J. S. BROWN.

Lard Lamp.

No. 13,675. Patented Oct. 9, 1855.

Fig. 1

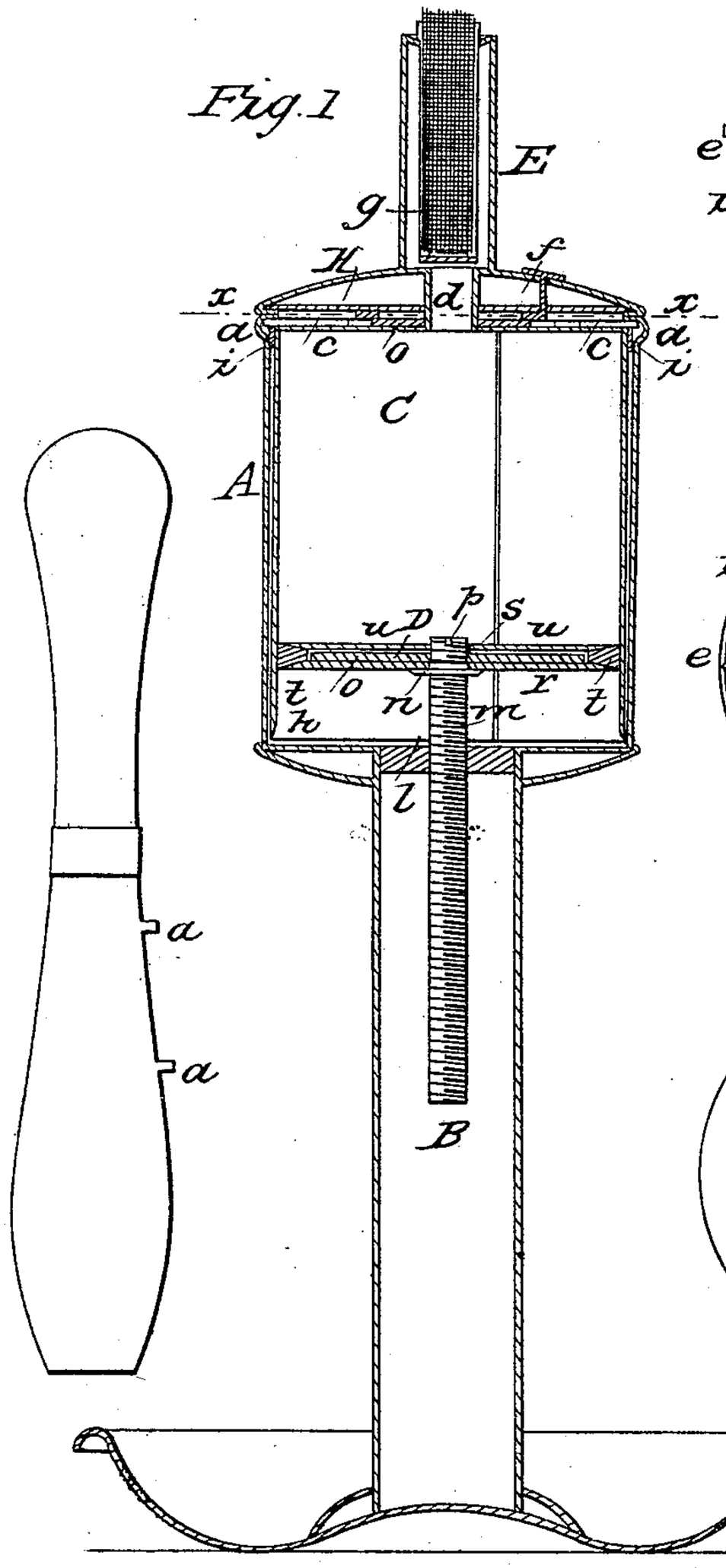


Fig. 3

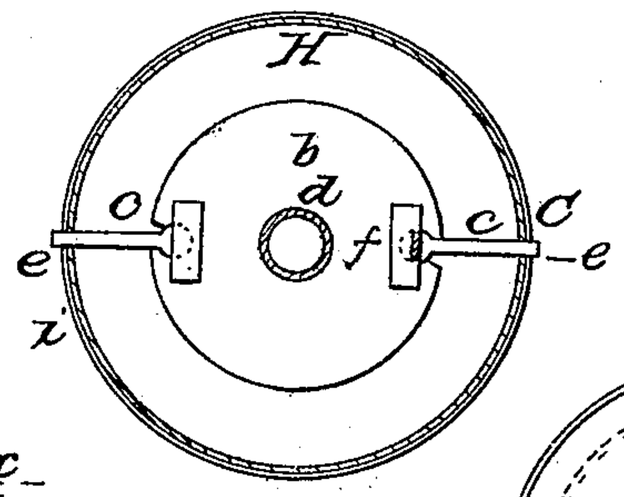


Fig. 5

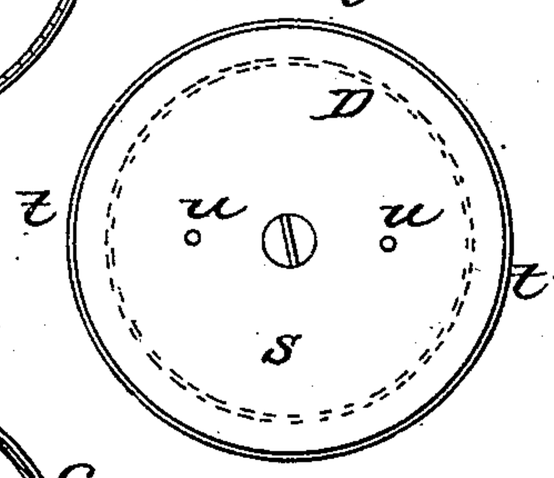


Fig. 4

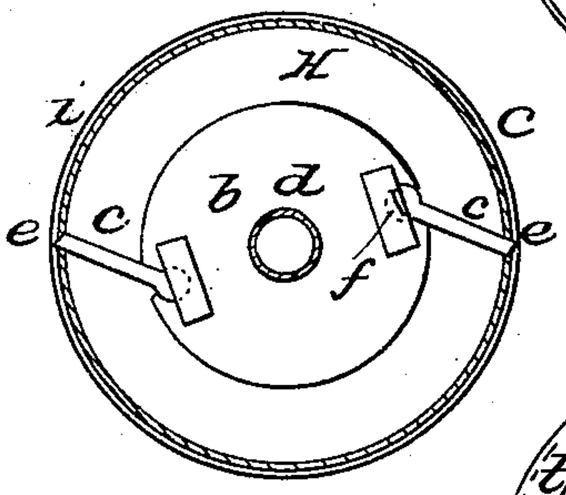


Fig. 6

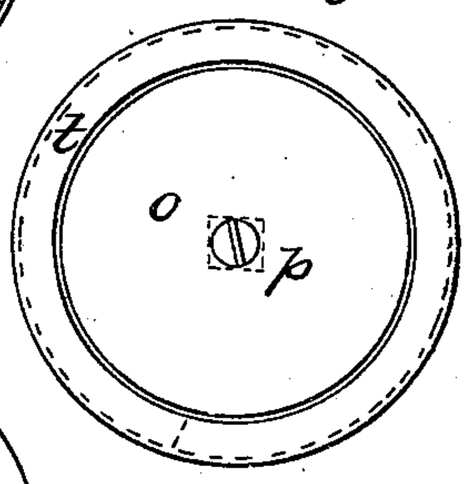
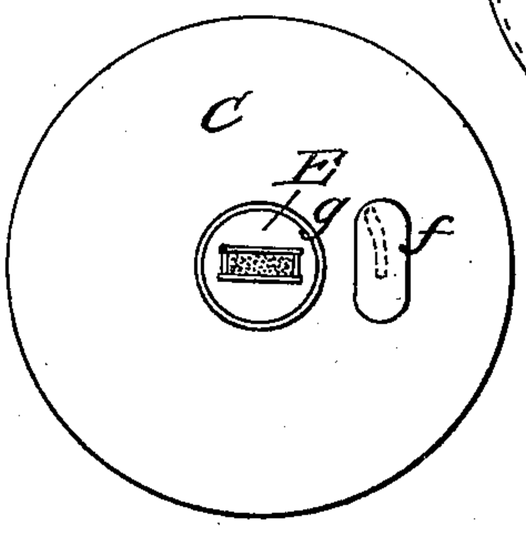


Fig. 2



UNITED STATES PATENT OFFICE.

J. S. BROWN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO JOS. KENT.

LARD-LAMP.

Specification of Letters Patent No. 13,675, dated October 9, 1855.

To all whom it may concern:

Be it known that I, J. S. BROWN, of Washington, in the District of Columbia, have invented a new and Improved Lard-Lamp; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, Figure 1, being a vertical section in the center of the lamp; Fig. 2, a top view thereof; Figs. 3 and 4, sections in the plane *x*, *x*, Fig. 1, showing different positions of certain parts represented; Fig. 5, top view of the piston; Fig. 6, view of the same, the upper plate thereof being removed.

Like letters designate corresponding parts in all the figures.

