

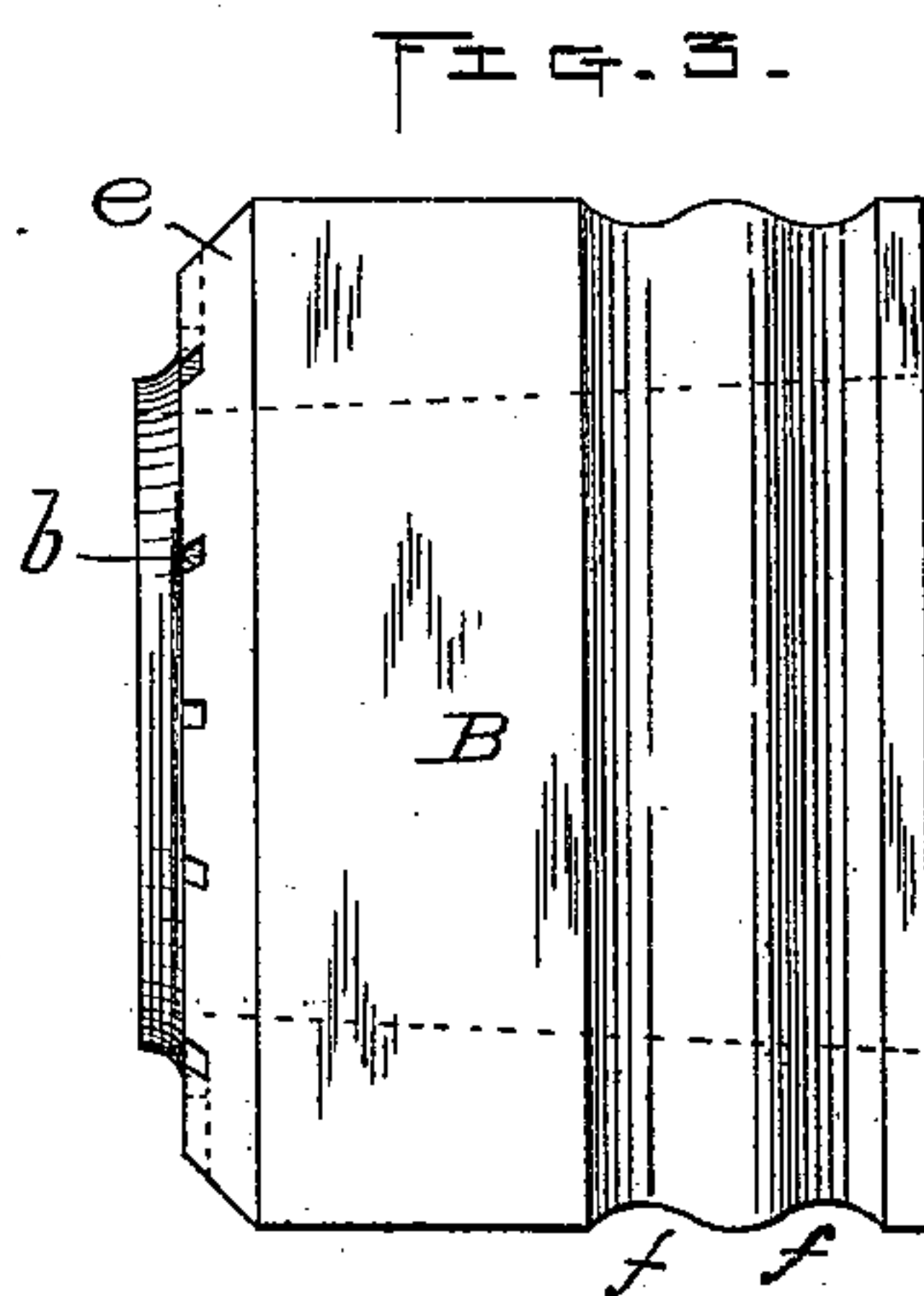
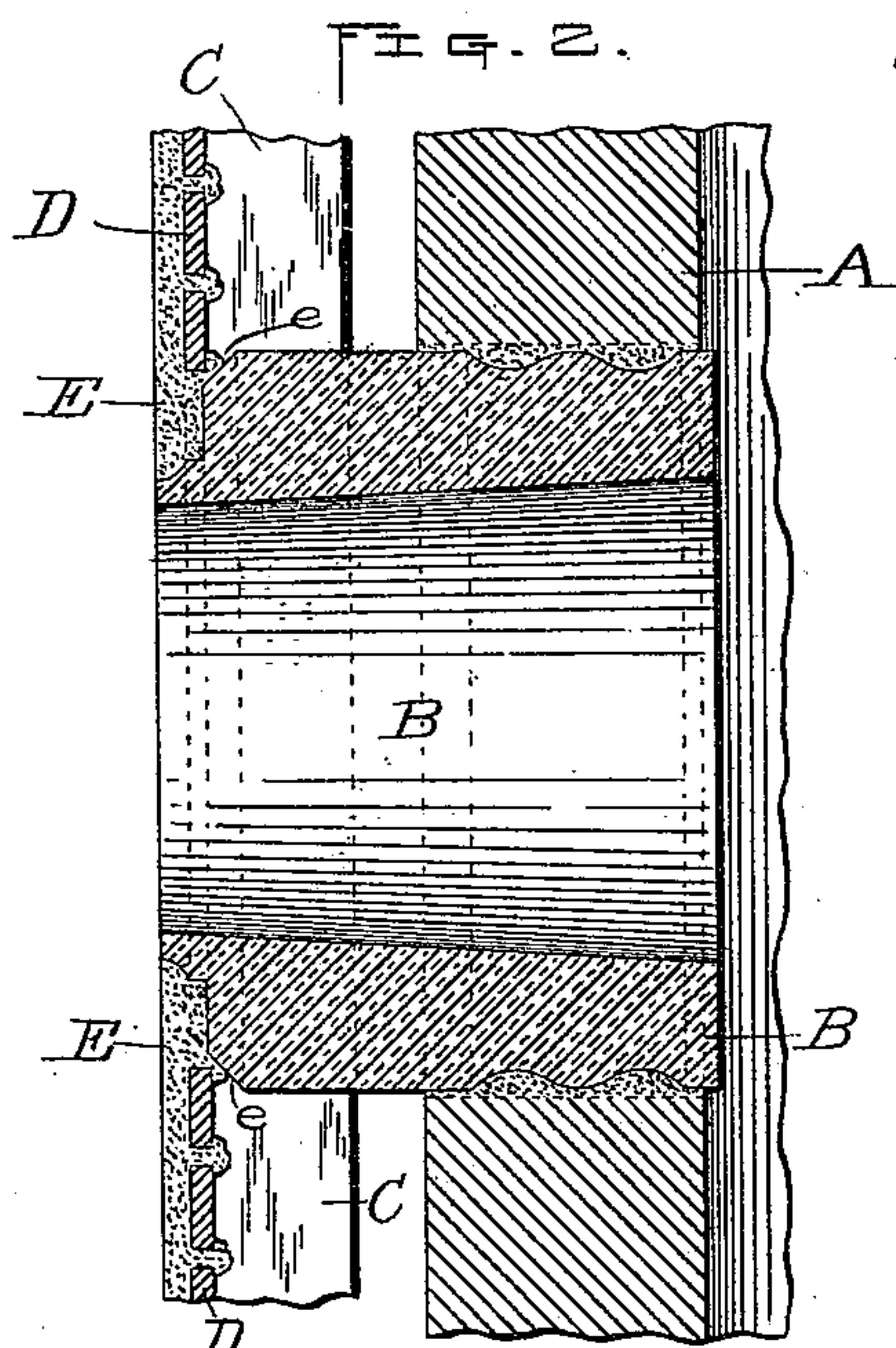
