

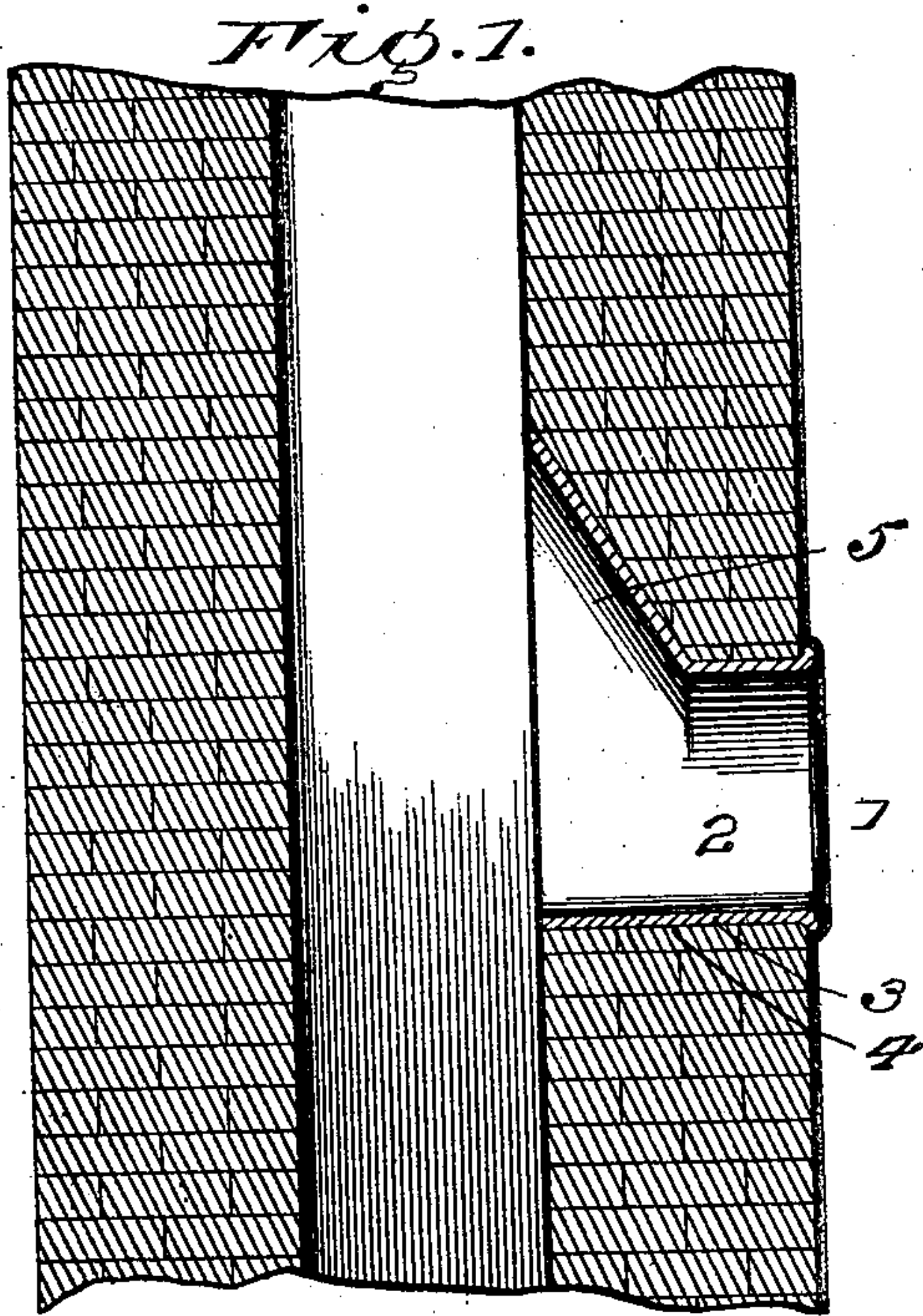
No. 690,778.

Patented Jan. 7, 1902.

