

(No Model.)

S. G. STODDARD.

LAMP BURNER.

No. 321,395.

Patented June 30, 1885.

Fig 1

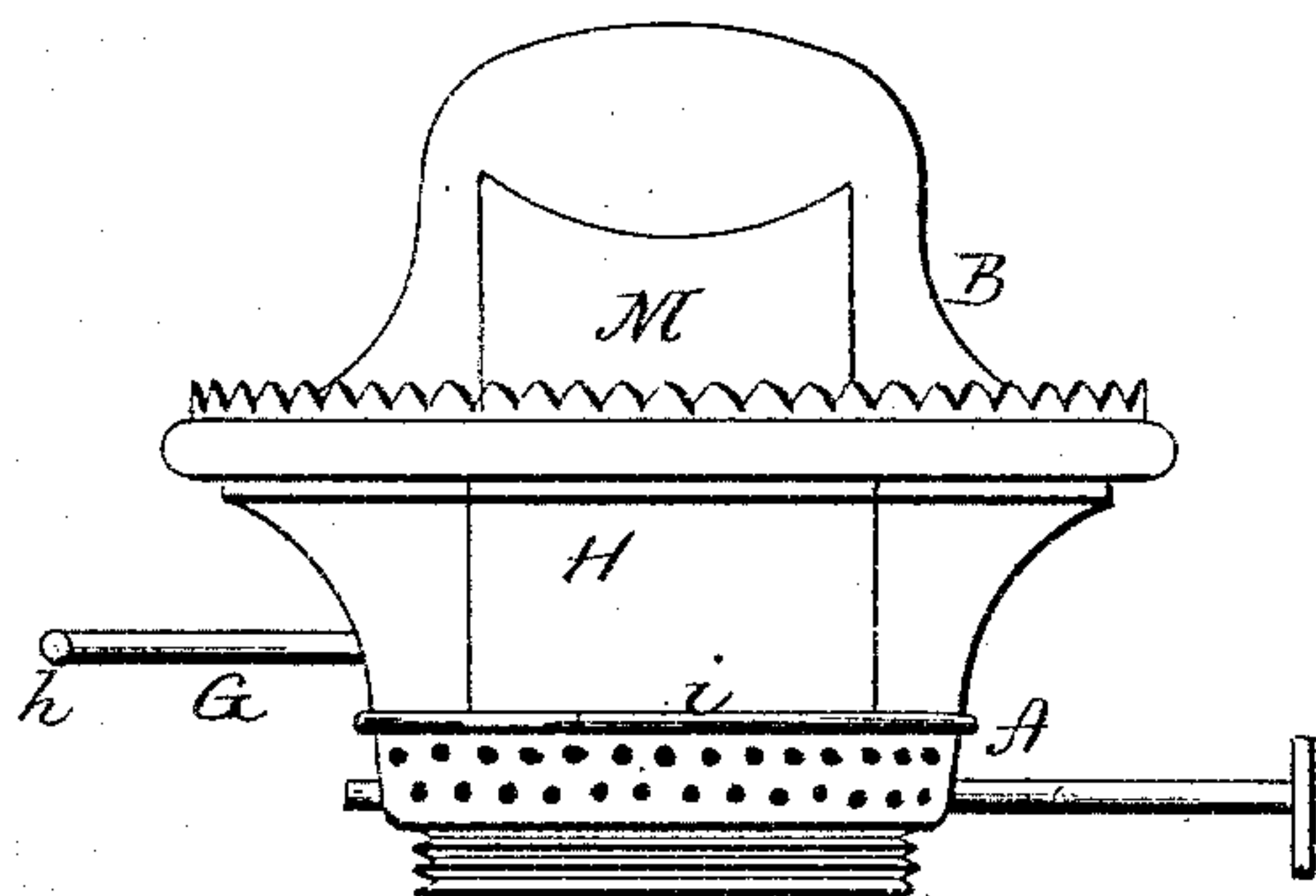


Fig. 2

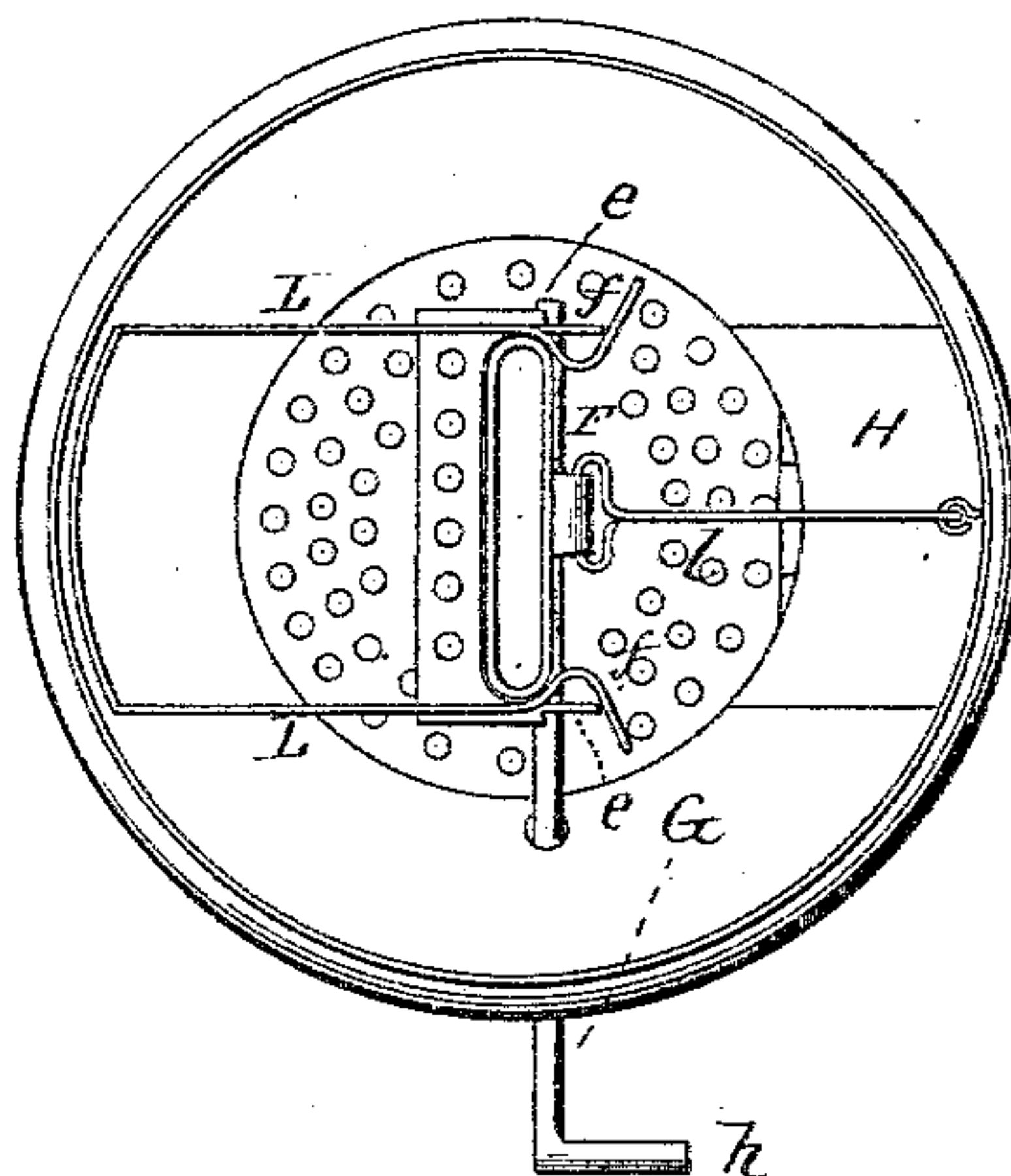


Fig. 3

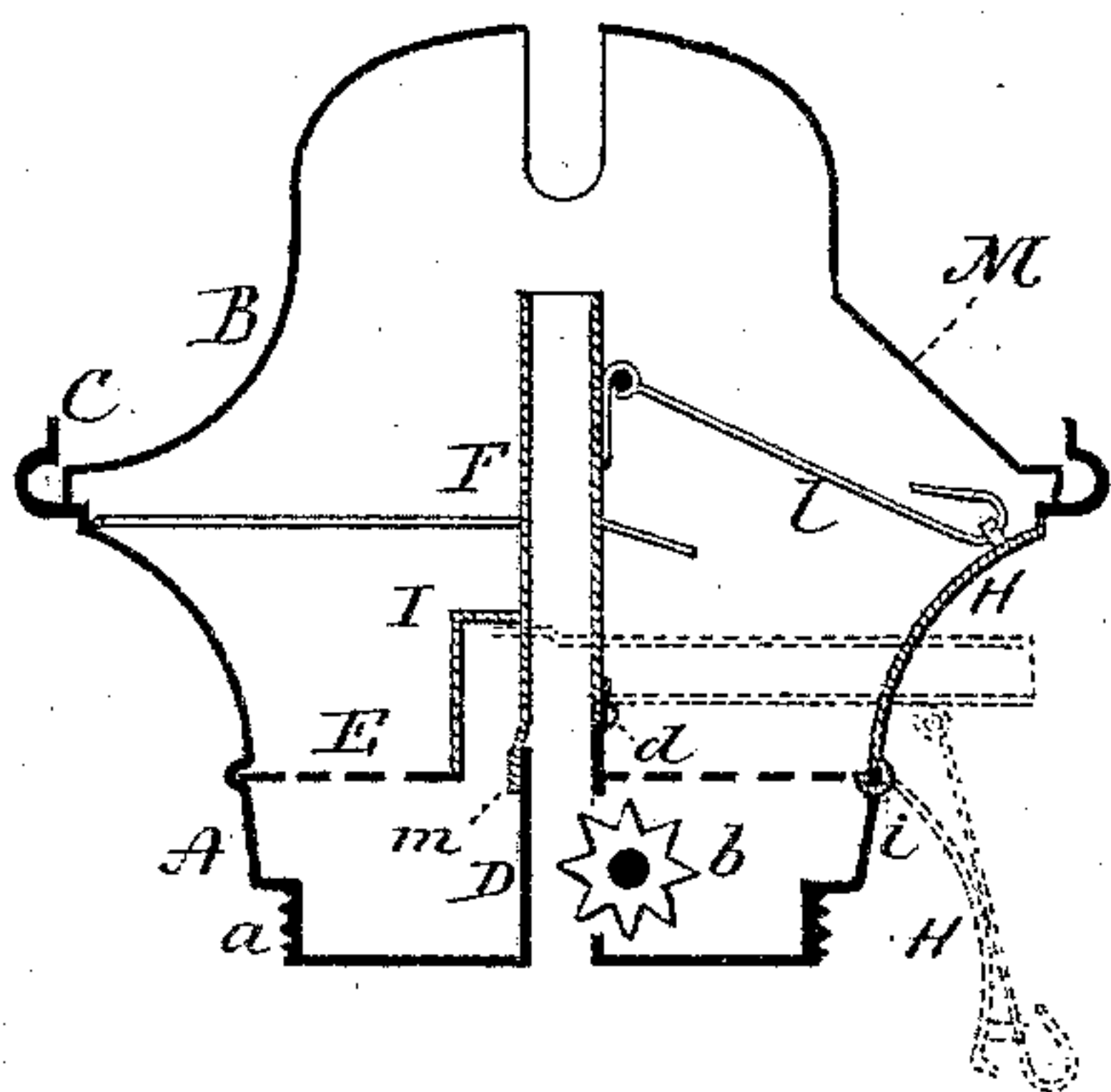


