

(No Model.)

E. B. REQUA.  
LAMP CHIMNEY.

No. 318,031.

Patented May 19, 1885.

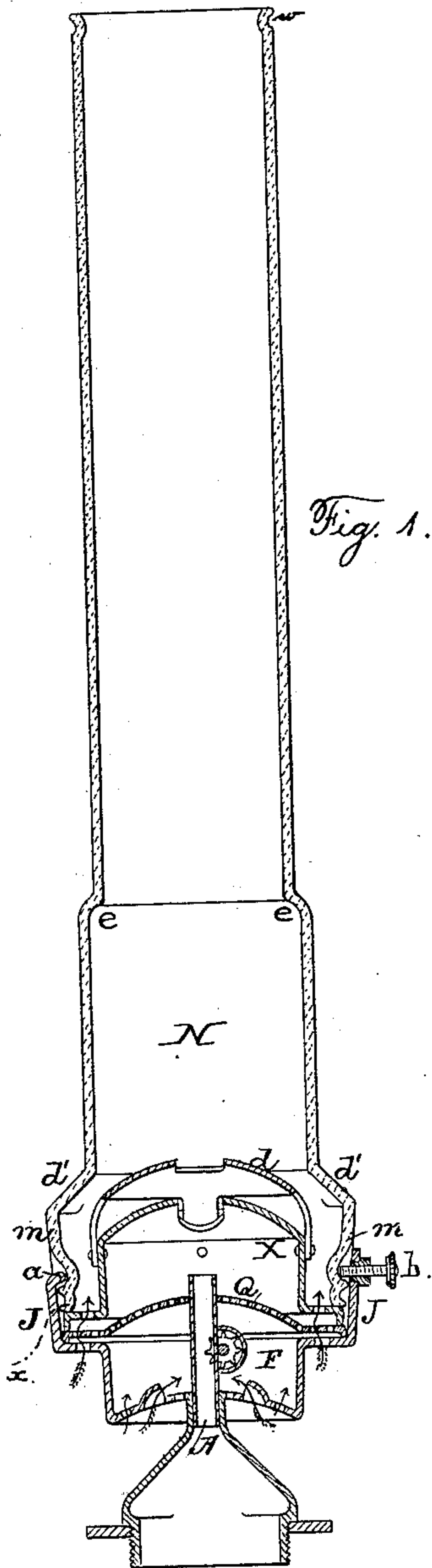


Fig. 1.

