

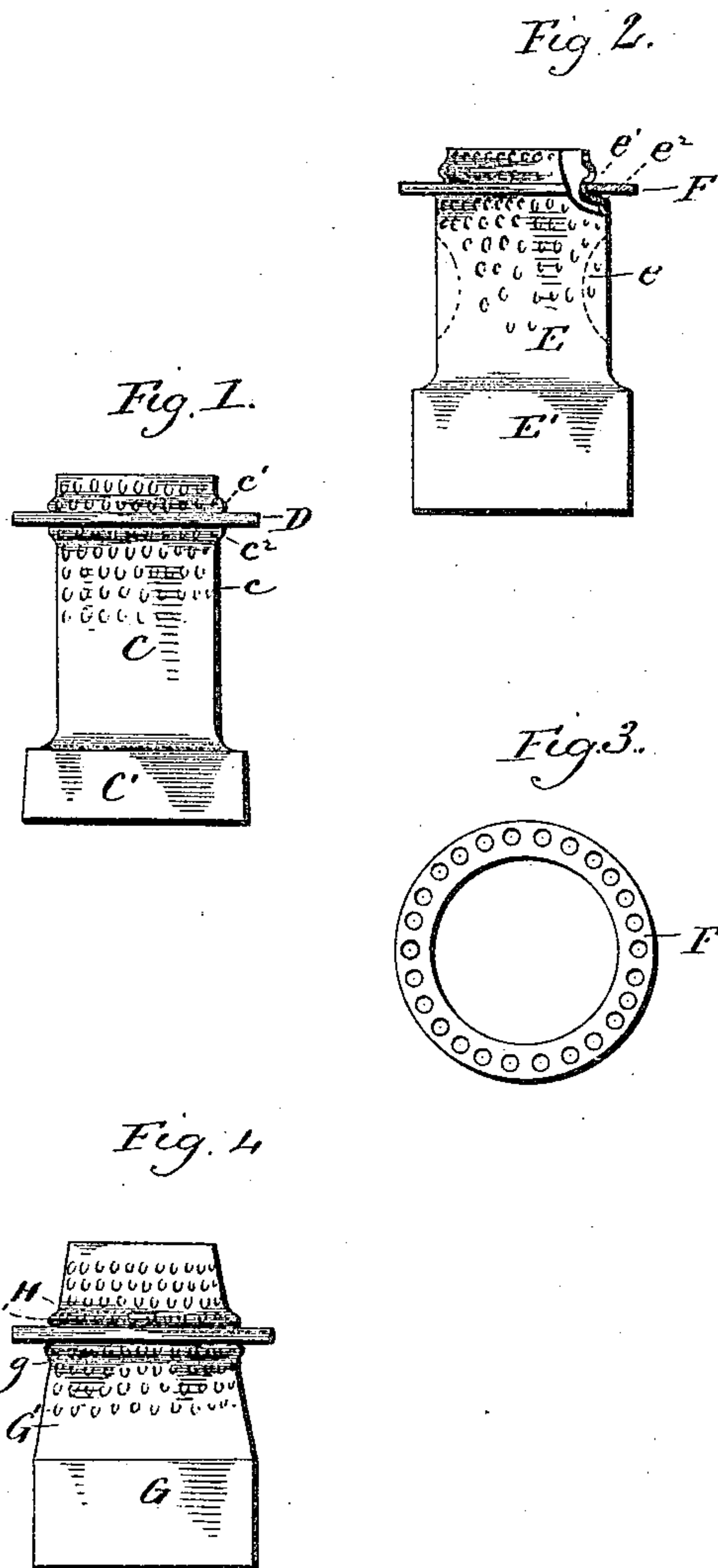
(No Model.)

J. JAUCH.

AIR DISTRIBUTER FOR CENTRAL DRAFT LAMPS.

No. 529,496.

Patented Nov. 20, 1894.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOSEPH JAUCH, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE BRADLEY & HUBBARD MANUFACTURING COMPANY, OF SAME PLACE.

## AIR-DISTRIBUTER FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 529,496, dated November 20, 1894.

Application filed January 16, 1893. Serial No. 458,449. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH JAUCH, of Meriden, in the county of New Haven and State of Connecticut, have invented new Improvements in Air-Distributers for Central-Draft Lamps; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of one form which an air-distributer constructed in accordance with my invention may assume; Fig. 2, a view partly in elevation and partly in vertical section of one of the modified forms which my improved air-distributer may assume; Fig. 3, a detached plan view of the deflector of the air distributer shown in the preceding figure; Fig. 4, a view in side elevation of another form which my improved air-distributer may assume.

My invention relates to an improvement in air-distributers or thimbles for central-draft lamps, the object being to produce a simple and effective device.

With these ends in view, my invention consists in an air-distributer having certain details of construction as will be hereinafter described, and pointed out in the claim.