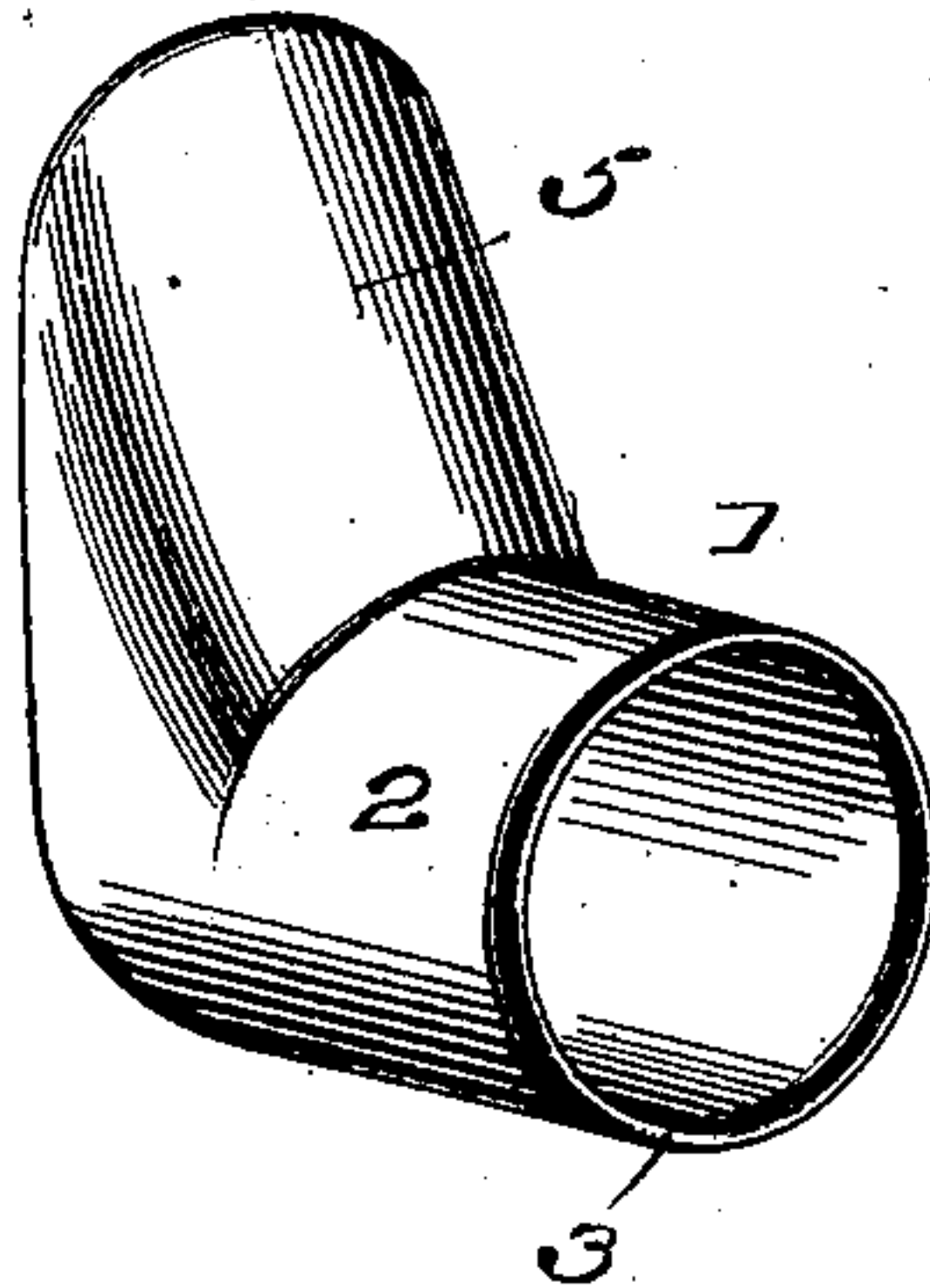
C. F. SCHROTH.  
CHIMNEY THIMBLE.

(Application filed Mar. 13, 1901.)

