

P. E. BUCKLEY.
STOVEPIPE THIMBLE FOR WALL FLUES.
APPLICATION FILED SEPT. 4, 1908.

980,919.

Patented Jan. 10, 1911.

Fig. 1

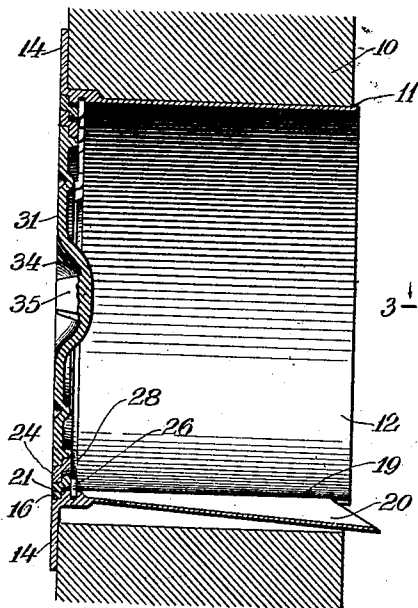


Fig. 2

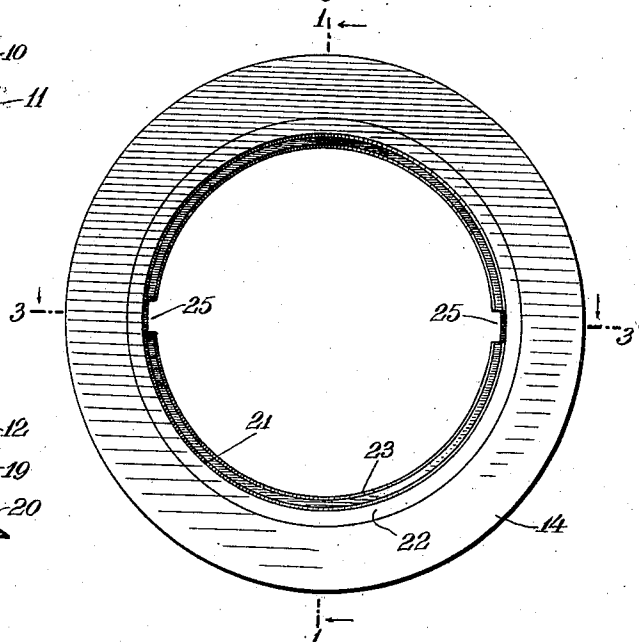


Fig. 3

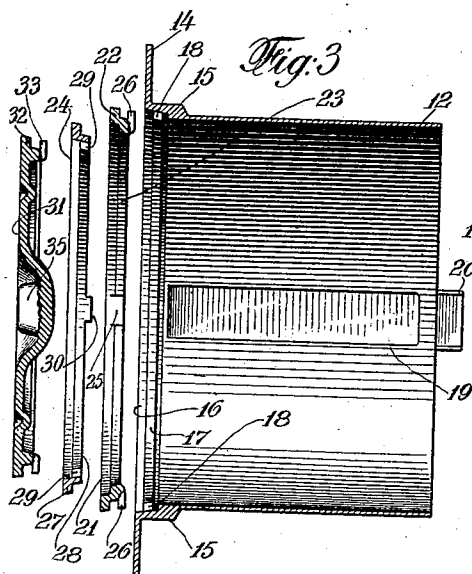
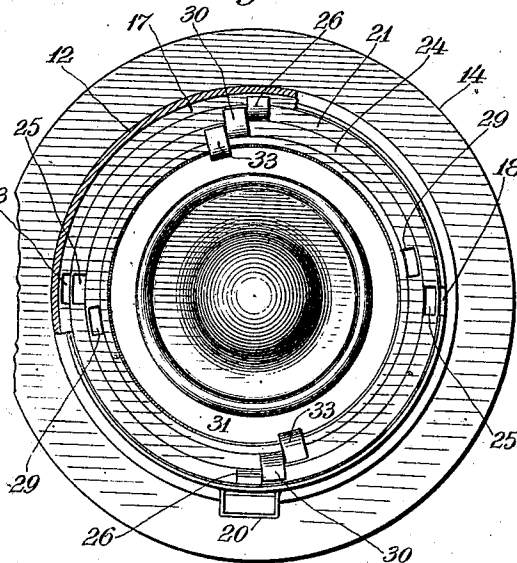


Fig. 4



Witnesses:

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UNITED STATES PATENT OFFICE.

