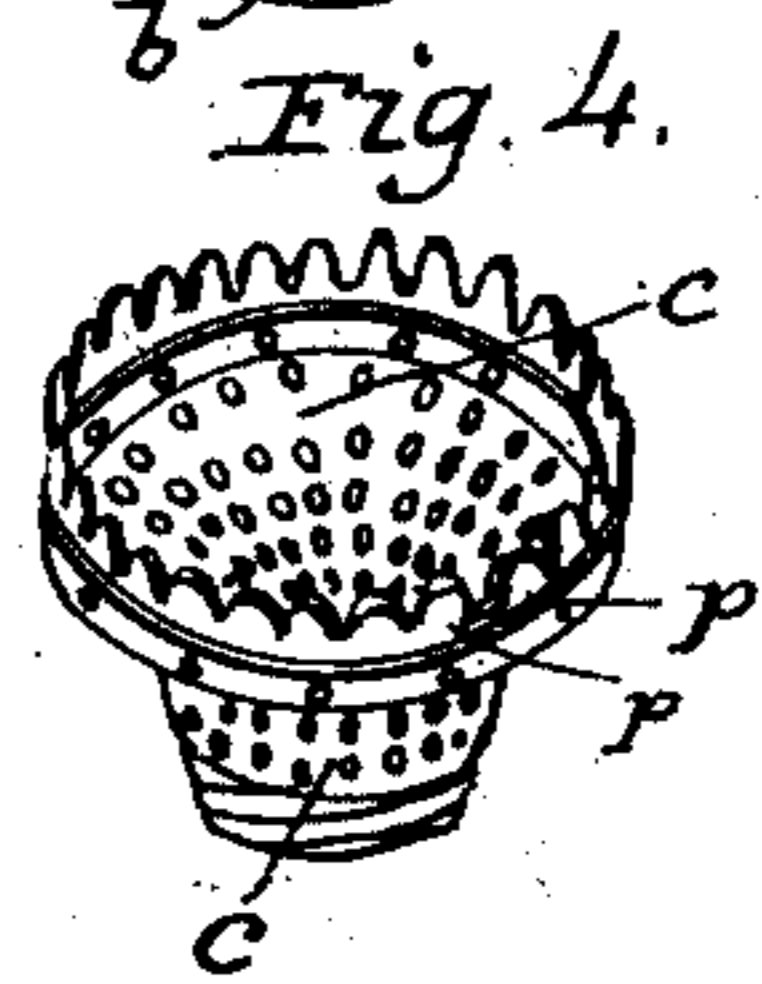