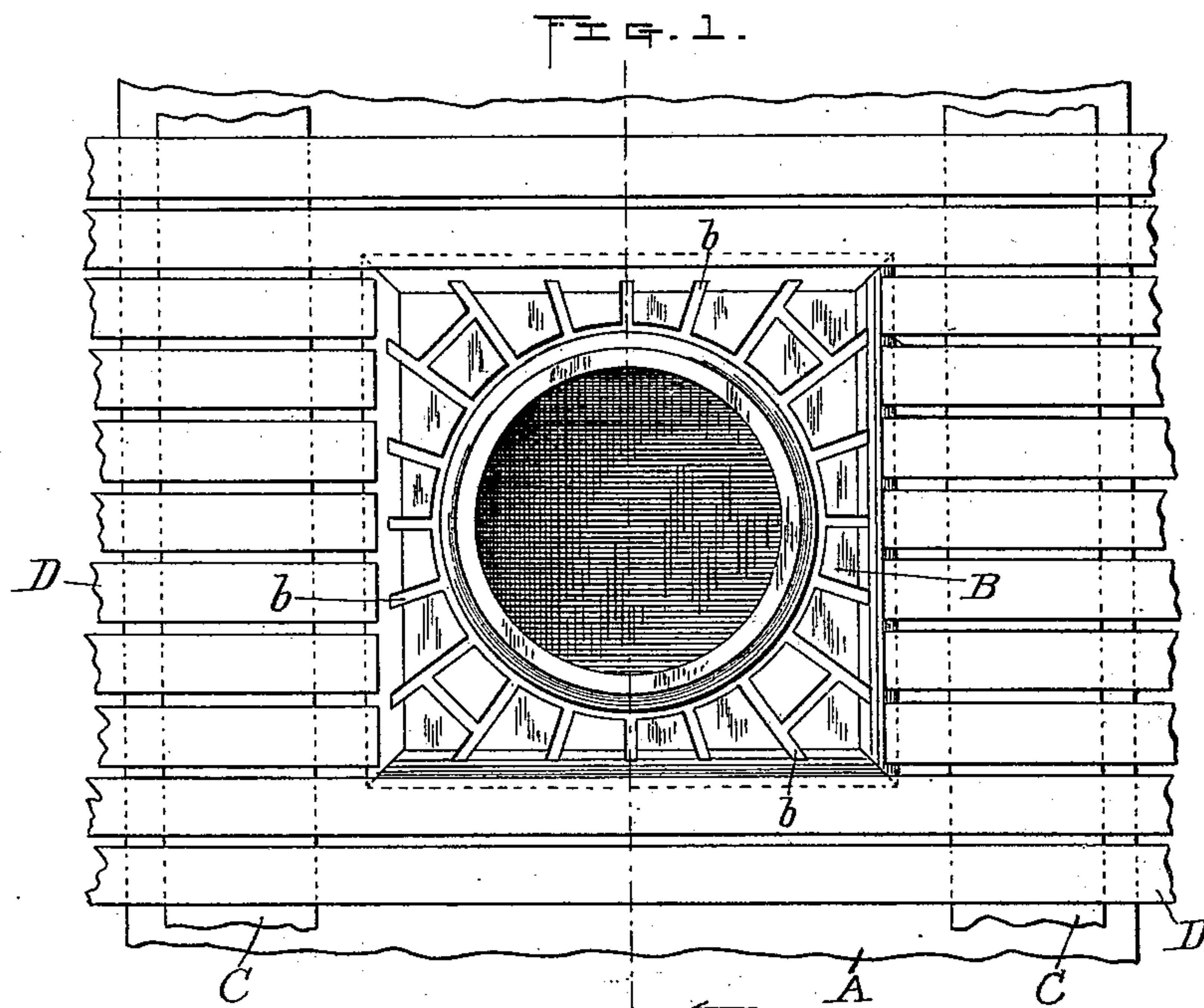
(No Model.)