Fig. 4

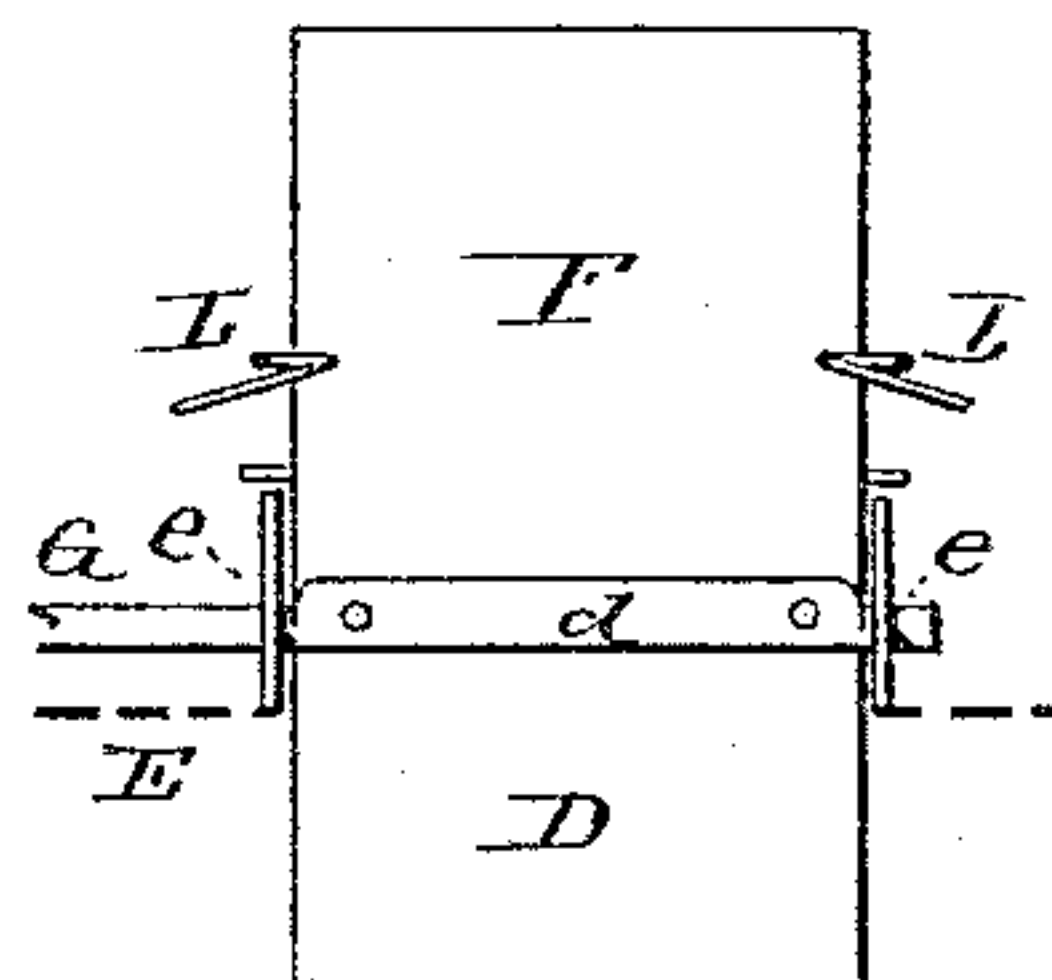
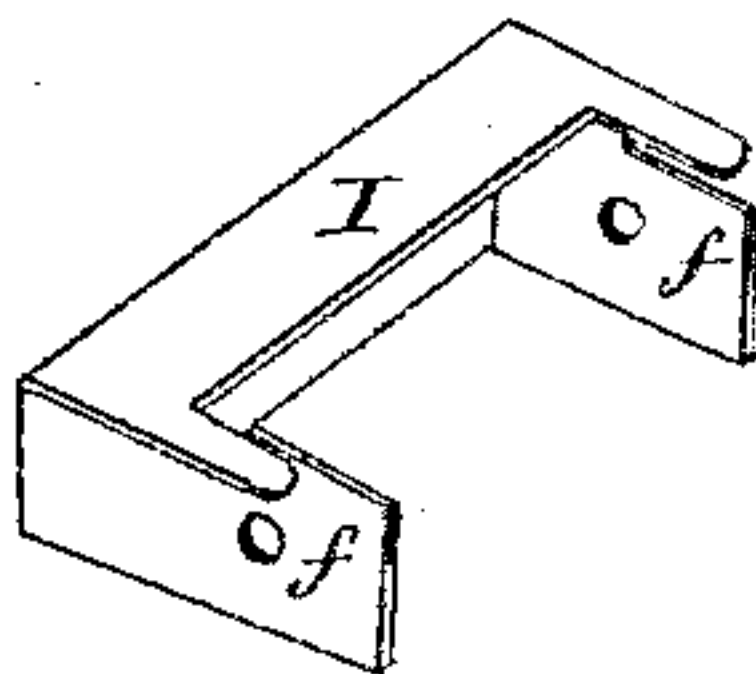


Fig. 5



Witnesses
J. H. Shumway
J. C. Carle

Samuel G. Stoddard.
Inventor.
By Atty
J. M. E. M. E.

