

(No Model.)

W. H. SOPER.
LAMP CHIMNEY HOLDER.

No. 489,695.

Patented Jan. 10, 1893.

Fig. 2.

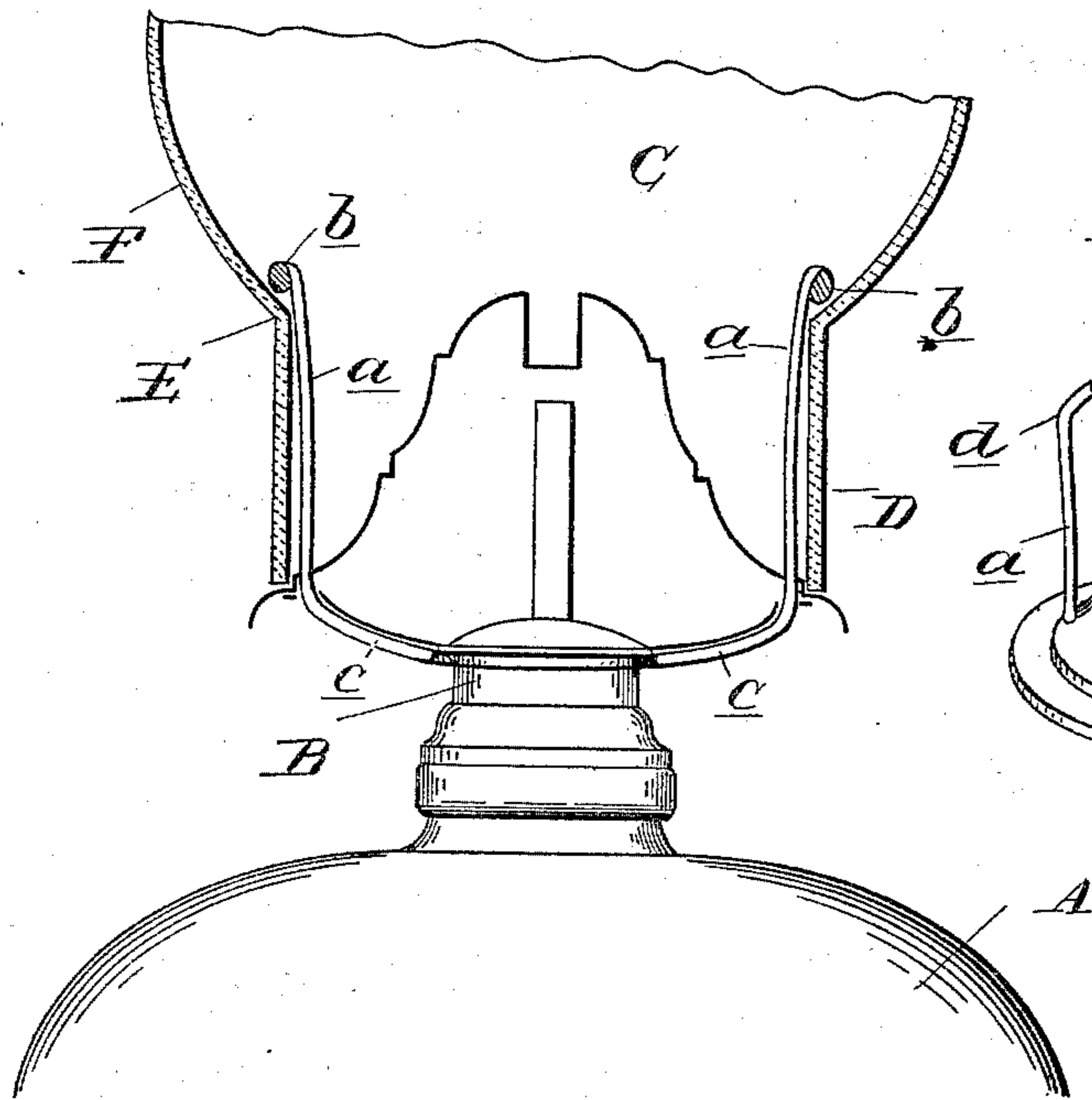


Fig. 1.