2 Sheets—Sheet 1.

C. F. GREEN.
CHIMNEY THIMBLE.

No. 450,355.

Patented Apr. 14, 1891.



Witnesses;

Walter B. Nourse
Lucius H. Briggs.

Inventor;

Charles F. Green
By A. A. Barker Atty.

(No Model.)

2 Sheets—Sheet 2.

C. F. GREEN.
CHIMNEY THIMBLE.

No. 450,355.

Patented Apr. 14, 1891.

FIG. 4.

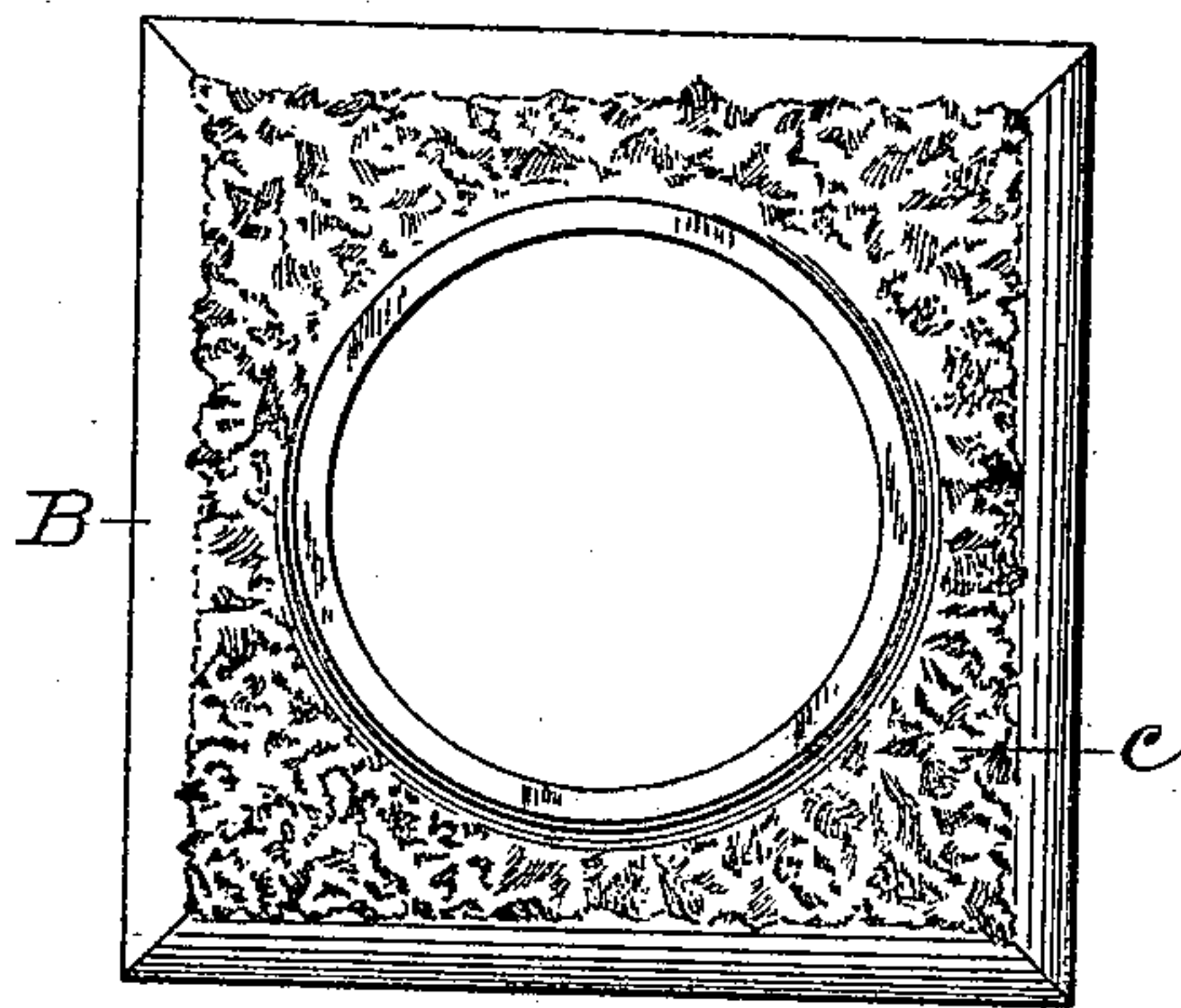
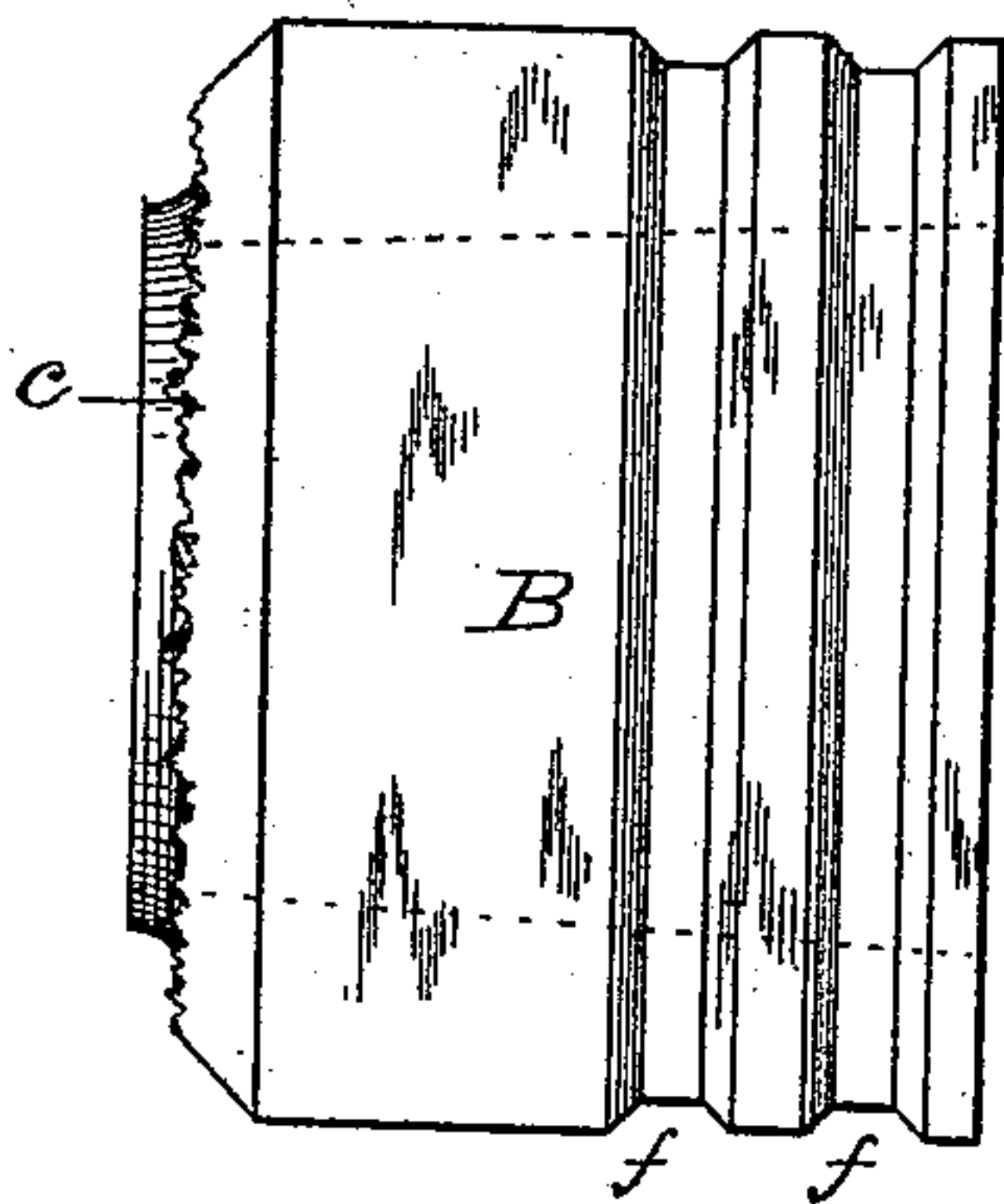