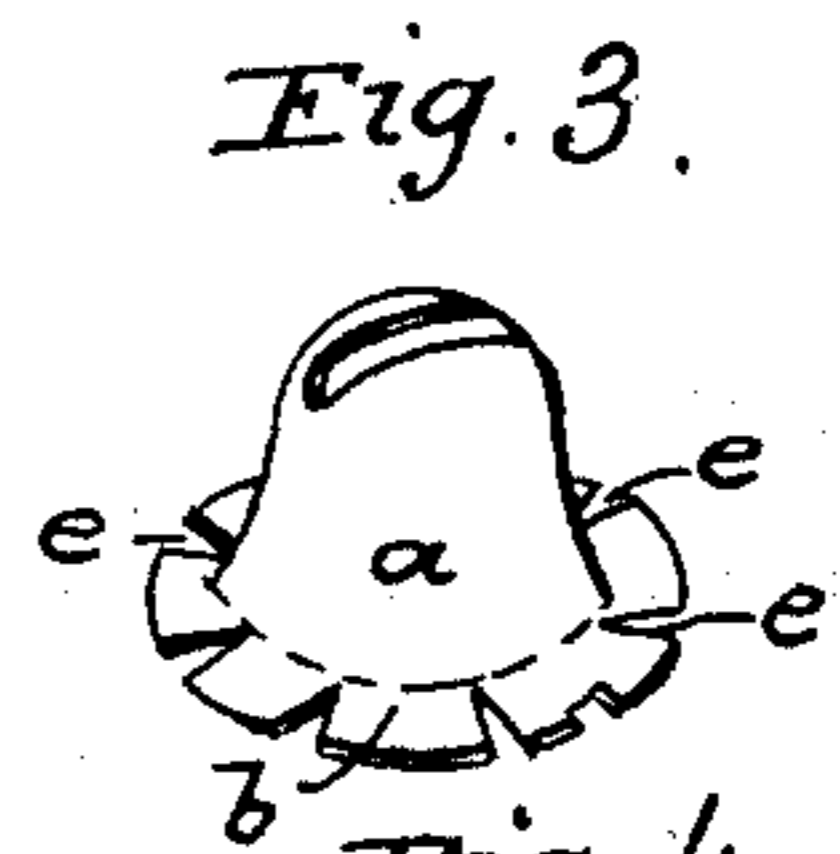
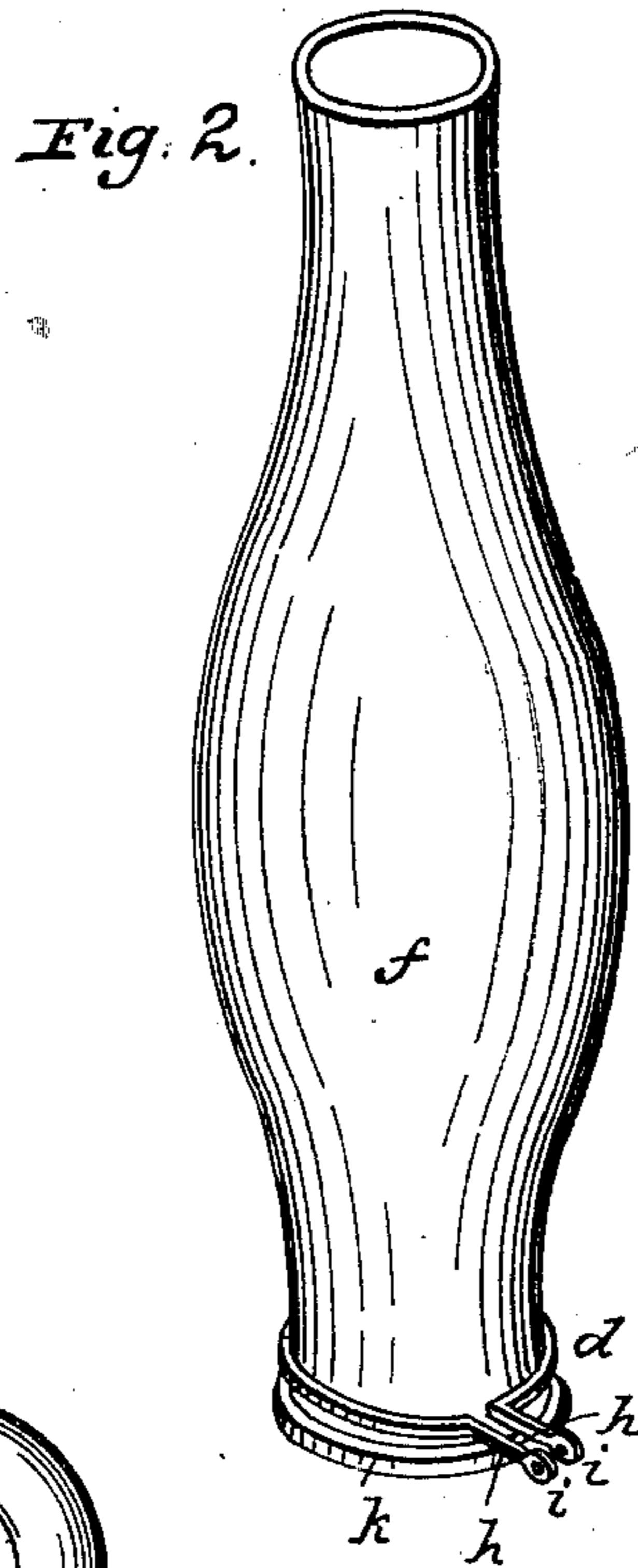