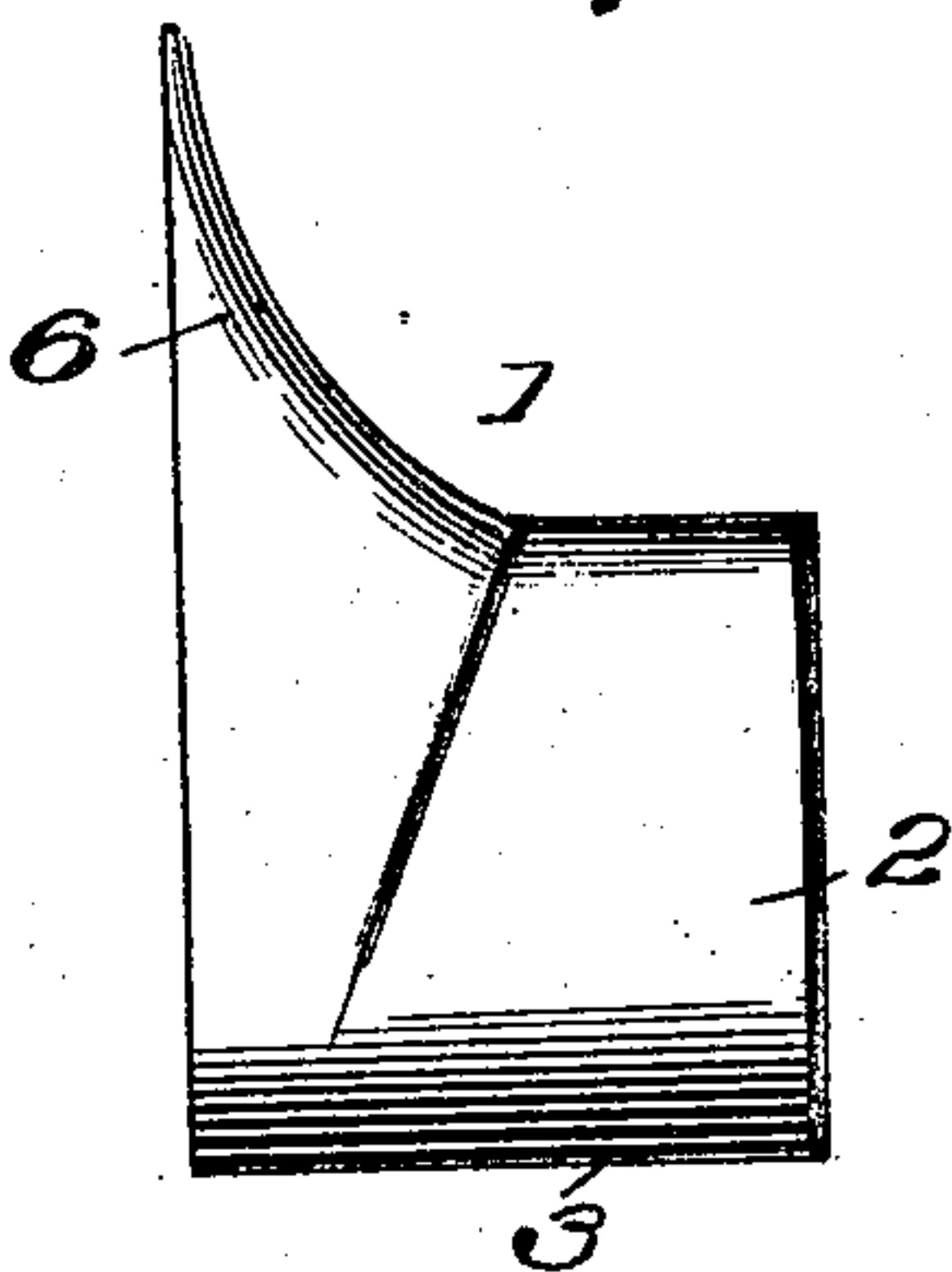
(No Model.)



