Drake & Eggington.

Lamp.

No. 72376 Patented Dec. 17, 1867

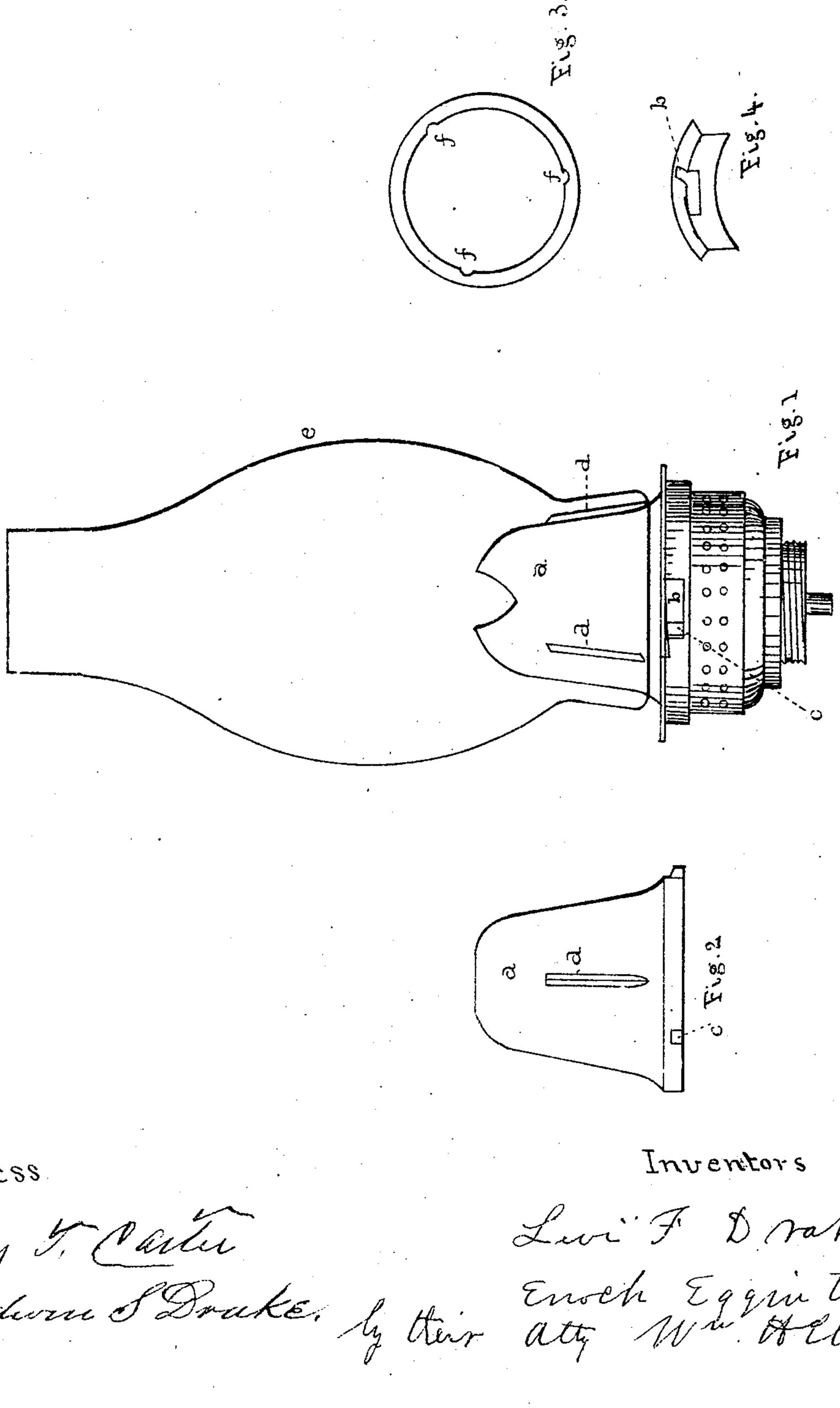

Fig. 1.

Fig. 1a.

Fig. 1b.

Fig. 2.

Witness

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United States Patent Office.

LEVI F. DRAKE AND ENOCH EGGINTON, OF PORTLAND, MAINE.

Letters Patent No. 72,376, *dated December* 17, 1867.

IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, LEVI F. DRAKE and ENOCH EGGINTON, of Portland, in the county of Cumberland, and State of Maine, have invented certain new and useful Improvements in Lamps; and we hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use our invention, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a side view of a lamp-top, cone, and chimney, embodying our improvements.

Figure 2, a side view of the translucent cone.

Figure 3, a view of the bottom end of the lamp-chimney.

Figure 4, a view of a portion of the top rim of the lamp-top, broken out in detail, in order to show the method of securing the cone.

Transparent lamp-cones for this description of lamps have already been patented, but we do not claim such. It is well known that the use of translucent material, such as porcelain, when employed to diffuse light in an apartment, produces an illumination exceedingly soft and agreeable to the eye, and one not exhibiting any of the dazzling characteristics which are both unpleasant and hurtful to the eye. Globes for lamps, made of this and other similar material, have long been in use. By the use of such material for a lamp-cone, in the kind of lamps termed kerosene or coal-oil lamps, much light could be gained over the common metal cone, and still the effects of the light, as transmitted through a transparent cone, could be avoided. This is one of the purposes of our invention. With this view, we make a cone of porcelain or other similar material, in the common general shape, but with the intention that the same shall not be perfectly diaphanous, but allow the light to pass through the same in a softer and less dazzling condition than when sent through transparent glass, thus attaining that condition of the illuminating medium, and the means of diffusing the same, before adverted to.

a shows the cone. This cone, thus constructed, is secured to the lamp-top as follows: In the said top is made, a short distance from the edge thereof, a small vertical slot; then, leading from this, a horizontal one. Two or more of these may be made, as desired. This slot is delineated in fig. 1, at *b*. *c* shows projections on the bottom edge of the cone. These are placed into the vertical portions of the slots *b*; then, by turning the cone in the fingers, the projections *c* pass into the longitudinal part of the slot, and thus, when such slots are made on two sides of the lamp-top, and two projections on the cone, the cone is held on the lamp-top. Thus the cone can be placed on or removed from the lamp-top. *d* shows ribs on the cone. Over these ribs the chimney *e* is placed, the grooves on the inside of the bottom of the chimney fitting on to the same. *f* shows the grooves in the chimney. More or less of these ribs and grooves may be made, according to the wishes of the manufacturers. This fitting of the grooves *f* over the ribs *d* does not, however, allow the under circumference of the chimney to come in contact with the cone when the chimney passes over the same, but, on the contrary, leaves a space between each rib; in other words, the ribs project from the cone more than the depth of the grooves. Thus, as the lamp is ignited, a current of air passes up between cone and chimney, and between the ribs *d*, which current, rising in consequence of the heating of the air around the lamp-flame, supplies fresh air to the flame, in its passage between the chimney and the cone, preserves the chimney-bottom cool. The chimney is held to the cone by the adhesion of the glass of the chimney to the material of the cone, which adhesion may be assisted by roughing the cone on the outer part of its ribs, so as to increase the friction and adhesion. We construct our chimney by the ordinary methods, and before quite cooled, but when in a somewhat malleable condition, pressing the same down over a cone or former, in order to form the grooves, and in order that they may conform to the ribs on the cone.

We do not claim constructing a cone of a transparent material, neither do we claim corrugating the cone-bottom, in order to form indentations, by which a supply of air is prevented from being cut off from the flame. This is not the purpose of our invention; but we have in view to keep the bottom of a chimney, simply fitting over the cone, and there held by friction, and removable as described, cool, so that it may be grasped between the thumb and finger, and removed without burning the same. With this arrangement, the chimney is held also by the expansion of the cone by the heat of the burning lamp. The edges of the slots in the lamp-top are made so as to form a spring, in order better to hold the cone.

We do not claim attaching the chimney by means of springs attached to the deflector, operating on the

inside of the chimney, so that no outside-circle points are needed, as shown in the patent of O. Snow and H. S. Snow, June 12, 1860, No. 28,695.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. Making the cone with the ribs and the small projections at the bottom, as and for the specified purposes.

2. The chimney, fitting over the cone when held on the same, as specified, and constructed with the grooves, as and for the purposes set forth.

LEVI F. DRAKE,
ENOCH EGGINTON.

Witnesses:

WILLIAM HENRY CLIFFORD,
WM. FRANK SEAVEY.