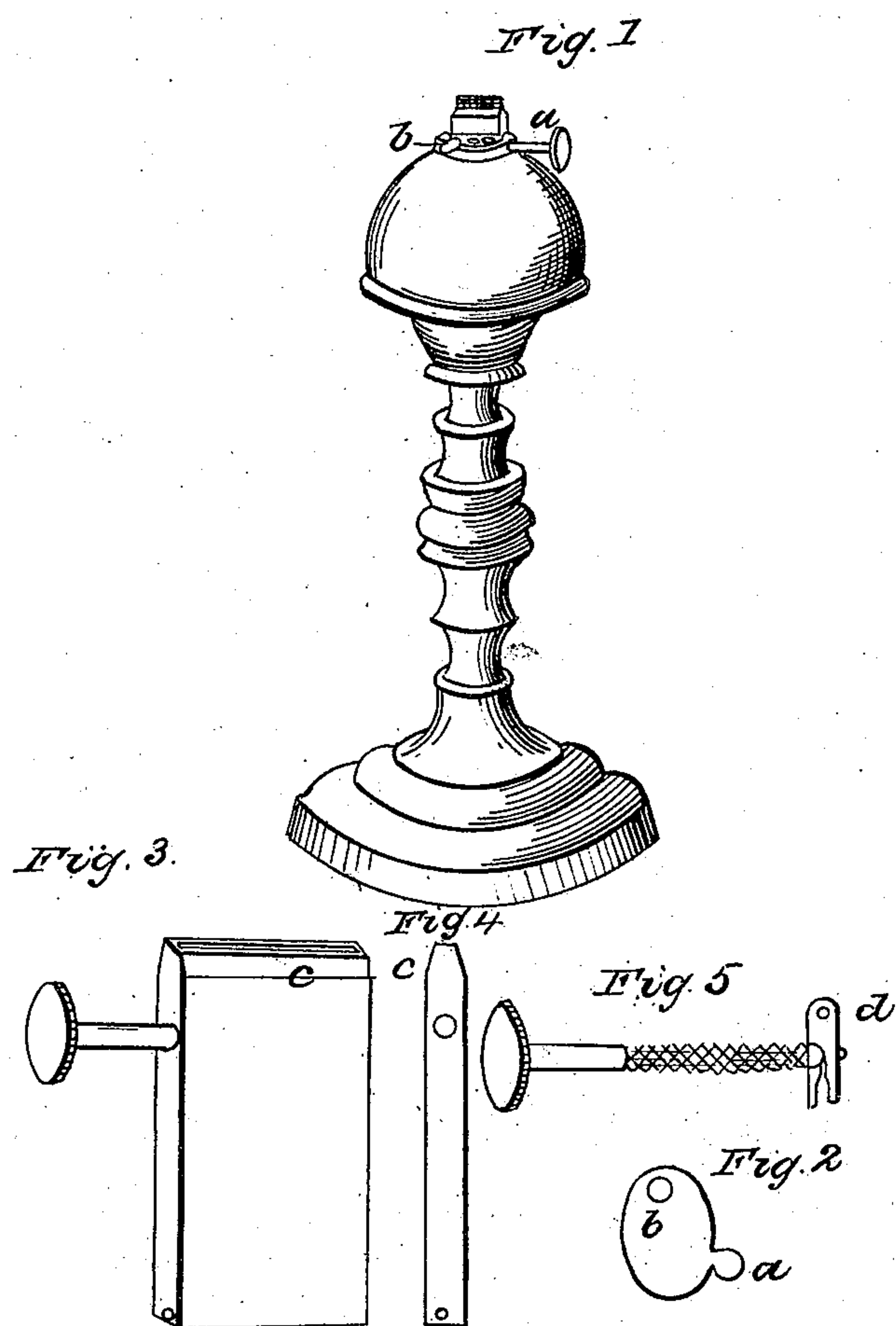


S. RUST.
Wick Raiser.

No. 176.

Patented April 20, 1837.



UNITED STATES PATENT OFFICE.

SAMUEL RUST, OF NEW YORK, N. Y.

LAMP.

Specification of Letters Patent No. 176, dated April 20, 1837.

To all whom it may concern:

Be it known that I, SAMUEL RUST, of the city of New York, county and State of New York, have invented a new and useful improvement in Samuel Rust's patent lamp and other lamps for lighting houses and other places, which patent was granted unto the said Samuel Rust October 6, 1835, and has been since sold to William Rowe, of Fishkill, and that the following is a full and correct description of said improvement as invented or improved by me.