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STOVEPIPE-THIMBLE FOR WALL-FLUES.

980,919.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed September 4, 1908. Serial No. 451,648.

To all whom it may concern:

Be it known that I, PAUL E. BUCKLEY, a citizen of the United States, and a resident of Alton, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Stovepipe-Thimbles for Wall-Flues, of which the following is a specification.

The invention relates to improvements in stovepipe thimbles for wall flues, and consists in the novel features hereinafter described, and particularly pointed out in the claim.

One object of my invention is to provide a thoroughly durable, efficient and reliable thimble adapted to stove pipes varying in diameter and to be entirely closed when desired, and a further object of the invention is to provide a thimble which is adapted to protect the wall from the consequences of heat or flames in the pipe, the thimble affording a fire-proof structure.

In carrying out my invention I provide an iron thimble comprising a tubular portion to enter the hole in the wall and having at its outer end an integral annular flat ring face plate to engage the face of the wall, and for the outer end of the tubular portion of the thimble I construct in a special manner several concentric enlarging and reducing rings and a central closure, said rings being adapted to nest one within the other and in said face-plate and the closure being adapted to nest within the inner ring and complete, when desired, the closing of the thimble. The several rings and closure are provided with means for conveniently securing them together in series in a very efficient manner, and the thimble structure as a whole is of durable character and superior practical utility.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a central vertical longitudinal section (on the dotted line 1—1 of Fig. 2) through a thimble constructed in accordance with and embodying my invention, a portion of the wall being shown in section and the several parts of the thimble being assembled and the outer end thereof being closed; Fig. 2 is a front view of the thimble, with the central closure and the inner ring omitted

therefrom, the outer ring being shown in position in the ring face-plate; Fig. 3 is a horizontal section, on the line 3—3 of Fig. 2, showing all of the features of the thimble structure in their relative positions for assembling to complete the structure illustrated in Fig. 1, and Fig. 4 is a rear face view, partly in vertical section and partly broken away, of the entire thimble structure with its parts assembled.

In the drawings, 10 denotes a portion of a wall having an opening 11 leading to a customary wall flue.

The iron thimble of my invention is applied to the wall 10 and comprises a tubular portion 12 which fits within the opening 11 in the wall and is formed integrally with an annular ring face-plate 14 which is adapted to rest against the wall around the opening 11. The face plate is united to the tubular portion 12 by a thickened section 15 in which is formed an annular recess 16 containing an annular flange 17 having at opposite points notches 18 formed therein for the purposes hereinafter explained. The tubular portion 12, face plate 14, thickened section 15 and notched flange 17 are in one integral casting, and said thickened section 15 is of annular formation and projects outwardly beyond the bore of the tubular portion 12 and forms a strong connection between said portion 12 and the face plate 14 and also, by extending outwardly, leaves the bore of the portion 12 of substantially uniform diameter from end to end, which I deem to be of considerable advantage. At its lower side the tubular portion 12 is preferably formed with an elongated longitudinal opening 19 leading to a trough 20 which inclines inwardly and downwardly to the flue, and the purpose of which is to receive and discharge into the flue such creosote as may form in the tubular portion 12. The tubular portion 12 is cylindrical and straight except at the trough 20, which is integral with and projects downwardly from the body of said portion 12 and in addition to serving the purposes of a trough prevents by being within a groove or recess in the opening 11 in the wall, any turning of the thimble.

Within the annular recess 16 of the face-plate 14 is arranged a reducing ring 21, which is of substantially right angular for-

mation in cross-section and comprises an outer portion 22 and an inner depressed portion or flange 23, the portion 22 being adapted to seat against the flange 17 and within the recess 16, so that its outer face and the outer face of the face-plate 14 will be flush with each other, as shown in Figs. 1 and 2. The inner portion or flange 23 of the ring 21 is concentric with and sets inwardly beyond the inner edges of the outer portion 22 of said ring and is adapted to receive a further reducing ring 24, and said flange 23 is formed at opposite points with notches or openings 25 corresponding with the notches or openings 18 in the flange 17. The ring 21, which I term the outer ring, is formed at opposite points with lips 26 which are at the inner side of the flange 23 and extend outwardly beyond the same, so as to leave a definite space between the outer faces of said lips and the inner face of the outer portion 22 of the ring 21, as shown in Fig. 3. The purpose of the lips 26, arranged as described, is to lock the ring 21 within the recess 16 of the face plate 14. In applying the ring 21 to the face plate 14 I move the lips 26 inwardly through the notches 18 in the flange 17 and then give to the ring 21 a partial rotation, thereby carrying the lips 26 along the inner surface of the flange 17 and away from the notches 18 therein, said flange 17 being thereby engaged between the lips 26 and the portion 22 of the ring 21 and serving to firmly support the ring 21.