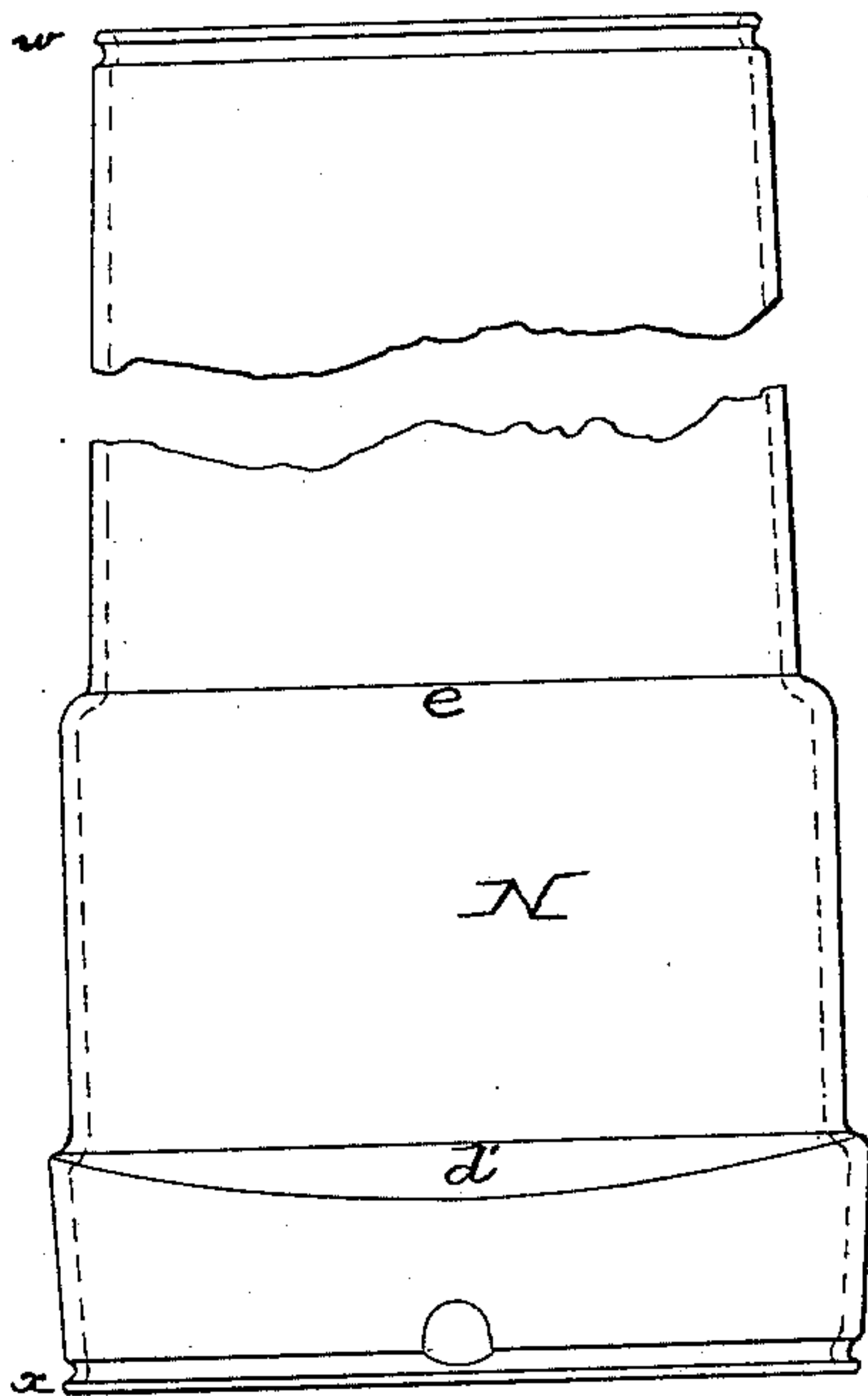


Fig. 2.