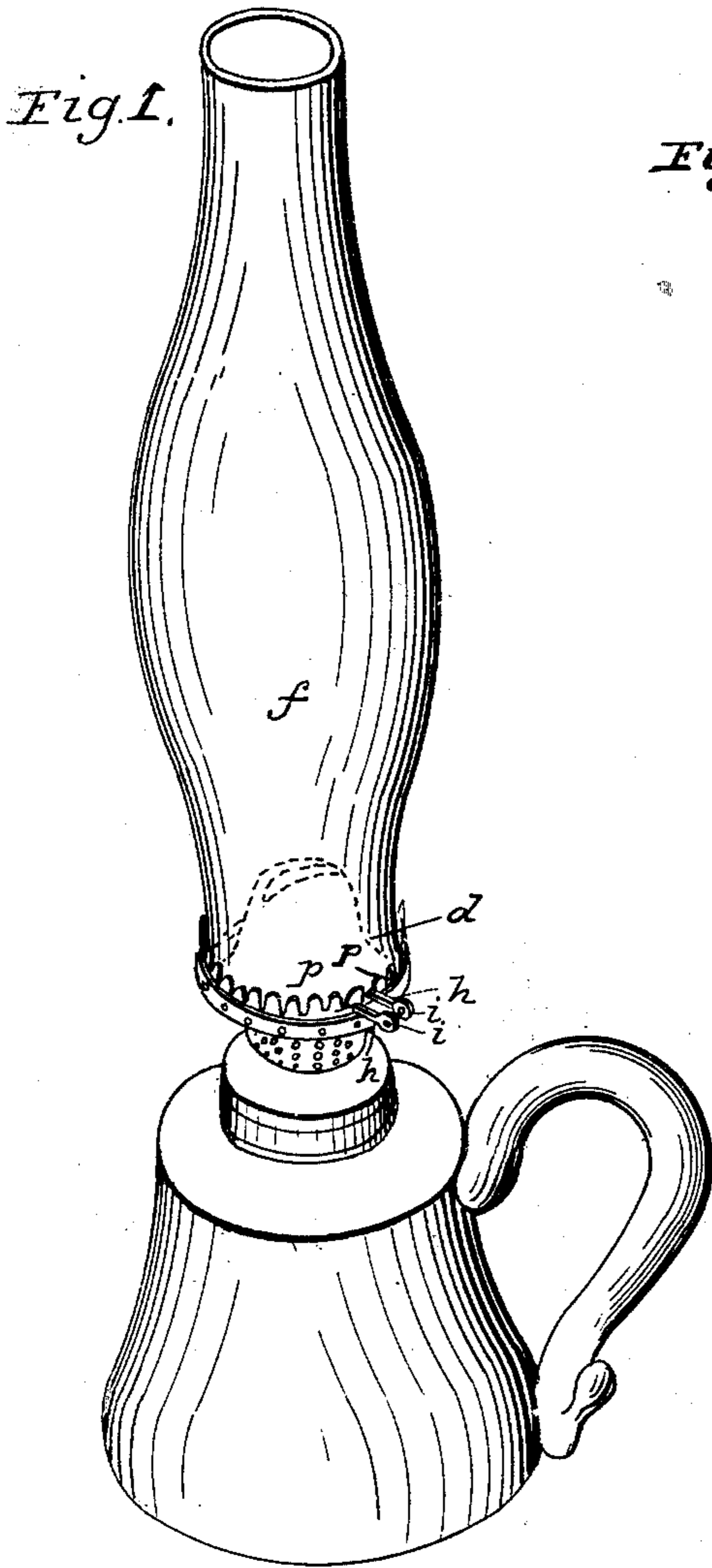