FIG. 5.



Witnesses;

Walter B. Nourse,
Lucius H. Briggs.

Inventor;

Charles F. Green.

By A. A. Barker Atty.

UNITED STATES PATENT OFFICE.

CHARLES F. GREEN, OF WORCESTER, MASSACHUSETTS.

CHIMNEY-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 450,355, dated April 14, 1891.

Application filed February 11, 1889. Serial No. 299,421. (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
5 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,
10 and in which—

Figure 1 represents a front view of my improved chimney-thimble fitted in position for use preparatory to plastering. Fig. 2 is a
15 central vertical section through the parts shown in Fig. 1 after the plaster is applied, taken on line *a* of said Fig. 1. Fig. 3 is a detached side view of the thimble; and Figs. 4 and 5 are a front and side view, respectively,
20 of said thimble, showing modifications in the construction thereof hereinafter described.

My invention relates to chimney-thimbles made from artificial stone, fire-clay, and similar substances. The object thereof is to attain certain improvements upon and not now
25 possessed by the chimney-thimble patented to me in the United States under date of June 15, 1886, No. 343,581; and it consists in providing the front face of the thimble with a series of grooves or indentations to produce an irregular broken surface and in forming transverse
30 corrugations or grooves in its outer side surfaces, where it fits into the chimney, as well as other minor improvements hereinafter more fully set forth.

35 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.

