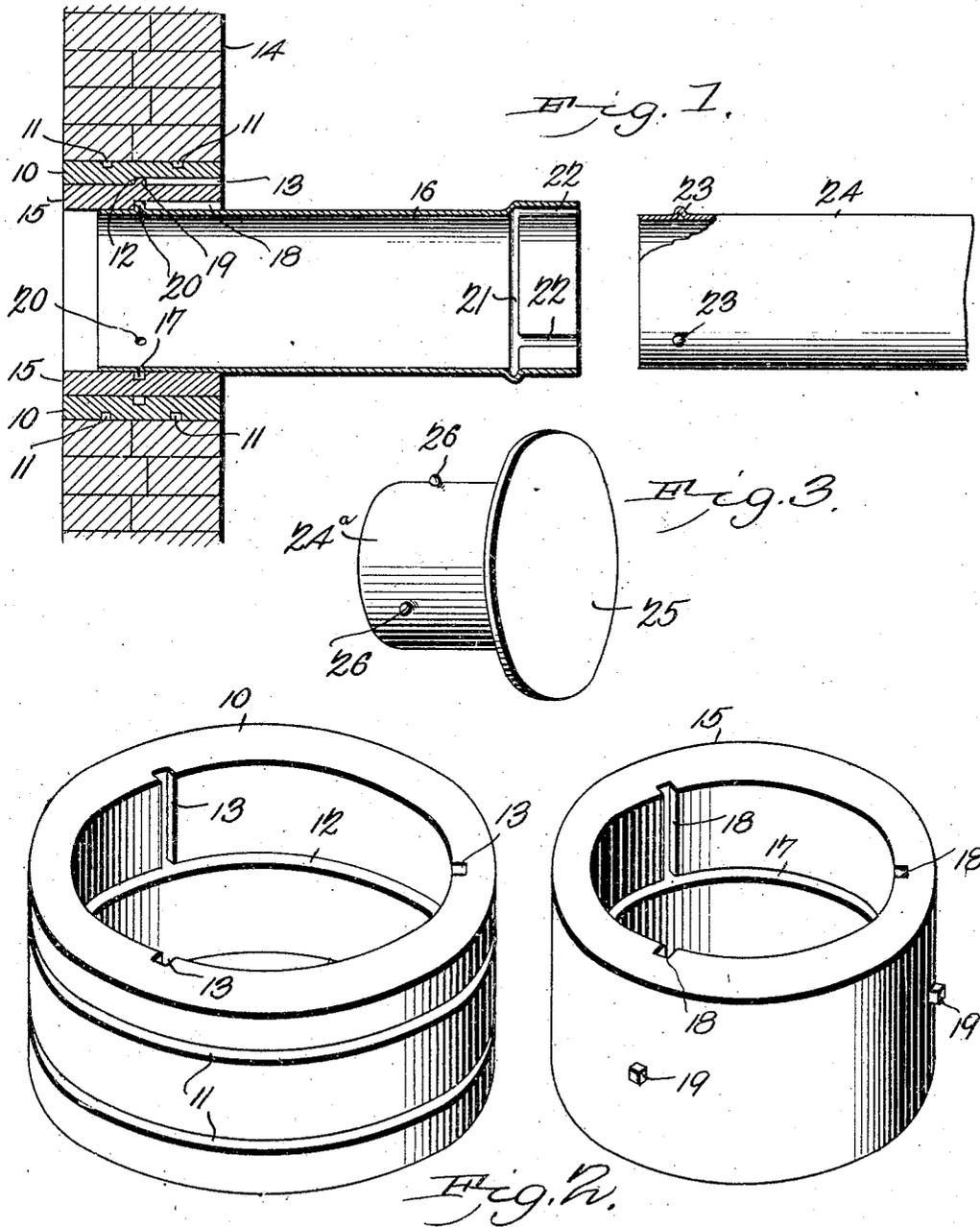


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PATENTED APR. 25, 1905.

E. FINCH.  
STOVEPIPE THIMBLE.  
APPLICATION FILED AUG. 12, 1903.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ERNEST FINCH, OF RICHMOND, INDIANA.

## STOVEPIPE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 788,200, dated April 25, 1905.

Application filed August 12, 1903. Serial No. 169,258.

*To all whom it may concern:*

Be it known that I, ERNEST FINCH, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Stovepipe-Thimble, of which the following is a specification.

This invention relates to stovepipe-thimbles; and it has for its object to produce an improved form of thimble which may be easily applied and which may be adapted to fit different sizes of chimney-openings.

The invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claim.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a sectional view of a portion of a chimney with the improved thimble and a pipe with its joint in position therein. Fig. 2 is a perspective view of the thimble-sections detached. Fig. 3 is a perspective view of a cap employed to close the flue-opening into the chimney when the flue is removed.