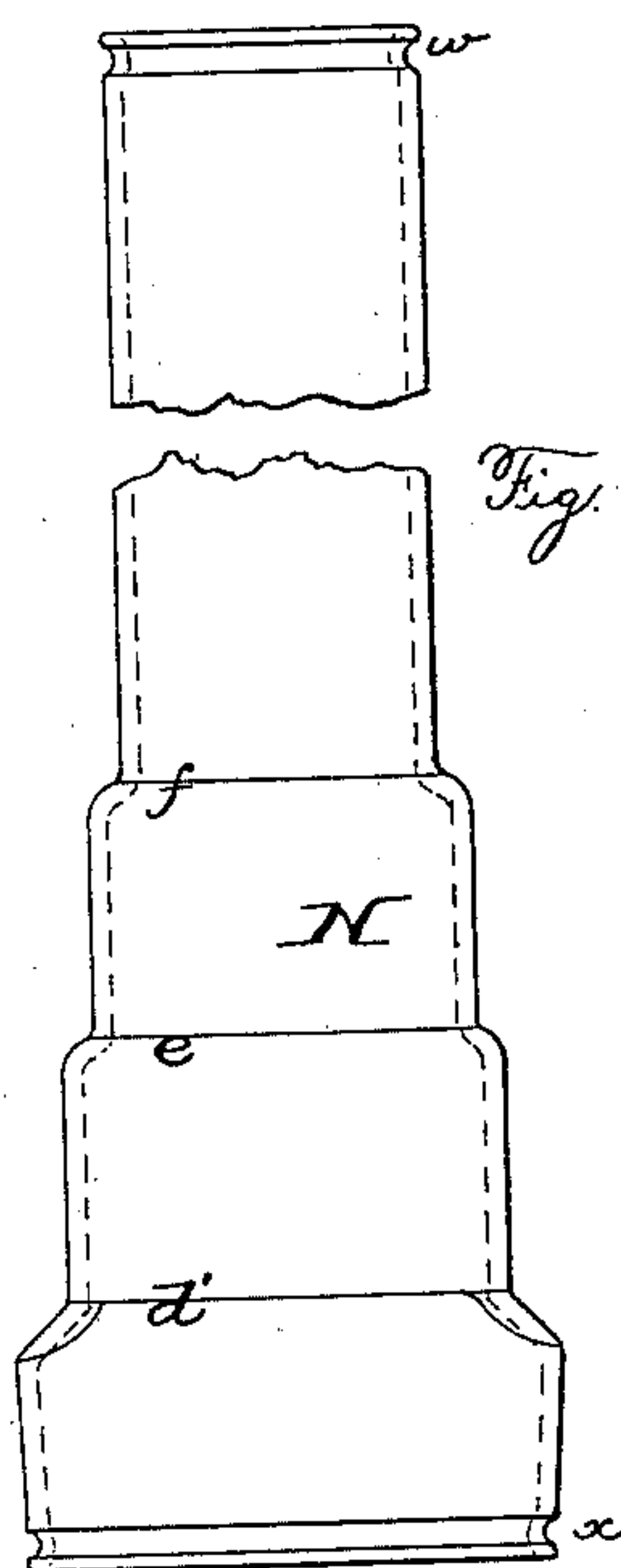


Fig. 3.

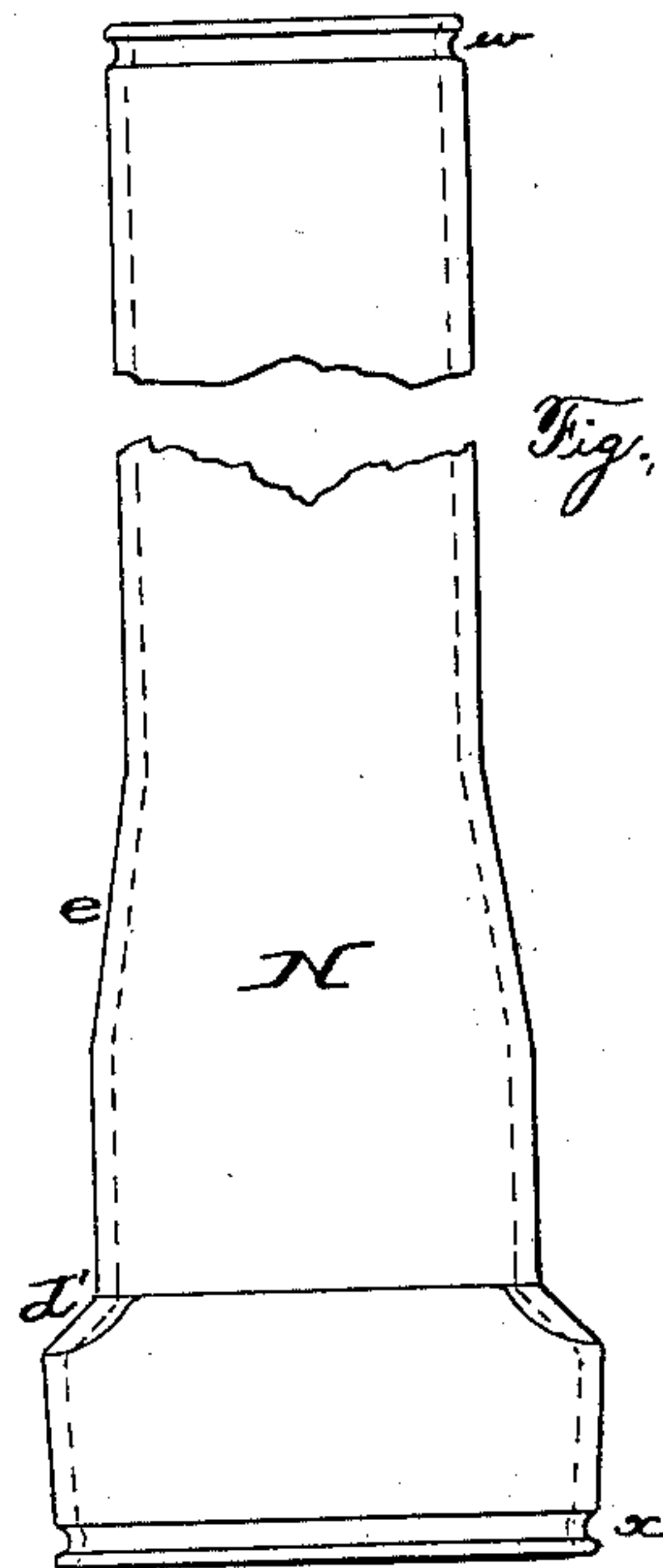


Fig. 4.