The vessel and body to hold the oil may be principally as other lamps, see Figure 1, but in place of making the common close lamp of the above said Samuel Rust's patent lamp and other lamps with the usual stopple in which the tube or socket is inserted to receive the wick, I cast or make them with the said stopple and the vessel of the lamp, which holds the oil, all in one piece, as though the stopple was brazed or soldered in, with the tube or socket to receive the wick, inserted in the top of the lamp in the same manner as in the usual stopple, as in the upper part of Fig. 1; thereby saving the trouble and expense of fitting the usual stopple into the lamp, which improvement is specially adapted to lamps made of metal of any kind. Into the top of the lamp is an opening, *a*, Fig. 1, for admitting the oil, which opening is stopped and unstopped by a kind of valve or circular slide, *a*, Fig. 2, serving as a stopper. This valve or circular slide is made of sheet iron, brass, tin or other metal, and is nearly oval or egg shaped, with a round projection, or thumb piece, on the side to move it by and works round horizontally on top of the lamp on a screw or pivot, *b*, Fig. 2, passing through the small end of the valve (which screw or pivot is made fast to the top of the lamp) while the other part of the valve or circular slide works around and covers and uncovers the opening as required where the oil is put in the lamp. One end of the valve or circular slide is secured down by means of a head on top of the said screw or pivot while the other end is secured down by sliding the edge under the head or into a notch made in another screw or in a pin, which screw or pin is secured in the top of the lamp or made fast to it in any other way. Into the top of the lamp, a flat tube, *c*, Figs. 3, and 4, is inserted (to receive the wick and a roller to

regulate the wick) which tube is of the particular shape and form represented in the drawing, and is particularly applicable to said Samuel Rust's patent lamp. Whereas the tube in said patent lamp (to receive the wick and roller to regulate the wick) is straight or a straight taper from the bottom to the top, I now make it with a short and more rapid taper, closing in at the top, as at *c*, commencing a little above where the roller is placed, which is about half inch below the top of the tube, more or less, as required; and, below this taper it is made straight or with a less taper than the top and is made larger, so as to have room for a large roller without compressing the wick, while the top of said tube is smaller, closing in on the wick, to keep the wick in the middle and to prevent the oil from spilling, which tube is manufactured with ease and rapidity preserving all the advantages aforesaid. In addition to the above tube and valve, a forked slide *d*, Fig. 5, is inserted into the top of the lamp, to render the roller of said Samuel Rust's patent lamp for regulating the wick perfectly manageable to take out and put in at pleasure which roller was formerly riveted fast or made fast by a bur on the end. This forked slide is of sheet iron, brass, tin or other substance and is made to slide through the top of the lamp at the narrow side or edge of the tube (which receives the little end of the roller) and to catch the fork of the slide in a groove or neck which is made in the end of the roller for that purpose. One prong of the slide passing down on one side of the neck or groove in the roller and the other prong passing on the other side until the slide is pressed down on the neck of the roller to the very fork, which holds the roller fast in the tube and lamp until the said slide is taken out or made loose from the neck of the roller, which is done by means of a small hole or catch at the upper end of the slide. This roller I make movable to take out of any tube or lamp and put in at pleasure by means of the said forked slide or in any other analogous way or manner either with or without a fastening, for the purpose of cleansing both the tube and roller when required and in case the wick should by accident get down in the tube or lamp, when the stopple and the vessel of the lamp which holds the oil are cast or made all in

one piece as aforesaid, or otherwise, the said roller can at once be taken out, when made movable, and the wick immediately taken up at the top of the tube by a common pin when
5 the point is a little bent or it can be taken up without any difficulty by a wire, nail, or stick and replaced in the tube at the top by means of the roller. This roller, I also make with a groove or recess at the large part,
10 where it works into the stopple, tube, or lamp for the purpose of wrapping an elastic substance of thread, cotton, or other material round it which elastic substance works tight in the said stopple, tube or lamp as it may
15 be applied to prevent the escape of the oil. This elastic substance will be required only in case the roller is made too loose from imperfection in the manufacturing or should become too loose from long wear, which in
20 either case is a complete remedy.

For further illustration of the whole the annexed drawings with the explanations are referred to, as making a part of this specification.

25 What I claim and now desire to secure by Letters Patent, as my own invention and improvement, both in the said Samuel Rust's patent lamp and other lamps of a similar

construction, (and not previously known in said lamps) is—

The casting or making the portion which constitutes the usual stopple and the vessel of the said common close lamp (which holds the oil) all in one piece, and also, the valve or circular slide, tube, and forked-slide, in
35 such lamps, as above described, applied, and combined or to the lamp so cast, or made, as above set forth, or in any other way or manner that is essentially the same; and also, the making of the said roller, in
40 such lamps, for regulating the wick of the lamp, movable to take out of the tube or lamp and put in at pleasure, by means of the forked slide or by any other means analogous thereto; and, likewise, in making the
45 said roller with the said groove or recess or elastic substance around it, combined as aforesaid or in any other way that is essentially the same.

Witness my hand this thirty-first day of
January A. D. one thousand eight hundred
and thirty seven.

SAMUEL RUST.

Witnesses:

HERSCHEL CAMP,
JOHN GOLDSMITH.