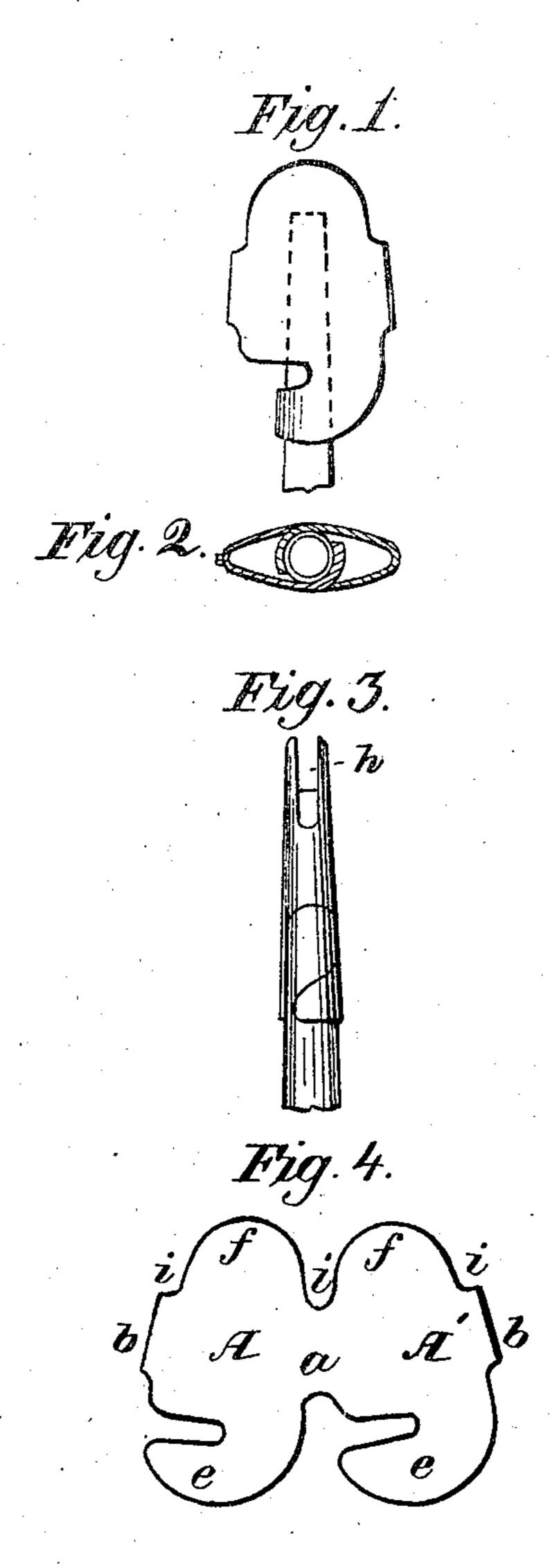
## H. LEIBERT.

Lamp Burner.

No. 31,024.

Patented Jan. 1, 1861.



Samuel Harwow Chas & Foster Atty for Halebert

## UNITED STATES PATENT OFFICE.

HENRY LEIBERT, OF NORRISTOWN, PENNSYLVANIA.

## LAMP.

Specification of Letters Patent No. 31,024, dated January 1, 1861.

To all whom it may concern:

Be it known that I, Henry Leibert, of Norristown, Montgomery county, Pennsylvania, have invented a new and Improved Manufacture of Caps for Lamps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to a mode of manufacturing adjustable caps such as are used in connection with lamps for directing a body of air to the flame and thereby consuming the smoke, and my invention consists in forming a cap of one flat piece of metal which has certain projections and recesses of peculiar shape and arrangement, the said piece of metal being bent so as to form the body of the cap and so that two of its projections shall form a spring clip for grasping the wick tube of the lamp as fully explained hereafter, thereby producing an effective and durable cap by a very inexpensive process.

In order to enable others to carry out my invention I will now proceed to describe the mode of manufacturing the same.

On reference to the accompanying drawing which forms a part of this specification— Figure 1 is a side view of my improved cap connected to the wick tube of a lamp, Fig. 2 an inverted plan view of Fig. 1. Fig. 3 an edge view of Fig. 1, and Fig. 4 represents the shape of the plate prior to being bent to the form desired.

Similar letters of reference allude to similar parts throughout the several views.

or other suitable metal any desired number of plates of the form illustrated in Fig. 4. Each plate is in the first instance bent at the strip a which forms the connection between the two halves A and A' of the plate. The projections b b of the two halves are now directly opposite to each other. The next process is to secure these two projections together which is done by simply making a fold on each, lapping the fold of one projection into that of the other and hammering the two firmly together. Riveting or any other mode of fastening in which no solder is used may

be substituted for that above described. The

two halves of the plate are now directly opposite to each other the projections e e however pointing in contrary directions; these projections are now bent so as to be adapted to the wick tube of the lamp, one projection being arranged to fit against one side and the other against the opposite side of the said tube as seen in the inverted plan view Fig. 2, and the two bent projections combined forming a spring-clip by means of which the cap is secured to and rendered adjustable on the tube.

It will be observed that the rounded tops f, f of the plate Fig. 4 form the opposite sides of the upper end of the cap while the recesses i i i form the required opening h (Fig. 3) between these two sides.

The wick tube is inclosed by the cap as seen in dotted lines Fig. 1, the air having free access to the interior of the cap from below and becoming heated therein is directed toward the ignited wick the flame of 75 which is consequently furnished with that plentiful supply of oxygen which insures a thorough consumption of smoke and deleterious gases generated by the consumption of coal oil and other burning fluid.

It will be seen without further description that the above described mode of manufacturing caps is cheap simple and effective.

I lay no broad claim to an adjustable cap for directing a body of air to the flame of 85 a lamp nor do I claim broadly forming a spring clip on the lower end of an adjustable cap; but

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

As a new manufacture, forming an adjustable cap for lamps of a single flat piece of metal having projections ef and b and recesses of the shape and arrangement described, the said piece of metal being bent as specified so as to form the body of the cap and so that the two projections ef shall form a spring clip for grasping the tube of the lamp in the manner set forth.

In testimony whereof, I have signed my 100 name to this specification, in the presence of two subscribing witnesses.

H. LEIBERT.

Witnesses:

JACOB L. PAXTON, JOHN BLACK.