

H. C. A. BUTTLES.

Improvement in Stove Pipe Thimbles.

No. 119,571.

Patented Oct. 3, 1871.

Fig. 1.

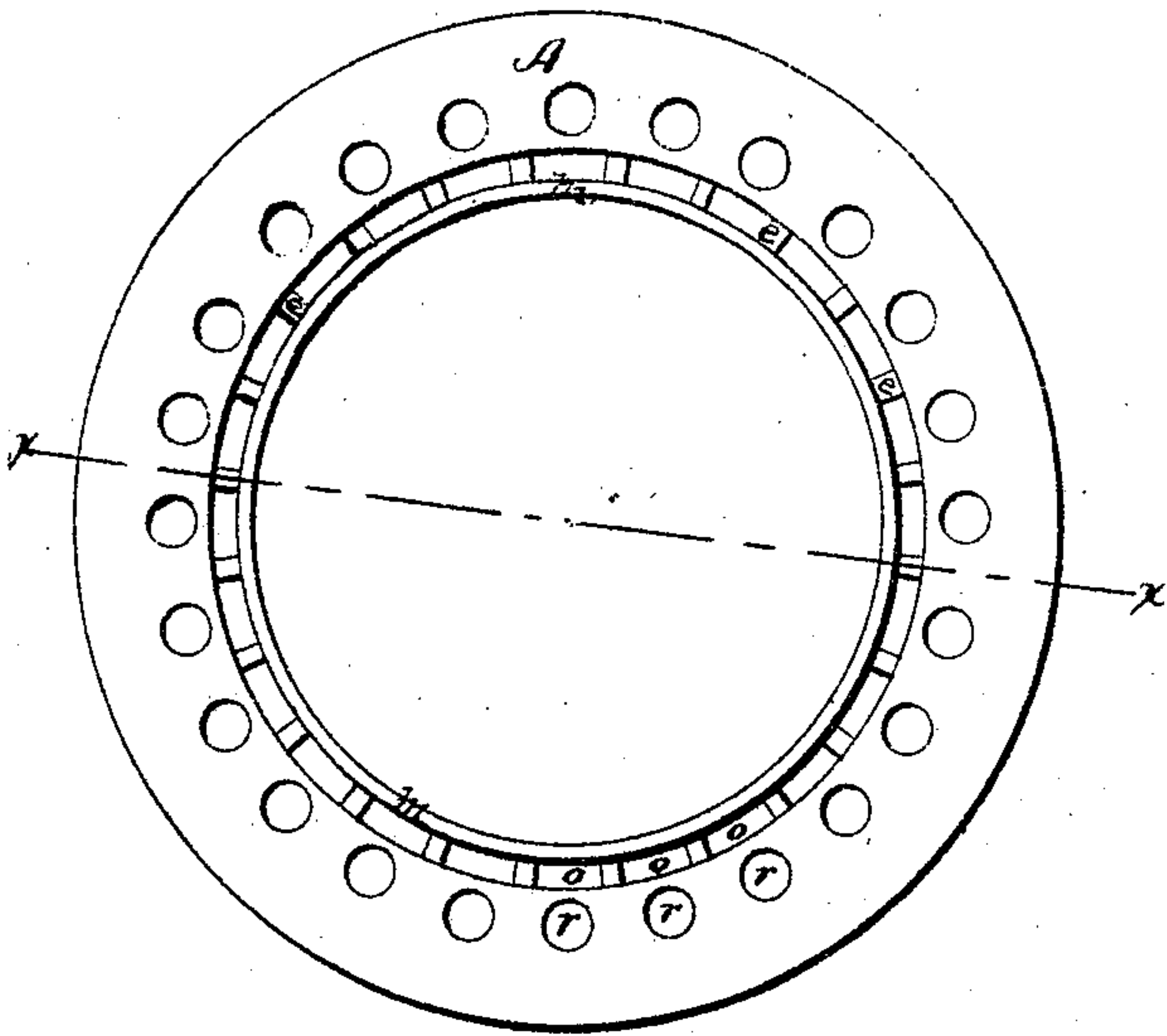


Fig. 2.