40 In the drawings, A represents part of the chimney; B, the thimble; C, the studding; D, the lathing, and E the plastering.

Heretofore considerable objection has been made to my aforesaid patented thimbles on account of the plaster not properly adhering
45 to the faces thereof and because the side surfaces were made straight in an unbroken line from their inner ends out, thus producing a straight joint through which fire might possibly work from the chimney and ignite the
50 wood-work around the thimble; and to obviate these objections is the main object of my invention. I obviate the first of the above

objections by forming a broken or rough front face and the second by providing the outer sides of the thimble where it fits into the
55 chimney with a corrugated or grooved portion, which may be filled with mortar in fitting the thimble in position, and thus more effectually interrupt the passage of fire, as aforesaid. The broken front surface may be
60 obtained by forming a series of grooves or channels *b* in the thimble, extending in various directions over said surface by means of irregular "rock-face" indentations *c*, as indicated in Figs. 4 and 5, or by vermiculated
65 and similar rough surfaces, the essential point being to produce a surface in this class of thimbles whereon the plaster after having been applied will adhere closely, in like manner to that applied to the lathing around the
70 same.

I prefer in practice to form a rim or collar *d* on the face of the thimble around its opening to plaster against, and also to make said opening flaring or beveled, with the inner end
75 the largest, so as to carry off any moisture upon the inside down into the chimney, instead of passing out at the front end of the thimble.

In my former patent previously referred
80 to I have shown a bevel *e* upon the front top edge, and the lath and plaster are made to come in alignment therewith, so that in case of settlement the plastering above the thimble will be bulged or forced out at the top of
85 said thimble only, instead of all around the same, as usual. The bevel is designed for the same purpose in the present instance; but instead of extending it across the top only it is carried entirely around the thimble, as is
90 shown in Figs. 1 and 4, for the purpose of facilitating the operation of fitting said thimbles in position, the thimble being made square with its opening at the center, and consequently being immaterial which side
95 comes at the top in setting the same. This feature of carrying the bevel entirely around the thimble is found to be of considerable advantage over my old form of thimbles in practice. I expect no protection thereon, however,
100 except in combination with my other improvements.

Although I prefer the square form of thimble shown, I do not limit myself thereto, as

my invention is equally applicable to thimbles made round or of polygon shape in cross-section.

5 The grooves or corrugations *f*, formed upon the outer surface of the thimble at its inner end where said thimble fits into the chimney A, may be made of various shapes to accomplish the desired result previously specified, and I therefore do not limit myself to any
10 particular shape.

In Figs. 2 and 3 I have shown a double-curved recess, while in Fig. 5 two grooves with beveled sides are shown, these being the shapes I prefer in practice. By thus corrugating or grooving the thimble at this point
15 it is obvious that when the mortar is properly pressed into said corrugations or grooves, as is indicated in Fig. 2, it is next to an impossibility for fire to work its way through around
20 said thimble. Said construction, as will be apparent, also serves to securely hold the thimble in position. Consequently a tight joint is always maintained and the liability to fire correspondingly reduced, in addition to
25 the above-described provision for effecting said result.

Having described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

30 1. A chimney-thimble made of one piece of artificial stone or similar material, having an opening therethrough, a roughened face, and a rim or collar around the outer end of the

opening, the said face being flat, except at its outer margin, where it is beveled, substantially as and for the purpose set forth. 35

2. A chimney-thimble made of one piece of artificial stone or similar material, having corrugations or grooves around the surface of the inner end thereof, an opening therethrough,
40 a roughened face, and a rim or collar around the outer end of the opening, the said face being flat, except at its outer margin, where it is beveled, substantially as and for the purpose set forth. 45

3. A chimney-thimble made of one piece of artificial stone or similar material, having a tapering opening therethrough, a roughened face, and a rim or collar around the outer end
50 of the tapering opening, the said face being flat, except at its outer margin, where it is beveled, substantially as and for the purpose set forth.

4. A chimney-thimble made of one piece of artificial stone or similar material, having cor- 55 rugations or grooves around the surface of the inner end thereof, a tapering opening therethrough, a roughened face, and a rim or collar around the outer end of the tapering opening, the said face being flat, except at its
60 outer margin, where it is beveled, substantially as and for the purpose set forth.

CHARLES F. GREEN.

Witnesses:

A. A. BARKER,
W. B. NOURSE.