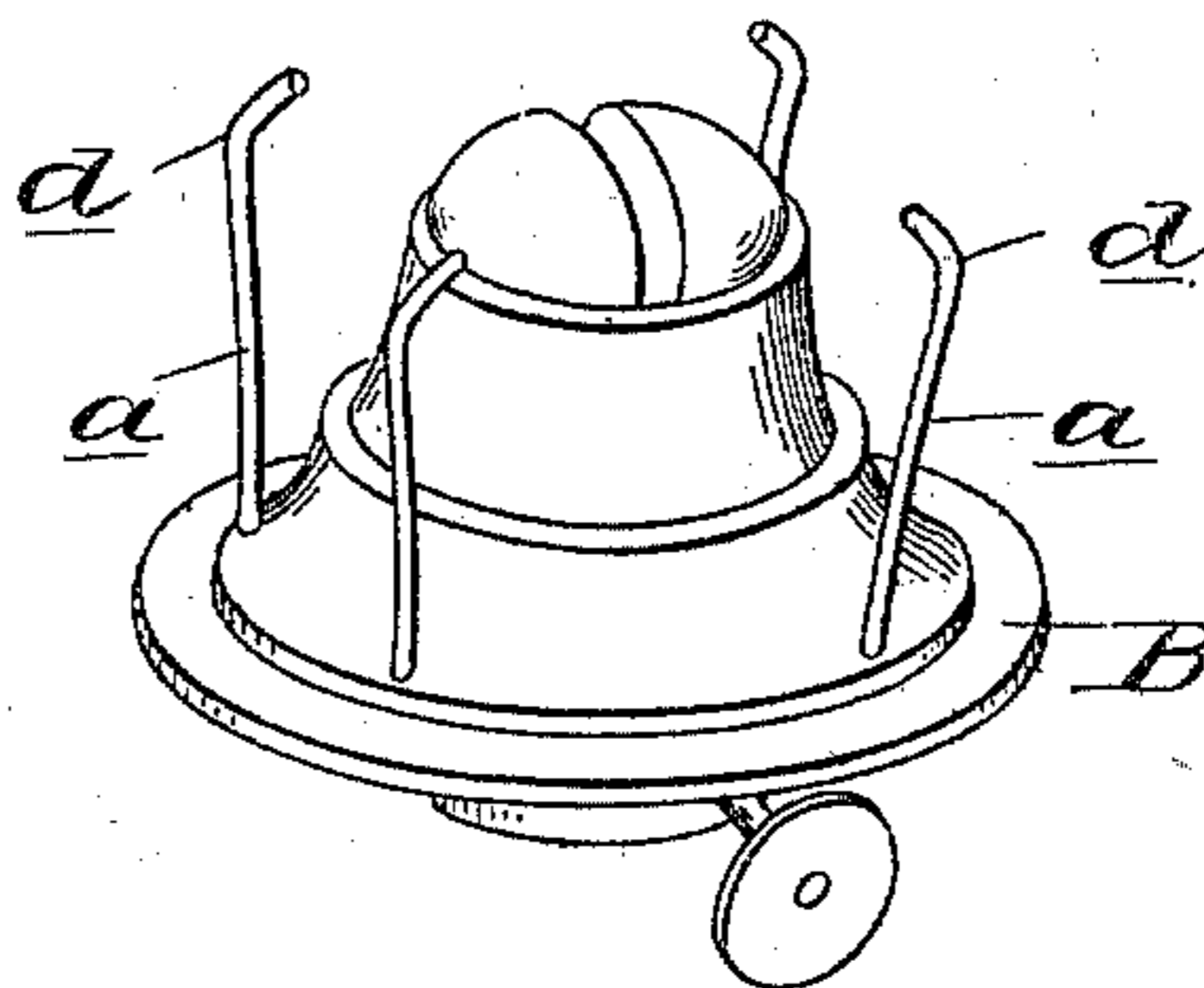


Fig. 1.

