b*. By means of these slots, the retaining spring S is held or released from the stopper as a whole. The upper aperture, which I designate as E', is somewhat longer than the others, in order to afford elastic play for the spring while it is being inserted or removed, and when inserted limit the expansion by bearing against the sides thereof, or to be so contracted or expanded as to conform snugly to the size of the flue-hole for purposes of removal or retention. Another purpose which these apertures or slots subserve is to permit the superheated air in the space between the inner and outer plates to escape to the flue, thus preventing any undue heat being communicated to the paper-covering or other material that may be affixed to the outer plate P.

I have shown the spring S as being in the shape of a quadrant, that is, its bearing or impinging surfaces against the interior of the flue, as being composed of four parts, one being integral with the other, but the number of these bearing parts I do not consider material—they may be more or may be less, the only object being to secure an equable pressure, so that the stopper will not wobble or sag, but be held firmly in position, so that no sparks or soot escape. As will be observed these bearing-surfaces are nearly a quarter of a circle each, and are so bent as that three inward prongs *r*, are formed, the two ends *d*, *e*, being free and unjoined and likewise inwardly bent, as seen more clearly in Figs. 1 and 2. By means of the free ends expansion and contraction is obtained, while through the prongs *r* inserted through the slots E, an equable retention and leverage is secured.

The plate P is circumferentially provided with slots *o* equal in number to the retaining lugs C. When it is desired to attach the plate these slots and lugs are aligned to one another, the plate P drops below the surface of the lugs C and is then slightly turned as to

bring the slots and lugs out of meeting with one another. The rim of the plate being thus under the lugs, said plate is firmly held in place, flush, or substantially so with the flange *b*. The rim of the plate *P* rests on and is supported by a shoulder *g* formed on the inner portion of the flange *b*, as seen in Fig. 1, but more noticeable in Fig. 3.

F, Fig. 4, represents the flue-hole.

Referring again to the slots *o* and lugs *C*, it may be stated that it is not necessary to have an equal number of each. All that is needed as seen in Fig. 3, where there are three lugs and one slot, is to provide a means whereby the plate *P* can be conveniently slipped under the lugs and retained thereby, or released therefrom, irrespective of the number of slots on the rim of said plate *P*, or the number of lugs on the flange *b*. I thus provide a flue-stoppper which is simple in construction, cheap in manufacturing, proof against fire or scorching, and which is a guarantee against the escape of soot or smoke into the room.

Another feature which it may be well to mention is the ease with which the parts may be taken apart for packing and shipping, the small bulk occupied, and the facility with which they can be replaced, all without danger of injury.

What I therefore claim, and desire to secure by Letters Patent, is—

1. In a flue-stoppper, a dished and flanged plate which impinges against the outer wall surface, and is provided with retaining lugs, in combination with an outer plate which is

designed to engage with said lugs and be retained or released thereby, whereby there is provided a space intermediate between the inner and outer plates, substantially as shown and described, and for the purposes specified.

2. In a flue-stoppper, a dished inner plate and an outer plate, which is secured in place or released by means of slots and lugs on said inner and outer plates respectively, whereby there is formed an intermediate space, in combination with spring and vent apertures whereby a spring, as *S*, can be readily attached and detached, expanded or contracted, substantially as described and for the purposes specified.

3. A double-plated flue-stoppper, with an intermediate space formed by dishing one of the plates, and having the other secured in place flush, or substantially so, with the flanged surface of the dished plate, in combination with a retaining spring, as *S*, capable of being held in place by slots, which also subserve the purpose of permitting the superheated air to escape, substantially as shown and described.

4. In a double-plated flue-stoppper provided with an intermediate space, a pronged spring which impinges against the interior of the flue and is retained in slots on the inner plate, whereby expansion and contraction are obtained, substantially as shown and described, and for the purposes specified.

CHARLES H. SCHOLLE.

Witnesses:

ELIZABETH U. SCHOLLE,
JERE. F. TUOHIG.