(No Model.)

C. F. GREEN.

CHIMNEY THIMBLE.

No. 563,587. Patented July 7, 1896.

FIG. 1.

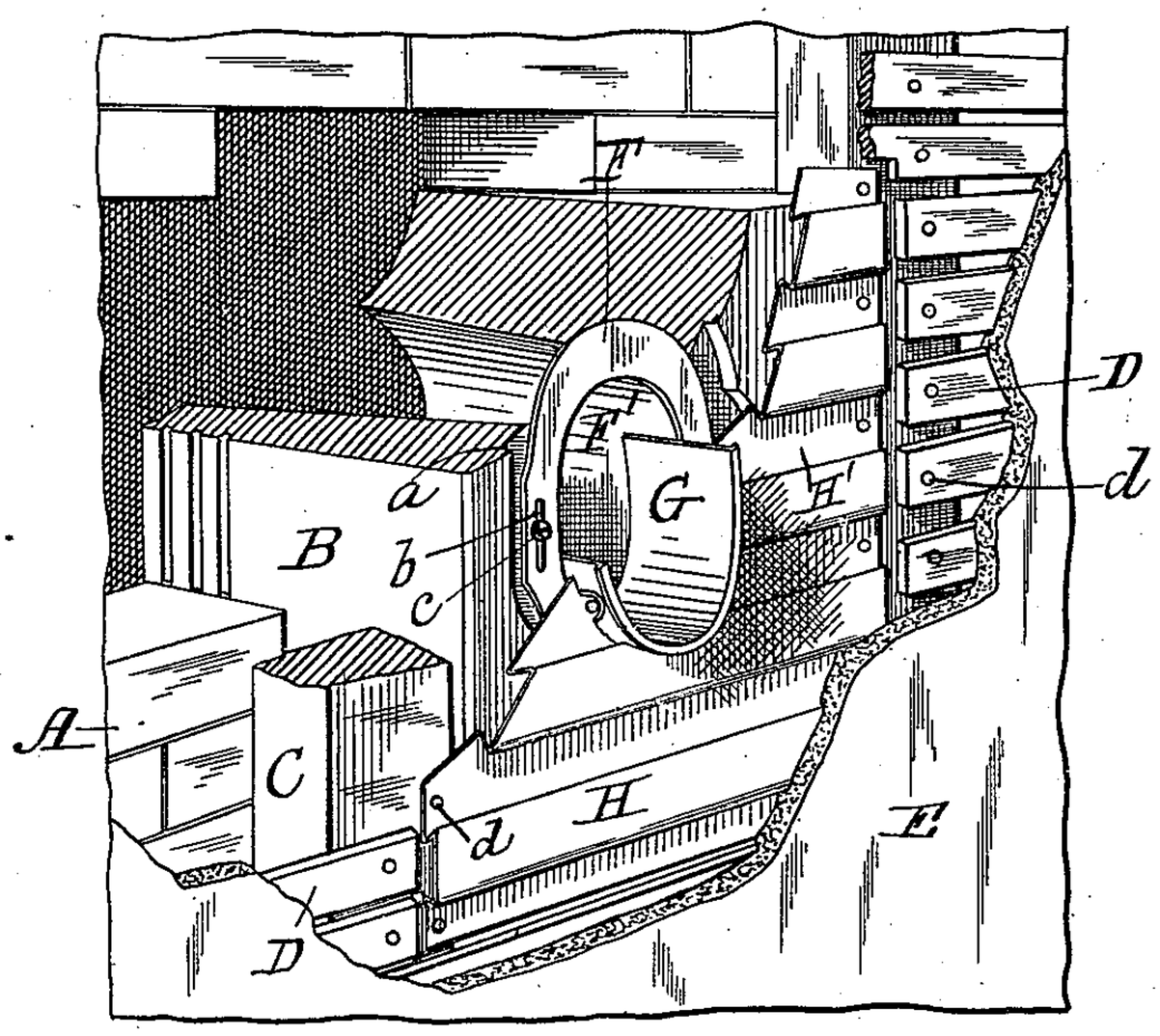


FIG. 2.