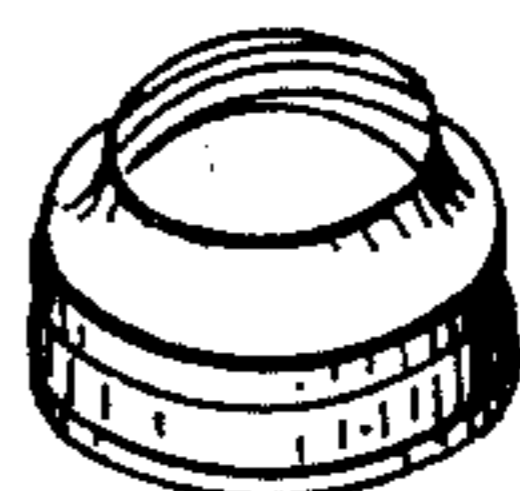
O. NEWTON.  
Lamp Chimney Holder.

No. 34,900.

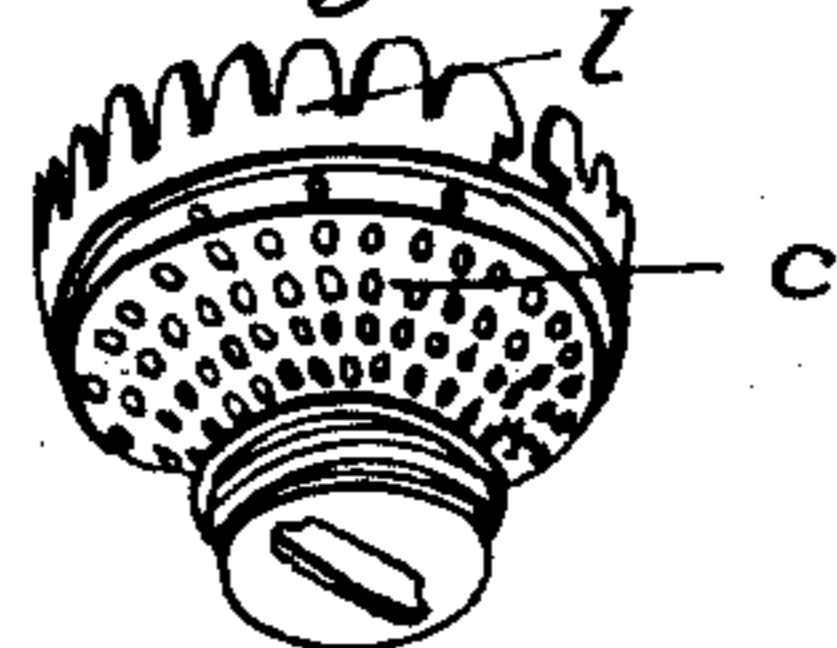
Patented April 8, 1862.



*Fig. 6.*



*Fig. 5.*



Witnesses:  
W. Bakewell  
W. A. Cushing.

Inventor:  
Orrin Newton.

# UNITED STATES PATENT OFFICE.

ORRIN NEWTON, OF PITTSBURG, PENNSYLVANIA.

## IMPROVED HOLDER FOR LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. 34,900, dated April 8, 1862.

*To all whom it may concern:*

Be it known that I, ORRIN NEWTON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Lamps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, forming part of this specification.

My improvement consists in an improved fastening for the chimney, which affords a means of removing it from the lamp without the necessity of applying the hand directly to it.

In the accompanying drawings, Figure I is a perspective representation of a lamp with my improvements attached. Fig. II is a chimney detached from the lamp with my improved fastener upon it. Fig. III is a representation of a cone or cap. Figs. IV and V are perspective representations of the burner-frame without the cone. Fig. VI is the socket of the lamp, into which the burner-frame screws.

In the several figures like letters of reference denote similar parts.

In order to enable others skilled in the art to construct and use my improved chimney-holder, I will proceed to describe minutely its construction and operation.

My improvement relates to the manner or mode of securing the glass chimney in the burner-frame, and accomplishes the further result of enabling the chimney to be removed or replaced without handling the glass itself.