The inner ring 24 corresponds in construction with the outer ring 21 and it is of substantially right angular form in cross-section and has an outer portion 27 adapted to seat within the recess formed by the junction of the parts 22, 23 of the ring 21, so that its outer surface may be flush with the outer surface of the outer ring 21 and face plate 14, as shown in Fig. 1. The ring 24 has an inwardly extending flange 28, which, at opposite edges, is formed with recesses 29 corresponding with the recesses 25 in the ring 21, and at two opposite points is formed with lips 30 corresponding with the lips 26 of the outer ring 21. In applying the outer ring 24 to the inner ring 21, I move the lips 30 of said inner ring through the recesses 25 of the outer ring and impart to said inner ring a partial rotation, thereby carrying said lips 30 from the recesses 25 and causing them with the outer section 27 of the ring to embrace the flange 23 of the ring 21, whereby said flange 23 is enabled to firmly hold the ring 24 in position.

I may provide as many of the reducing and enlarging rings 21, 24, as may be desired, but usually two of said rings will be sufficient, said rings enabling me to either reduce or enlarge the opening to the tubular portion 12 to suit stove pipes varying in

diameter. The rings 21, 24 are exactly alike, except that one is smaller than and adapted to nest in the other, while both rings may, when desired, be nested within the face plate 14 and therewith present a flush front.

As a means for stopping up the opening through the inner ring 24, I provide a closure plate 31 which at its edge is formed with an annular flange 32 to seat within the ring 24 and against the flange 28 thereof, and I also provide the closure 31 at opposite points, with lips 33 corresponding with the lips 26, 30 hereinbefore described. In applying the closure 31 to the inner ring 24 I move the lips 33 of said closure through the recesses 29 of said ring and then impart to the closure a partial rotation, so as to carry the lips 33 away from the recesses 29 and along the flange 28 of said ring, whereby said flange is enabled to firmly hold the closure 31 in position. I provide the central portion of the closure with a concavity 34 containing a finger piece 35 to facilitate the handling of the closure and its application to the other members of the structure.

When the rings 21, 24 and closure 31 are in position across the outer end of the tubular portion 12 of the thimble they fully and absolutely close the thimble and present lapped joints which enable the several parts to present a flush front and also exclude drafts through the thimble. When it is desired to apply a stove-pipe to the thimble the closure 31 will be removed, and if the opening thus left is of proper diameter for the pipe, the thimble will require no further attention. If, however, the pipe should have a diameter greater than the hole through the ring 24, said ring will be removed, so as to increase the opening into the thimble and the pipe may be inserted, if of proper diameter into this opening. If the diameter of the pipe to be used is greater than that of the opening through the outer ring 21, said ring may be removed and the pipe inserted into the opening thus left. The rings 21, 24 are both reducing and enlarging rings, the rings being one after another removed for enlarging the opening for the pipe and one after another applied for reducing the opening for the pipe.

What I claim as my invention and desire to secure by Letters-Patent, is:

A stove-pipe thimble comprising an iron tubular portion 12 having integrally therewith at its outer end an annular ring face-plate 14 to rest against the outer face of the wall around the opening therein receiving said tubular portion and also having at its outer end an annular outwardly projected section 15 containing an annular recess 16 within which is an inwardly extending flange 17 having notches 18 at definite points, an outer ring (21) fitted against said flange and itself having an inwardly extend-

ing flange (23) which is notched through at
definite points and at other points formed
with outwardly extending lips to pass
through the notches in the said flange 17 and
5 engage the rear surface of the same, an in-
ner smaller ring (24) corresponding in con-
struction and concentric with said outer
ring and fitted thereto, and a closure fitted
to said inner ring having outwardly extend-
10 ing lips to pass through notches in the flange

of said inner ring and engage the rear sur-
face thereof; substantially as set forth.

Signed at Alton, in the county of Belknap
and State of New Hampshire, this 2 day of
Sept. A. D. 1908.

PAUL E. BUCKLEY.

Witnesses:

WALDO C. VARNEY,
HATTIE F. VARNEY.