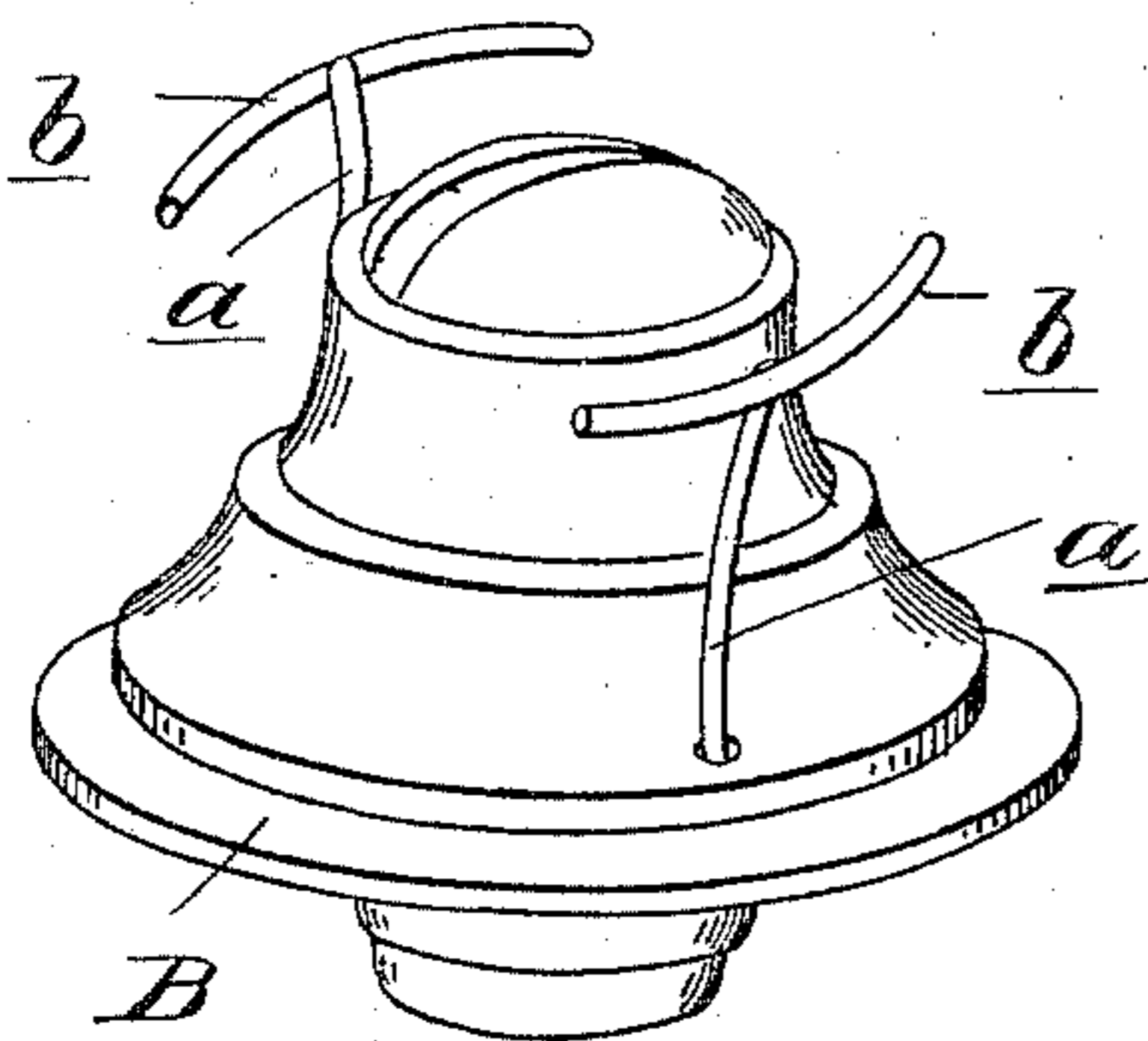
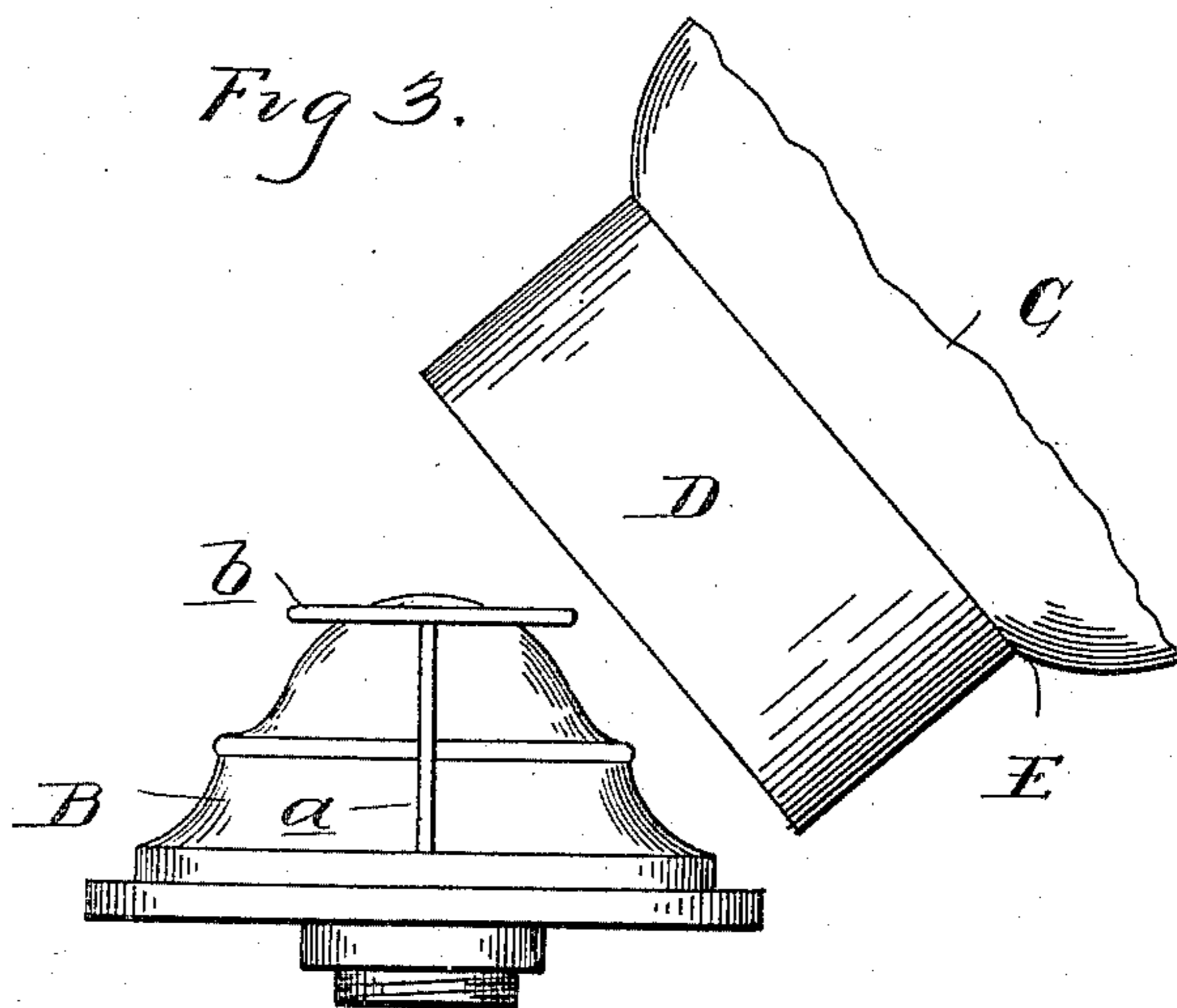