Various modes of fastening the chimney are in use, some at least of which are liable to the objection that the glass is apt to be broken up by the contrivance employed for that purpose. It is well known, also, that the glass chimneys of coal or carbon oil lamps become excessively heated at all parts, excepting very near the bottom, so that it is impossible to touch them with the naked hand while the lamp is alight or for some time after it has been extinguished, and as the chimney must, in burners of ordinary construction, be removed in order to cut or trim the wick or remove the cone, some safe mode of doing this while the chimney is hot is very desirable. This double purpose I accomplish by means of my chimney-holder, marked *d* in Figs. I

and II. It consists in a piece of steel, iron, brass, or other suitable material bent into an annular shape, of somewhat smaller diameter than the base of the chimney *f*. The ends of the piece of metal forming the chimney-holder are not united, and so do not form a perfect ring, and do not quite touch unless pressed together, but both turn outward in a direction radial to the circular portion of the chimney-holder, forming two arms *h h* nearly parallel to each other, but not touching unless pressed together. Each arm terminates in a button *i i*, which may be made, if desired, of wood or other substance which is a bad conductor of heat. The annular part of the chimney-holder has sufficient spring in it to separate the arms *h h* when they are free. The chimneys used with my chimney-holder should be a little larger at their base than immediately above it, which is the usual construction, or have a bead *k* around their lower end, as seen in Fig. II. The ring part of the chimney-holder, when the arms *h h* are pressed together, should hold the glass chimney tightly around its base, and when free should loosely encircle the chimney just above the bead *k*, and yet be so small as not to permit the bead to pass through without springing the ring open a little. In the crown-piece *l* of the burner-frame, just above the level of the rim of the cone, is a slit *n*, (see Figs. IV and V,) the upper part of which will just admit the two arms *h h* of the chimney-holder when pressed together, and the lower part of which enlarges so as to allow the spring to react and separate the arms. At two or three places around the inside of the crown-piece of the burner-frame points *p p* are turned down, projecting far enough to engage the ring of the chimney-holder when sprung open, but to permit it and the bead *k* around the base of the chimney to pass freely when the arms *h h* of the chimney-holder are pressed together. This chimney-holder is not fastened to the burner-frame in any way, as if it were it could not be removed with the chimney from the lamp.

The operation of the chimney-holder is as follows: The chimney is inserted in the ring *d*, and the buttons *i i* at the extremities of the arms *h h* are taken hold of between the finger and thumb, which presses them together and

clasps the chimney sufficiently to hold it steadily and firmly. The chimney-holder and base of the chimney are then placed inside the burner-frame, the arms *h h* of the chimney-holder passing down into the slit *n* in the crown-piece *l* of the burner-frame. The arms are then released, when they spring apart in the wider portion of the slit *n*, and the ring of the chimney-holder enlarges, passing under the projecting points *p p* in the burner-frame, and thus securely holding the chimney in place.

As glass is a bad conductor of heat, and as there is a constant draft of cold air around the base of the chimney, the chimneys do not usually become much heated at their extreme lower end, and therefore the metallic chimney-holder will not become very hot, so that the ends of the arms of the chimney-holder may be metal, or, if preferred, may be tipped with a button of wood or other non-conductor.

To remove the glass chimney from the lamp it is only necessary to take hold of the ends of the arms *h h* of the chimney-holder and press them together, when the ring becomes

disengaged from the points *p p* in the burner-frame, and the chimney and its holder are lifted off together.

The advantages of this arrangement are so obvious as not to need further comment.

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

The use of a chimney-holder consisting of a circular piece of metal or other suitable material separate and detached from the burner-frame and surrounding the base of the chimney, and having projecting arms or handles constructed and operating, substantially as described, for the double purpose of holding the chimney in place in the burner-frame and removing it therefrom without the necessity of handling the chimney in so doing.

In testimony whereof I, the said ORRIN NEWTON, have hereunto set my hand in the presence of two witnesses.

ORRIN NEWTON.

Witnesses:

M. G. CUSHING,  
A. S. NICHOLSON.