UNITED STATES PATENT OFFICE.

SAMUEL G. STODDARD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO
BRIDGEPORT BRASS COMPANY, OF SAME PLACE.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 321,395, dated June 30, 1885.

Application filed March 23, 1885. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL G. STODDARD, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new
5 Improvement in Lamp-Burners; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same,
10 and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a top view, the deflector removed; Fig. 3, a vertical section transversely across the wick-tube; Fig. 4, a
15 horizontal section showing side view of the wick-tube; Fig. 5, a perspective view of the protector for the joint of the tube, detached.

This invention relates to an improvement in that class of burners adapted to burn hydrocarbon oils, and particularly to that class in which a flat wick is employed, and an air-distributor surrounding the wick-tube, above the wick-adjuster, and which are constructed
20 with a deflector or cone adapted to receive a chimney, the object of the invention being to readily present the upper end of the wick for trimming, lighting, or extinguishing without displacing the chimney; and the invention consists in the construction, as hereinafter described, and more particularly recited in the
30 claims.

A represents the base of the burner, constructed with the usual screw, *a*, to fit the lamp-collar. The base extends upward, and is adapted
35 to receive the cone or deflector B in the usual manner, and form a gallery, C, upon which the chimney may rest.

D is a portion of the flat wick-tube, extending from the bottom of the base upward, and
40 through which the usual ratchet, *b*, works for adjusting the wick, the tube opening through the base below.

Above the ratchet is the perforated air-distributor E. The base below the distributor is
45 perforated as shown for the admission of air, the air passing up through the distributor into the combustion-chamber above. The distributor also serves to prevent the ignition of gas which may escape through the wick-tube
50 around the ratchet-openings, as in the class of

burners to which this invention particularly pertains.

Instead of making the wick-tube as a continuous tube from the base upward, the upper portion, F, is made separate from the lower or
55 fixed portion, D; and this upper portion is attached at its lower end to a shaft, G, which extends in alongside the tube, and is secured to it, as seen at *d*, Fig. 4. This shaft forms trunnions *e e*, to serve as pivots upon which the
60 upper part, F, of the tube may be turned. These trunnions are supported in a corresponding bearing, *f*, at each side the wick-tube. The shaft G extends outward through the casing of the burner, and terminates in any convenient
65 shape to form a handle, *h*, and so that by turning the shaft the upper part, F, of the wick-tube may be turned downward from its vertical position, as indicated in broken lines, Fig. 3. A portion, H, of the casing on that
70 side toward which the tube is adapted to turn is detached from the body of the casing and hinged below, as at *i*, and so as to be turned downward and outward in opening, as indicated in Fig. 3. This door H is connected to
75 the hinged part F of the wick-tube by a rod, *l*, and so that as the wick-tube is turned outward the door opens in advance of the tube to permit the end of the tube to protrude through the casing, as indicated in Fig. 3. 80
Then, as the tube is returned, the door follows and closes the opening just as the wick-tube reaches its upright position.

The side of the wick-tube opposite the hinge is constructed with a downwardly-projecting
85 flange, *m*, to overlap that side of the fixed part D of the wick-tube, as seen in Fig. 3, and close the joint between the two. At the opposite edge the break is made to hinge, so that there will be substantially no opening, 90
and as a protection for the joint in the tube, when bent, a box-like casing, I, is fixed upon the distributor E, and so as to surround the joint between the hinged and fixed part of the tube, as seen in Fig. 3. The protector I is
95 shown in perspective, Fig. 5. Its two ends are extended to form the bearings *f f*, one at each side of the wick-tube, and in which the shaft or trunnions take the bearing to form the pivot upon which the hinged part of the tube 100

may turn. As the wick-tube is turned downward, the flange *m* comes against the under side of the top of the protector, so as to fully close the opening, and so that there is no communication from the combustion-chamber to the distributor below. The protector *I* is preferably perforated to add to the air-distributing capacity of the base of the burner.