A bowl, or cup, A, of suitable size, and open at its top, is first prepared, and secured upon a hollow support B. Into this bowl, an inverted cup C, or one open at the bottom, is made to fit loosely, or so as to leave a space of about the thickness of a sheet of tin between the two. The lower edge *h*, of this cup is bent outward and sharpened, substantially as represented in Fig. 1, so that it will fit pretty closely, but not tightly, in the bowl A. The object of this, is both to insure the reception of all the lard therein, as the inverted cup is pushed down over it, and more especially to enable the cup to pass readily over the piston D, which is to work therein. A narrow band of tin *i*, may be soldered around the upper edge of the inverted cup, to prevent its playing loosely in the bowl A. The top of the cup C, is double, with a space H, between the two covers, of any convenient depth, say from an eighth to half an inch; and a small tube *d*, passes through them, so as to form a communication between the interior of the cup and the burner E, above. This tube should be made quite small, as it is only required to be large enough to furnish a passage for the lard through it; and it is desirable to disconnect the burner from the interior of the cup as much as possible, so that the heated lard in the former may not melt the lard below; the space H being employed also to more effectually secure the same object, whereby the piston may keep the lard in the cup without requiring to fit very accurately therein. The wick-holder *g*, should not touch the metal below; otherwise much heat would soon be communicated to the cup C.

The screw *m*, by which the piston is worked, turns in a nut *l*, secured in the top of the hollow support B; and should have a left-handed thread, so that the piston may be raised by turning the cup C, to the right. The top of this cup should project beyond the bowl A, so that it may the more easily be grasped for turning. To prevent the cup C, itself being lifted, as the screw is turned, instead of the piston therein, a bead, or groove *a*, is formed in the upper part of the bowl A, into which little arms *c*, *c*, extend from the cup C. Figs. 3, and 4, exhibit the construction and operation of these arms. They are jointed to a disk *b*, which is situated in the space H, and is allowed to move around the tube *d*, as an axis. The outer ends of the arms pass through holes, or slots *e*, *e*, just large enough to receive them in the periphery of the cup. A projection *f* extends from the disk up through a slot in the top of the lamp, far enough to allow it to be operated by the fingers. When the arms *c*, *c*, are placed in a radial position, as seen at Fig. 3, they will reach into the groove *a*, and thus hold the cup C, in the bowl, but at the same time, allow it to turn freely therein. But by turning the disk *b*, sufficiently to bring the arms *c*, *c*, into the position shown in Fig. 4, the cup may be withdrawn or inserted. The length of the slot in the top of the lamp, should be only sufficient to allow the requisite movement of these arms.

The piston D, is composed of two metallic disks *r*, *s*, of a little less diameter than the interior of the cup C. The lower disk *r*, slides freely upon the upper end of the screw *m*, and rests on a shoulder *n* thereof. The upper end of said screw also has a right-handed screw-thread *p*, cut upon it; and the upper disk *s*, is screwed thereon. The packing consists of a ring *t*, of sole leather, india-rubber, or other suitable, yielding material, and if not sufficiently elastic to be stretched as it is pressed outward, it may be cut apart in one place. The edges of the disks *r*, *s*, which come in contact with this packing, are beveled, as shown in Fig. 1, so that by simply screwing down the disk *s*, the packing may be expanded to fit the cup C, whenever it wears loose. A loose disk *o*, may if desired, be inserted in the space between the disks *r*, *s*, and packing *t*, to keep the said packing properly centered.

When the lamp is to be filled, the in-

verted cup is drawn straight out, and the piston D, screwed down to the bottom of the bowl A. A notch in the top of the screw *m*, will enable this to be done, with a screw driver, or any other suitable instrument, which may be at hand. The lard is then put either in the bowl A, or cup C, which is then replaced.

Fig. 7, represents an instrument which might be used in connection with the lamp, consisting of a wide blade, of ordinary sheet iron, inserted in a handle. This would serve both as a screw-driver, and for dipping the lard into the lamp. By forming two projections *a*, *a*, on one side, which would fit into two holes *u*, *u*, in the disk *s*, of the piston, it could also be employed to expand the packing of the piston when required. It will be seen that if the piston should fail to hold the lard in the cup C, it will only run down into the bowl A, and there be held. By this means I insure perfect cleanliness.

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

The combination and arrangement of the open bowl A, with its hollow support B, the inverted cup C, with its air space H, and enlarged mouth *h*, and the piston D, constructed and operating substantially in the manner and for the purposes herein set forth.

J. S. BROWN.

Witnesses:
E. P. HUDSON,
CLEMT. S. STULL.