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## LAMP-CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 318,031, dated May 19, 1885.

Application filed April 23, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ELIAS B. REQUA, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

The invention relates to improvements in lamps; and it consists, particularly, in the formation of the chimney and in a novel method of supporting same upon the burner.

Figure 1 of the accompanying drawings is a central vertical transverse section of a burner and chimney embodying the invention. Fig. 2 is an enlarged side view of same, and Figs. 3 and 4 are views of modified forms of the chimney.

The burner illustrated is similar to that which forms the subject of a separate application for Letters Patent of even date herewith, Serial No. 129,036, the only difference being that in this application the chimney-retaining flange J is deflected outward, as hereinafter described. The burner consists of the inch tube A, bowl F, foraminous plate Q, flame-dome X, and deflector *d*. The flange J is deflected outward, as indicated in Fig. 1, and is provided with the usual lip, *a*, and thumb-screw *b*. The chimney N will be of any suitable outline in cross-section, but preferably oval (which is the form shown in the drawings) when used in connection with a burner such as described. The lower portion of the chimney will taper inward as at *m*, so as to conform to and snugly fit the walls of the flange J; and said portion of the chimney is supplied with indentations to receive the lip *a* and thumb-screw *b* in the customary manner. The purpose of thus conforming the flange J and portion *m* of the chimney is to insure a firm attachment for the chimney, and to prevent any lateral movement of same upon the burner. Above the portion *m* the walls of the chimney extend upward and inward, forming a deflector, *d*, above which the walls pass vertically upward to a point about opposite to the top of the flame, where they turn inward again, forming another deflector, *e*, whence they pass upward to the desired height for the chimney, as shown in Fig. 1; or they may be turned inward again to form another deflector, *f*, as shown in Fig. 3. Any number of the deflectors may be formed about the base of the chimney, and their purpose is to

constantly direct and compress the air and products of combustion into the flame, producing thereby a pure white flame and (the walls above the deflectors being vertical) preventing any deposition on the interior of the chimney. The deflector *d* turns the outside drafts through the burner into the base of the flame, and the deflector *e* directs the air into the upper part of the flame, and has the effect of holding it steady and increasing its brilliancy. When the deflectors are employed on an oval-shaped chimney the depths of the deflector *d* on the two opposite sides thereof will diminish toward the end walls of the chimney, as illustrated in Fig. 2. The upper and lower edges of the chimney are provided with the beads *w x*, as shown. Any desired number of the deflectors *d' e f* may be made use of, according to the character of the burner, the effect it is desired to produce on the flame, and other circumstances, and the deflector *e* may have the form shown in Figs. 1, 2, and 3, or that illustrated in Fig. 4, as may be preferred. The deflectors gradually compress the volume of air within the chimney around the flame, and thus hold it steadily in form. The effect of the air when uncontrolled is to have the flame, which, under that condition, would flicker and be irregular, and the purpose of the deflectors on the chimney is to prevent any such result.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A lamp-chimney which is oval in cross-section, and is provided with the deflector *d'* adjacent to the base of the flame, and the deflector *e*, at a point adjacent to the upper part of the flame, the deflector *d'* diminishing in depth toward the end walls of the chimney, substantially as and for the purposes set forth.

2. A lamp-chimney having a deflector, *d'*, adjacent to the base of the flame, and a deflector, *e*, at a point adjacent to the top of the flame, those portions of the chimney between and above the deflectors being vertical, substantially as and for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 15th day of April, A. D. 1884.

ELIAS B. REQUA.

Witnesses:

HERMAN GUSTOW,  
CHAS. C. GILL.