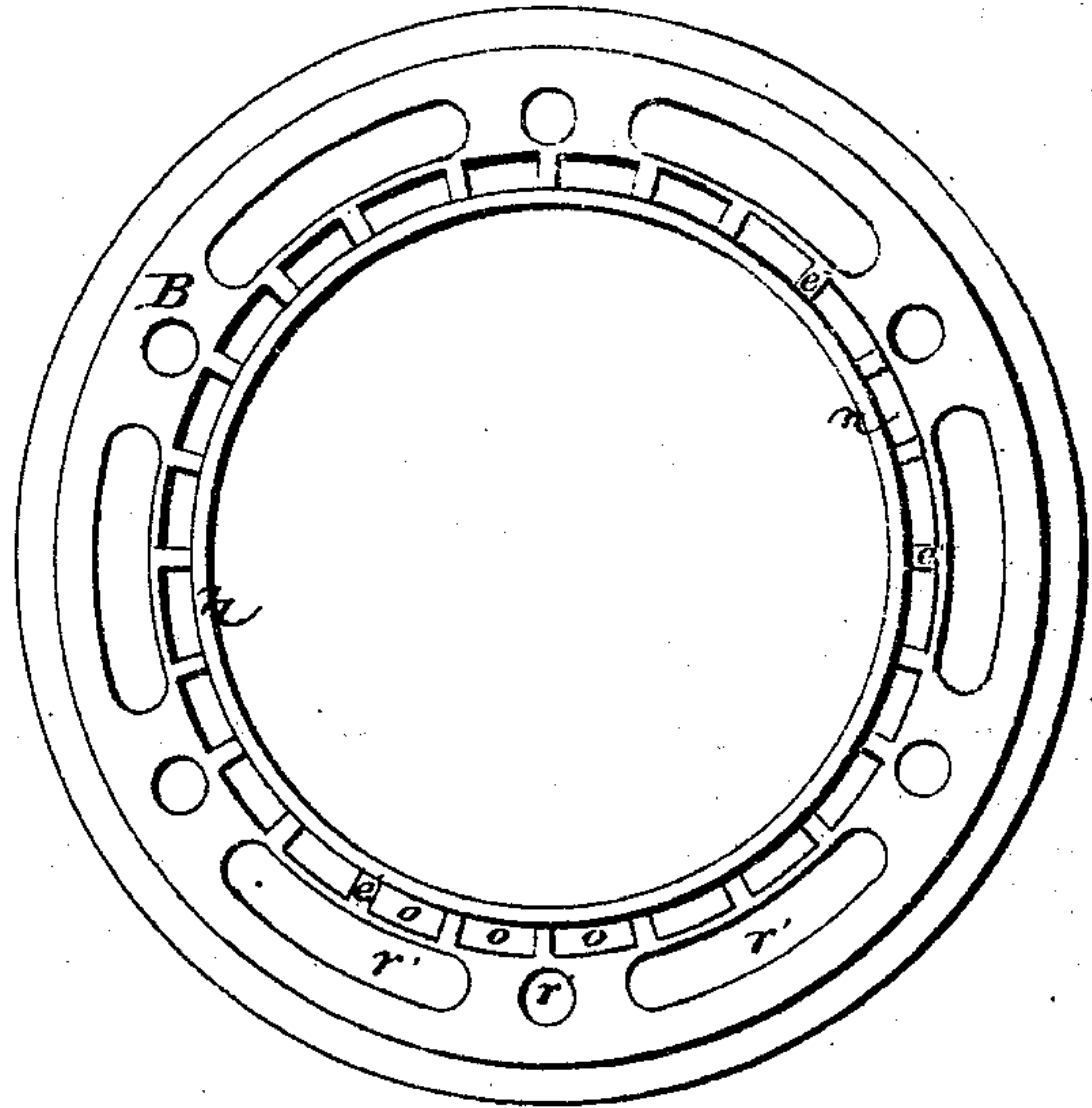


Fig. 3.