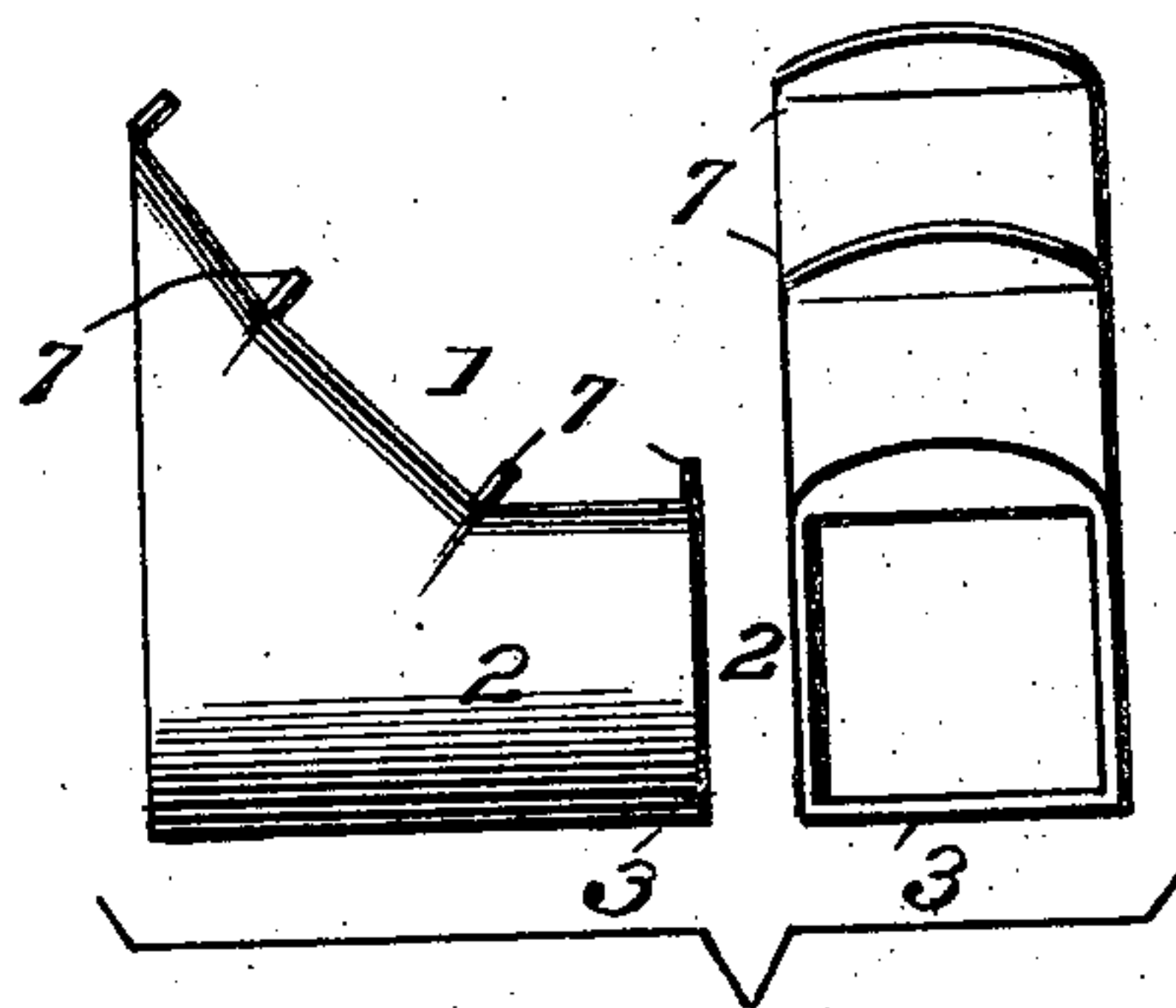
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

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By

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# UNITED STATES PATENT OFFICE.

CHARLES F. SCHROTH, OF WINONA, MINNESOTA.

## CHIMNEY-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 690,778, dated January 7, 1902.

Application filed March 13, 1901. Serial No. 51,034. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. SCHROTH, a citizen of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Chimney-Thimbles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to produce and apply and use the same.

This invention contemplates certain new and useful improvements in chimney-thimbles.