The improved device consists of a tubular member 10, preferably of brick or other similar material capable of being molded into the required shape, but which may be made of metal or other suitable material which will resist the action of heat. For the purpose of this description the member 10 will be referred to as the "primary" thimble member. Said member 10 is provided with exterior annular channels or grooves 11 and an interior annular channel or groove 12, with one or more longitudinal grooves or channels 13 connecting therewith, as shown. Any number of the exterior channels 11 may be employed; but generally two will be sufficient, the function of these channels being to receive the cement or mortar and assist in holding the thimble in place in the opening in the chimney, which is indicated at 14. The interior diameter of the member 10 will correspond to the outside diameter of the largest size of smoke-pipes which will be employed; but to enable the device to be adapted to the different-sized pipes employed upon different forms of stoves,

and the like secondary reducing-thimbles will be employed.

The pipes generally employed are eight or nine inches in diameter for furnaces and heating boilers or generators, six inches for ordinary heating-stoves, and five and four inches for the smaller heating-stoves or special forms of apparatus from which smoke-pipes lead; but it will be understood that I do not wish to be limited in any manner to the sizes of the pipes to which the improved device is adapted, but reserve the right to its use for all the various sizes of pipes or other similar structures to which it is applicable.

One of the reducing-thimbles will be provided for each size of pipe, or a plurality of interengaging thimbles having interior diameters corresponding to the pipes will be provided, as preferred.

For the purpose of illustration a single secondary reducing-thimble 15 is shown, having its exterior corresponding to the interior of the primary thimble 10 and its interior corresponding to the pipe-section represented at 16, as in Fig. 1.

The secondary thimble member is provided with an interior annular channel or groove 17, having longitudinal channels 18 communicating therewith which correspond to the similar channels 12 13 of the member 10. Upon the exterior of the member 15 studs or lugs 19 are provided, corresponding in number to the channels 13 in the primary thimble. When the secondary thimble is inserted within the primary thimble, the lugs 19 will pass into the longitudinal channels 13, and when the secondary thimble is in position the lugs will enter the channel 12 if the secondary thimble is rotated within the primary thimble. By this simple means the secondary thimble may be "locked" into engagement with the primary thimble.

The pipe-section 16 is provided with studs 20, corresponding to the longitudinal channels 18 of the thimble member 15 and adapted to enter therein when the pipe is inserted into the thimble to enable the pipe to be locked in the thimble when the pipe is rotated, and the studs 20 are made to enter the channel 17

in the same manner as the studs 19 are entered into the channel 12 in the member 10. Thus it will be seen that the pipe-sections will be locked in the thimble, and when a pipe smaller than the primary thimble is required the reducing-thimble will be employed. It will also be obvious that provision is made for the employment of any size of pipe by merely inserting the reducing-thimbles of the proper sizes in sufficient number.

The end of the pipe-section 16 opposite the studs 20 will be provided with an internal annular channel 21 and with intersecting longitudinal channels 22, corresponding in number to the studs 20, and by which means the pipe-sections may be united and locked together by studs 23 on the next section 24 in substantially the same manner as the thimble-sections are united and locked, as will be obvious. By this simple arrangement the whole structure is firmly united and "interlocked" and all danger of displacement obviated. It will also be noted that with the pipe-sections thus united to the chimney and to each other no holding-wire or other similar supports are required to prevent longitudinal movement of the pipes relative to the chimney or each other, thus greatly simplifying the construction and materially increasing the safety and improving the appearance of the same. The unsightly stay-wires are thus dispensed with, which is a very desirable result.

The studs 20 and channels 21 22 will preferably be "struck" or "pressed" outwardly from the bodies of the pipe-sections, as represented.

Any number of the guide-channels 13, 18,

and 22 may be employed; but generally three will be sufficient, as shown.

A cap member will be provided to close the pipe-opening in the chimney when the stoves or furnaces are "taken down," consisting of a pipe-section 24<sup>a</sup>, having a closed outer end and spaced studs 26, corresponding to the channels 13 or 18, as the case may be, adapted to be locked in position in the same manner as the pipe-sections are secured.

Having thus described the invention, what I claim is—

A tubular cylindrical primary thimble having exterior and interior annular grooves formed in the body thereof and interior longitudinal grooves communicating at their inner ends with the interior annular grooves, in combination with a tubular cylindrical secondary reducing thimble of an exterior diameter equal to the interior diameter of the primary thimble and of a thickness of body sufficient to effect the desired reduction, said secondary thimble being provided with exterior lugs to engage the interior grooves of the primary thimble and with an interior annular groove formed in the body thereof, and with longitudinal grooves likewise formed in the body thereof and communicating at their inner ends with said annular groove.

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

ERNEST FINCH.

Witnesses:

J. E. MOORE,  
M. B. TAYLOR.