The protector *I* forms a bearing against which the wick-tube will strike when raised to its vertical position, and so as to properly locate it with relation to the slit in the deflector above; and, that the tube may not be accidentally turned, springs *L* are arranged within the body of the burner, the ends of which are adapted to embrace the tube, as seen in Fig. 2, when in its upright position, but yet so as to yield as the shaft *G* is turned to throw the tube downward.

On that side of the deflector beneath which the tube passes in its opening and closing movement a recess, *M*, is formed on the inside to prevent contact of the tube with the deflector, so that the general form of the deflector need not necessarily be changed; but instead of making the recess *M* the whole surface of the deflector may be made of such shape, as indicated by this recess in Fig. 3, to permit the tube to be turned outward without interference therewith.

I claim—

1. The combination, with a lamp-burner having the base *A*, adapted to be secured to the collar of the lamp, and constructed with the perforated air-distributor *E* to form a chamber in the base, the fixed tube *D*, extending upward through the base and said air-distributor, combined with the wick-adjuster arranged in the base below said distributor, the upper part, *F*, of the tube arranged upon a hinge above the distributor, with a shaft extending therefrom outward through the body of the burner, the body of the burner constructed with an opening through its side, substantially as described, and whereby said upper part of the burner may be turned downward to present its upper end outside the body of the burner, while the said lower portion, *D*, of the tube remains stationary.

2. The combination, with a lamp-burner having the base *A*, constructed for attachment to the collar of the lamp, and with the air-distributor *E*, forming a chamber in the base, of the fixed tube *D*, extending upward through the base and air-distributor, the wick-adjuster in said base, the upper portion, *F*, of the tube hinged above the air-distributor and independent of the fixed portion *D*, the shaft *G*, extending therefrom through the body of the

burner, the said body of the burner constructed with an opening through its side, and the door *H*, hinged at said opening and connected with the tube, substantially as described.

3. The combination, with a lamp-burner having the base *A*, constructed for attachment to the collar of the lamp, and with the air-distributor *E*, to form a chamber in the base of the burner, of the fixed wick-tube *D*, extending upward through the base and said air-distributor, the upper part, *F*, of the wick-tube hinged above the air-distributor, a shaft extending therefrom outside the body of the burner, said hinged part *F* constructed with a flange, *m*, on its side opposite the hinge and so as to overlap the upper end of the fixed tube *D*, substantially as described.

4. The combination, with a lamp-burner, the base *A*, constructed for attachment to the collar, and with the air-distributor to form a chamber in the base, of the fixed tube *D*, extending through the base and through said air-distributor, the upper part, *F*, of the tube hinged above the air-distributor, with a shaft therefrom extending through the body of the burner, a protector, *I*, above the air-distributor and surrounding the wick-tube upon its side opposite the hinge, substantially as described.

5. The combination, with a lamp-burner having the base *A*, constructed for attachment to the lamp-fount, and with the air-distributor *E*, forming a chamber in the base, of the fixed tube *D*, extending upward through said base and air-distributor, the upper part, *F*, of the tube hinged above the air-distributor, and with a shaft therefrom extending through the body of the burner, the said body constructed with an opening through its side, a door, *H*, hinged at said opening and in connection with the tube, and the protector *I*, around the tube opposite the hinge and above the air-distributor, substantially as described.

6. The combination, with a lamp-burner having the base *A*, constructed for attachment to the collar of the lamp, and with the air-distributor *E*, forming an air-chamber in the base, of the fixed tube *D*, extending up through the base and air-distributor, the upper part, *F*, of the tube hinged above said distributor, and with a shaft therefrom extending through the body of the burner, with the springs *L* within the body of the burner, and adapted to embrace the part *F* of the burner when in the vertical position, substantially as described.

SAMUEL G. STODDARD.

Witnesses:

D. W. KISSAM,
N. M. BEACH.