The object of the invention is to provide an improved, simple, and efficient thimble so constructed that it will aid the draft through the pipe into the chimney and direct the same upwardly without in any way obstructing the chimney-flue.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view showing the preferred form of embodiment of my invention. Fig. 2 is a perspective view thereof. Figs. 3 and 4 show modified forms of embodiment.

Referring to Figs. 1 and 2 of the drawings, 1 designates a thimble having a horizontal cylindrical portion 2, designed to fit securely upon or into a stovepipe or other duct designed to carry off smoke, vapors, gases, or air. The bottom 3 of the thimble is perfectly straight, so as to insure its sitting firmly upon the base 4 of the orifice in the chimney-casing. The top 5 of the thimble is flared upwardly and inwardly from a point near the center thereof and is held in position by the wall of the chimney-orifice, which is made to conform to the contour of the thimble. This flared portion of the top and the bottom of the thimble terminates flush with the inner face or lining of the chimney-casing, and at the end opening into the chimney the thimble presents a substantially oblong outlet.

In practice the smoke or gases passing through the pipe will enter the thimble and pass toward the chimney. It is well known that the upward draft through the chimney-flue, being of greater force than that passing from the stovepipe, will ordinarily drive the

smoke back into the pipe and hinder its being properly carried off. By my invention, however, it will be noted that the smoke, which naturally has an ascending tendency, will upon reaching the upwardly-flared portion of the thimble move upwardly and inwardly in a line of direction that gradually converges with the upward draft through the chimney.

I am aware that it is not, broadly, new to provide deflectors by which the smoke is given an upward direction through the chimney; but as heretofore constructed these contrivances have been projected into the chimney-flue, and consequently their employment is at the expense of obstructing the chimney, hindering the draft therethrough, rendering cleaning difficult, and precluding the positioning of similar deflectors on the lower floors of the building because of the obstruction to the flue above.

An advantage of my invention is that the farther the smoke moves toward the chimney the greater becomes the area in which it is confined, and this is accomplished without in any way obstructing the chimney-flue.

In Figs. 3 and 4 I have shown modified forms of embodiment of my invention. These are for use when best adapted to the nature of the materials of which the chimney is built, or the size and weight of the latter. In the form shown in Fig. 3 the flared top 6 is curved, while Fig. 4 shows the top formed in three angles and strengthened by ribs 7, the thimble being made rectangular in cross-section. This latter form is desirable with very large thimbles for use in thick walls.

I claim as my invention—

1. A chimney-thimble having that end designed to fit within the chimney-opening flared upwardly at the top in the direction of the line of draft in the chimney, the inner edge of the thimble being designed to be flush with the inner face of the chimney-casing, as set forth.

2. The combination with a chimney-casing having an orifice therein the upper wall of which is flared upwardly and inwardly in the line of draft, of a thimble designed to fit within said orifice and having its top flared upwardly and inwardly to conform to the wall

of said casing, the inner end of the thimble being flush with the inner face of the casing, substantially as set forth.

3. The combination with a chimney-casing  
5 having an orifice the inner portion whereof is upwardly inclined at its top and horizontal at the bottom, of a thimble designed to fit within said orifice having a horizontal portion and upwardly inclined at its top in the  
10 direction of the line of draft of the chimney,

the bottom of the thimble being designed to conform to the bottom of said orifice, the inner end of the thimble being flush with the inner face of the chimney-casing, substantially as set forth.

Winona, Minnesota, February 28, 1901.

CHARLES F. SCHROTH.

Witnesses:

ALF. B. SCHROTH,

J. R. SCHROTH.



It is hereby certified that in Letters Patent No. 690,778, granted January 7, 1902, upon the application of Charles F. Schroth, of Winona, Minnesota, for an improvement in "Chimney-Thimbles," errors appear in the printed specification requiring correction, as follows: Line 41, page 1, after the word "top" a comma should be inserted; line 42, same page, after the word "thimble" a comma should be inserted, and same line, the word "terminates" should read *terminate*; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 14th day of January, A. D., 1902.

[SEAL.]

F. L. CAMPBELL,  
*Assistant Secretary of the Interior.*

Countersigned:

F. I. ALLEN,  
*Commissioner of Patents.*