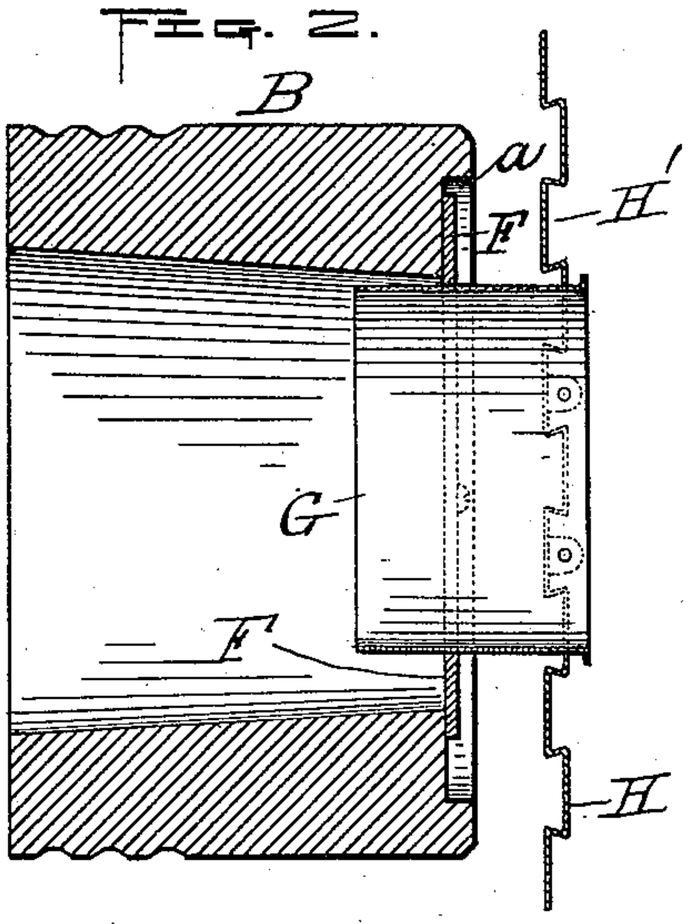
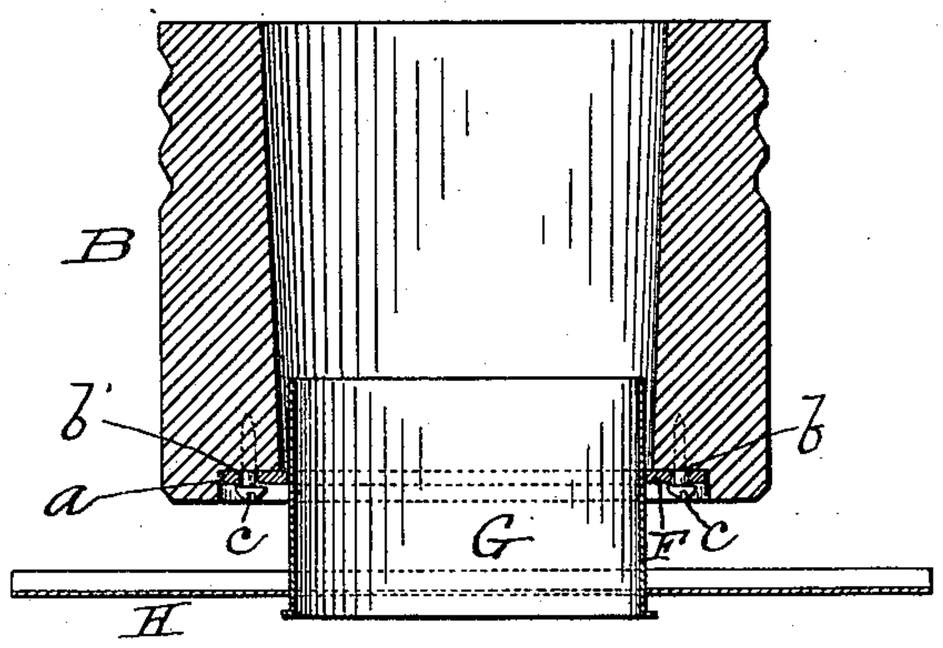


FIG. 3.



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UNITED STATES PATENT OFFICE.

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CHIMNEY-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 563,587, dated July 7, 1896.

Application filed April 26, 1895. Serial No. 547,231. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. GREEN, of the city and county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Chimney-Thimbles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved chimney-thimble applied to a chimney, also showing the surrounding woodwork and plastering, with a part of said thimble, chimney, woodwork, and plastering broken away to more clearly illustrate my improvements. Fig. 2 is a central vertical section through the thimble, and Fig. 3 is a central horizontal section thereof.

The object of my invention is to provide a thimble for chimneys which may be easily and expeditiously applied to any ordinary house-chimney; that is self-adjustable, so as to conform to any unequal settlement or horizontal movement forward or back of either the chimney or woodwork surrounding the same, and thus preventing the usual bulging out and cracking of the plastering around said thimble, and also serving as an efficient safeguard against fire to surrounding woodwork without bricking around the thimble, as is now commonly done.