Air-distributers constructed in accordance with my invention may assume different forms, three of which I have shown in the accompanying drawings.

As shown in Fig. 1 of the drawings, the distributer consists of a tube C, formed with fine lateral perforations *c*, and having an enlarged, integral, concentric, imperforate base C', adapted to support the distributer within the central draft-tube of the lamp in which the distributer is used. Two horizontal annular beads or shoulders *c'* *c*<sup>2</sup> located near the upper end of the tube in the midst of its perforations, and themselves perforated, are formed by upsetting the tube outwardly. They receive between them the inner edge of an annular deflector D, located in a horizontal plane, and consisting of a flat sheet-metal ring. The diameter of the entire portion of the tube above the said deflector is smaller

than the diameter of the deflector, and the diameter of that portion of the tube immediately below the deflector is also smaller than the diameter of the deflector. The flat upper end or top of the tube is closed and imperforate.

The air-distributer shown by Fig. 2 of the drawings consists of a tube E, formed with fine lateral perforations *e*, and having an enlarged, integral, concentric, imperforate base E', adapted in diameter to support the distributer within the central-draft tube of a lamp. The said tube E is provided at its upper end with two horizontal shoulders *e'* *e*<sup>2</sup>, formed in the midst of its perforations, the shoulder *e'* being uppermost, and produced by upsetting the tube, and the shoulder *e*<sup>2</sup> being formed by reducing the upper end of the tube in diameter at a point below the shoulder *e'*. The said shoulders are separated just enough to receive between them the inner edge of an annular deflector F, which is by preference furnished with vertically arranged perforations, as shown in Fig. 3. In this figure of the drawings the tube E is shown by full lines to be of substantially uniform diameter between its shoulder *e*<sup>2</sup> and its base E', and by broken lines to have a deep wide annular groove formed between such points. The flat upper end or top of the tube is closed and imperforate.

The construction shown by Fig. 4 of the drawings has an enlarged, imperforate base G, and a laterally perforated tapering upper portion G', which is struck out just above its center to form two horizontal annular beads or shoulders *g* *g*, separated just enough to receive the annular deflector H between them.

My improved distributer in its provision with two annular shoulders formed in the midst of its perforations, for confining a deflector in place, is very simple in construction, and requires no solder, which, when used, is liable to stop up the perforations. I have found it, moreover, a very effective air-distributer in use.

By preference, the deflector will be provided with vertical perforations, as shown in Fig. 3, which permit a portion of the air to pass upward to the flame, whereby the body of air is reduced so much in volume and



force, that it will not be thrown radially outward far enough beyond the edge of the deflector to sulphurize and cloud the chimney. Furthermore, the combined action of the perforations in the tube, and the deflector, so sifts the air into fine currents and breaks the force of the draft, and handles the currents, as to produce a flame not only white and constant, but very even on top. The three forms shown and described herein, of my improved air-distributor, are designed to take all of the air rising through the draft-tube, but that is not essential, though I intend that the major portion, at least, of the air passing through the draft-tube shall be taken by the distributor.

In view of the different forms shown and described, I would have it understood that I do not limit myself to the exact forms set forth, but hold myself at liberty to make such changes and modifications as fairly fall within the spirit and scope of my invention.

I am aware that it is old to form inwardly projecting horizontal shoulders in the midst of the perforations of an air-distributor to confine an internal annular deflector by its outer edge. I do not, therefore, broadly claim securing the deflector in place by means of shoulders formed in the distributor and located so as to hold the deflector between them. I am also aware that it is old to locate an outwardly projecting perforated annular deflector upon a distributor constructed with perforations, and I do not therefore claim that construction broadly.

I am further aware that it is old to construct a distributor for central-draft lamps from a long tube furnished at its lower end with radial wings which engage with the inner face of the draft-tube for supporting the distributor in place therein, and the said tube having

its upper end perforated and furnished with three outwardly projecting annular deflectors, of which the lower deflector is imperforate and located between the perforate and imperforate portions of the tube, and of which the upper deflector is perforate and located close to the upper end of the tube, and of which the middle deflector is imperforate and located close to the perforate upper deflector.

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

The herein described air-distributor for central-draft lamps, having its upper end closed and constructed with two exterior horizontal shoulders formed near but below its said closed upper end in the midst of its perforations, and provided with a single exterior annular deflector confined by its inner edge between the said shoulders, located in a horizontal plane and consisting of a flat sheet-metal ring, the diameter of the entire portion of the distributor above the said deflector being smaller than the diameter of the deflector, and the diameter of that portion of the distributor immediately below the deflector being also smaller than the diameter of the deflector, and the lower end of the distributor being adapted to be supported within the central draft-tube of a lamp, and to take the major part of the air passing through the same, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOSEPH JAUCH.

Witnesses:

R. E. MILLS,  
A. B. SAVAGE.