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM H. SOPER, OF JACKSON, MICHIGAN.

LAMP-CHIMNEY HOLDER.

SPECIFICATION forming part of Letters Patent No. 489,695, dated January 10, 1893.

Application filed March 21, 1892. Serial No. 425,747. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SOPER, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Lamp-Chimney Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to new and useful improvements in lamp chimney holders, and the invention consists in the peculiar construction of a spring arm designed to engage over a shoulder on the interior of the lamp, 15 and further in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a perspective view of the burner with my invention attached. Fig. 2 is a vertical, central, longitudinal section of the same with the chimney in position. Fig. 3 is a detached elevation of the burner showing the manner of engaging the chimney thereon. Fig. 4 is a perspective view of the burner, showing a modification.

30 A is a lamp, B the burner thereof, of known and usual construction, and C is the chimney, having the usual straight portion D terminating in a shoulder E and the enlarged portion F tapering to a smaller exit opening at the top, as in the usual manner of forming such lamp chimneys.

In the present state of the art lamp chimneys of this kind are usually held upon the burner by a series of vertically extending spring arms arranged around the base of the burner, and into which the lower end of the straight portion of the chimney engages. 35 This manner of securing the chimney upon the burner is satisfactory so long as the lamp remains stationary, but it forms no secure device in case it is moved about and in case of the chimney being even lightly touched, 40 or the lamp quickly moved the chimney is very apt to fall off and break.

My device embodies all the simplicity of

other attaching devices and gives a security of attachment which is not present in any other device of this kind.

50 *a* are two vertically extending spring metal rods extending to the base of the burner and extending vertically beside the same. They are provided at the top with the segmental circular heads or cross-bars *b*, these cross-bars being arranged in the arc of a circle of slightly greater diameter than the interior of the lamp chimney and are located at a height above the burner slightly greater than the length of the vertical portion D of the chimney. I preferably form these two vertical arms from a single piece of spring wire having the connecting portions *c* secured to the under side of the burner, the two ends projecting through the base of the burner as 55 described, and provided with a top also, as described, the connecting portions *c* forming a most convenient means of attaching the device to the burner.

To secure a lamp chimney in position I 70 engage the lower end of the chimney over the two heads of the two cross-bars *b*, as shown in Fig. 3—then by moving the chimney downward while inclining it toward a vertical position, the spring bars *a* will be pressed inward and allow the pushing down of the chimney until it is seated upon the base of the burner. Then the cross-bars *b* will be moved out by the tension of the spring arms *a* and engage over the shoulders E, holding 75 the chimney in position upon the burner. I get ample support against the angular movement of the chimney by making the cross-heads of proper length and holding it firmly down by the engagement of such heads over 80 the vertical portions upon the shoulders E, as plainly shown in Fig. 2, yet it may be as readily detached as the chimney from the ordinary lamp, by turning it in line with the cross-bars, giving them the reverse movement of that described for the engaging of 85 the chimney.

In Fig. 4 I have shown a modified form of my device in which I dispose with the seg-

mental cross bar *b* and provide the spring arms *a* with the projection *d* adapted to engage over the shoulder E.

What I claim as my invention is:

- 5 In a lamp burner, the combination with the base of a chimney holder consisting of upwardly extending arms, formed with retaining heads on their outer ends, and having their lower ends extending through the base

and united below the burner, substantially as is described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. SOPER.

Witnesses:

JAMES WHITTEMORE,
M. B. O'DOHERTY.