Said invention consists of an artificial stone thimble proper having the outer face thereof preferably slightly recessed around its opening to receive a flat ring having vertical transverse slots in opposite sides thereof, through which are passed screws fastened into the stone thimble proper to hold said ring in position, and at the same time permit it to move vertically up or down.

It further consists of a detachable collar adapted to fit endwise into the opening of the stone thimble proper and secured at or near its outer end in the opening of a metal face-plate, having dovetail-shape horizontal corrugations H′, and adapted to be secured to the wood frame around the thimble, as and for the purpose hereinafter more fully set forth.

In order that others may better understand the nature and purpose of my said invention, I will now proceed to describe it more in detail.

In the drawings, A represents the chimney; B, the stone thimble proper fitted therein; C, the wood framework around the thimble; D, the laths secured thereto, and E the plaster spread upon said laths.

The thimble proper B is in practice preferably made from artificial stone; but I do not limit myself to said material. Aside from the recess in its face and the flat ring fitted therein, previously alluded to, the construction of said stone part is not new, and will therefore not require a detailed description. The recess *a* is made a little deeper than the thickness of the flat ring F, of about the same width as the outside horizontal diameter of the ring, and of sufficient height to permit of the required vertical movements of said ring and the parts which move with it, as will be hereinafter described. At each side of said ring are formed transverse vertical slots *b b*, through which horizontal screws *c c* are passed and fastened in the stone thimble proper, B, the purpose of said slots and screws being, as is obvious from reference to the drawings, to hold the flat ring in its proper position against the face of the stone thimble, and at the same time permit it to move up and down vertically, as aforesaid. A removable collar G is adapted to fit endwise into the central opening F′ of the ring F and is secured near its outer end to a face-plate H, having a central transverse opening to receive it, and also made with horizontal dovetail-shape grooves or corrugations H′ to receive and hold the mortar E. Said horizontally-corrugated face-plate is secured around the edges to the wood framework by means of nails *d* or other suitable fastenings.

By the use of a flat ring fitting in a recess against the face of the stone thimble a collar G, fitted endwise therein, extending quite a distance into the thimble-opening, and a metal face-plate secured thereto and to the surrounding wood frame, as above described, it will at once be apparent that the danger from fire escaping around the chimney-thimble to ignite the woodwork is reduced to a minimum. It will also be observed that by the adoption of the flat recessed ring F, with the side slots and holding-screws, the metal portions of the

thimble device are permitted to move together vertically up or down freely. Consequently, if the wood partition or other woodwork around the thimble settles unequally with the chimney, it is permitted to do so without injury to the plastering around said thimble, and by the combination, with said flat ring, of the collar G, fitted to slide horizontally therein, horizontal movement of the chimney or woodwork is permitted without injury to the plastering, thereby removing two serious and very objectionable features to the common mode of rigidly securing an iron thimble in the chimney and bricking tight around it outside of the chimney, between said thimble and the usual wood frame around the same. By my invention said bricking around the thimble is wholly dispensed with, as it is unnecessary to employ the same to insure perfect safety against fire.

By the use of a horizontally-corrugated plate, as described and shown, perfect clenches are provided for the mortar, to hold the same securely in place, and a stiff rigid background also provided therefor, as durable, if not more so, than the usual lathed surfaces.

In applying my improved thimble the stone part B is preferably fitted in the chimney when the latter is built, the recessed flat ring being secured thereto at that time, and forming a part of the thimble proper. After said stone part has been fitted, the face-plate H and its collar may be fitted and secured in place at any time prior to plastering. In fitting said parts the flat ring is, in practice, pushed up so that the holding-screws *c c* will come at or below the center of the side slots *b b* in said ring, about as shown in Fig. 1, so as to permit either the chimney or woodwork to settle, more or less, without affecting the other. Since the woodwork is more liable to settle than the chimney, owing to shrinkage of said woodwork, in addition to settling, the ring F is usually, in practice, moved so as to bring the screws *c c* near the bottom of the slots *b b*.

I reserve the right to modify the construction as circumstances may require in carrying out the principle of my invention.

I am aware that several patents have been issued for chimney-thimbles embodying means whereby unequal settlement is provided for, to prevent bulging and cracking the plastering around the thimble, and I therefore limit my invention to substantially the construction and arrangement herein set forth, and pointed out in the claim.

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

A chimney-thimble, comprising in combination the thimble proper, the flat ring having means for fastening it to said thimble proper and adapted to slide vertically on the face thereof; the pipe-collar fitted in said flat ring, and the face-plate having corrugations therein to hold the plaster, also fitted and fastened to the pipe-collar and adapted to be fastened at its edges to the woodwork around the chimney-thimble opening, substantially as and for the purpose set forth.

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