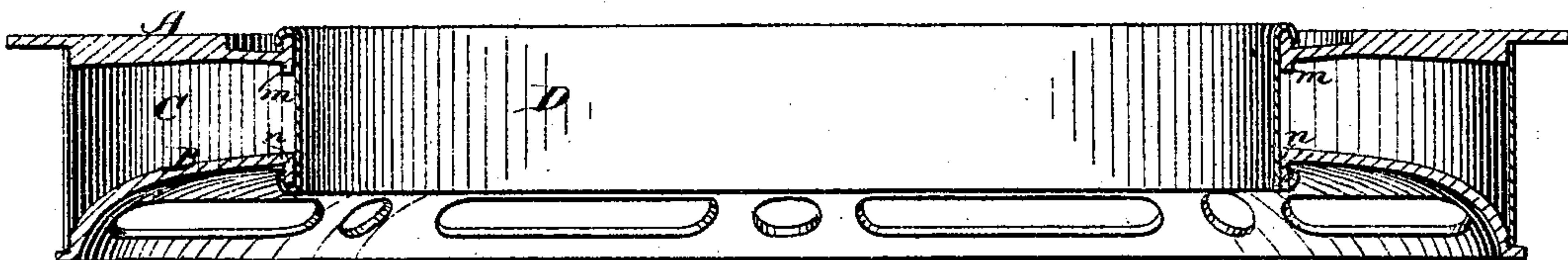
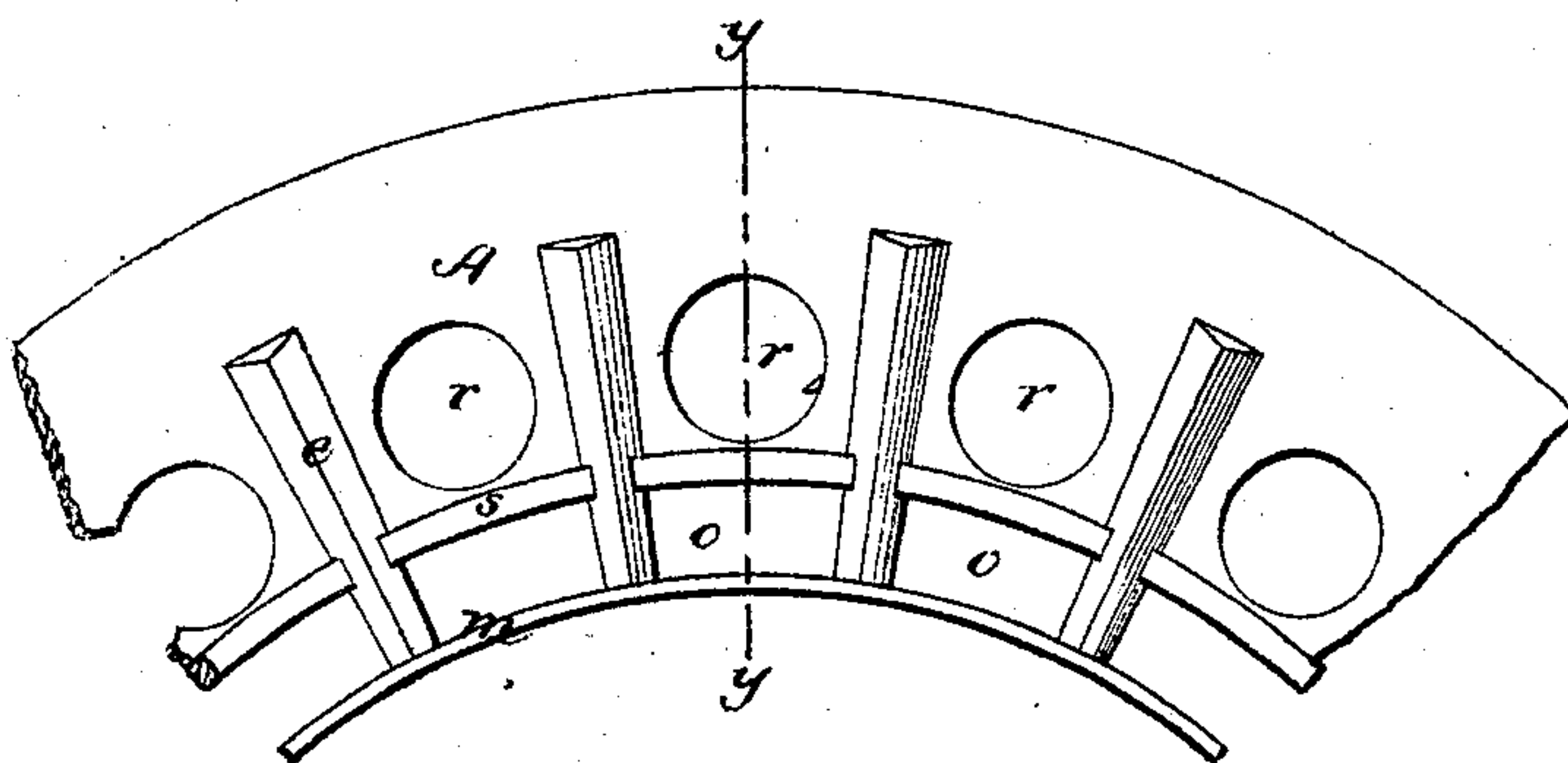


Fig. 4.



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Fig. 5.



UNITED STATES PATENT OFFICE.

CEPHAS A. BUTTLES, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN STOVE-PIPE THIMBLES.

Specification forming part of Letters Patent No. 119,571, dated October 3, 1871.

To all whom it may concern:

Be it known that I, CEPHAS A. BUTTLES, of the city and county of Milwaukee and State of Wisconsin, have invented an Improved Stove-Pipe Thimble; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a plan; Fig. 2, a bottom view; Fig. 3, a vertical section in line *xx* of Fig. 1; Fig. 4, a plan, showing the under side of the upper head, only a segment of said head being represented; and Fig. 5, a section in line *yy* of Fig. 4.

Similar letters of reference in the accompanying drawing denote the same parts.

Letters Patent of the United States were granted to me October 12, 1869, and reissued for a stove-pipe thimble in which the bearings of the inner band were brought nearer together than those of the outer one in order to prevent waste in cutting the tin. I have subsequently invented an improvement upon said thimble, which consists in strengthening the upper head by radial ribs cast on its under side, for which improvement, together with others, I filed an application for Letters Patent contemporaneously herewith.

The invention which I will now proceed to describe is an improvement upon that last mentioned; and consists, first, in elongating said ribs so as to make them project from the inner edge of the head, and then soldering to or casting upon them an annular flange, which supports the inner band; and, secondly, in casting upon or attaching to the lower head projecting arms, which support a similar annular flange for the purpose of more securely holding the inner band at its lower edge, substantially as hereinafter set forth.

In the drawing, A is the upper head; B, the lower head; C, the outer band; and D, the inner band. The radial strengthening-ribs *e* project beyond the inner edge of the head, as shown in Figs. 1, 2, 3, and 4, and support an annular flange,

m, over which is bent the upper edge of the band D. The inner edge of the head B is provided with arms *e'*, that support an annular flange, *n*, around which locks the lower edge of the tin band, as represented in Fig. 3. The upper edge of the flange *m* is designed to be a little lower than the level of the head and yet a little higher than the projecting arms *e*, so that the edge of the tin will bend down into the recess behind it, and no part of the band will be higher than the rest of the head. A strengthening-flange, *s*, may be formed around the inner edge of the upper head between the ribs *e e*, as shown in Figs. 4 and 5. The heads are preferably made of cast-iron and the bands of tin, although the whole may be made of sheet metal, if preferred. Besides, the outer holes *r r'*, an inner row, *o*, is thus formed immediately around the pipe, which secures more perfect ventilation and prevents the dust from lodging in the vicinity of the heated stove-pipe, where it would be liable to ignite and endanger the building. The ribs *ee* strengthen the upper head against fracture in any other than a radial line, and the inner flange *s* against fracture in a radial line. This flange is located at the inner edge because the strain is principally at that point, the outer edge being supported by the floor, and therefore not in danger of giving way under any pressure likely to be brought upon it.

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

A stove-pipe thimble in which the upper head is provided with strengthening-ribs *e* that project beyond its inner edge and support a flange, *m*, upon which the band is secured, the lower edge of said band being fastened to a flange, *n*, supported by arms *e'* projecting from the lower head, substantially as and for the purposes herein set forth.

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Witnesses:

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(105)