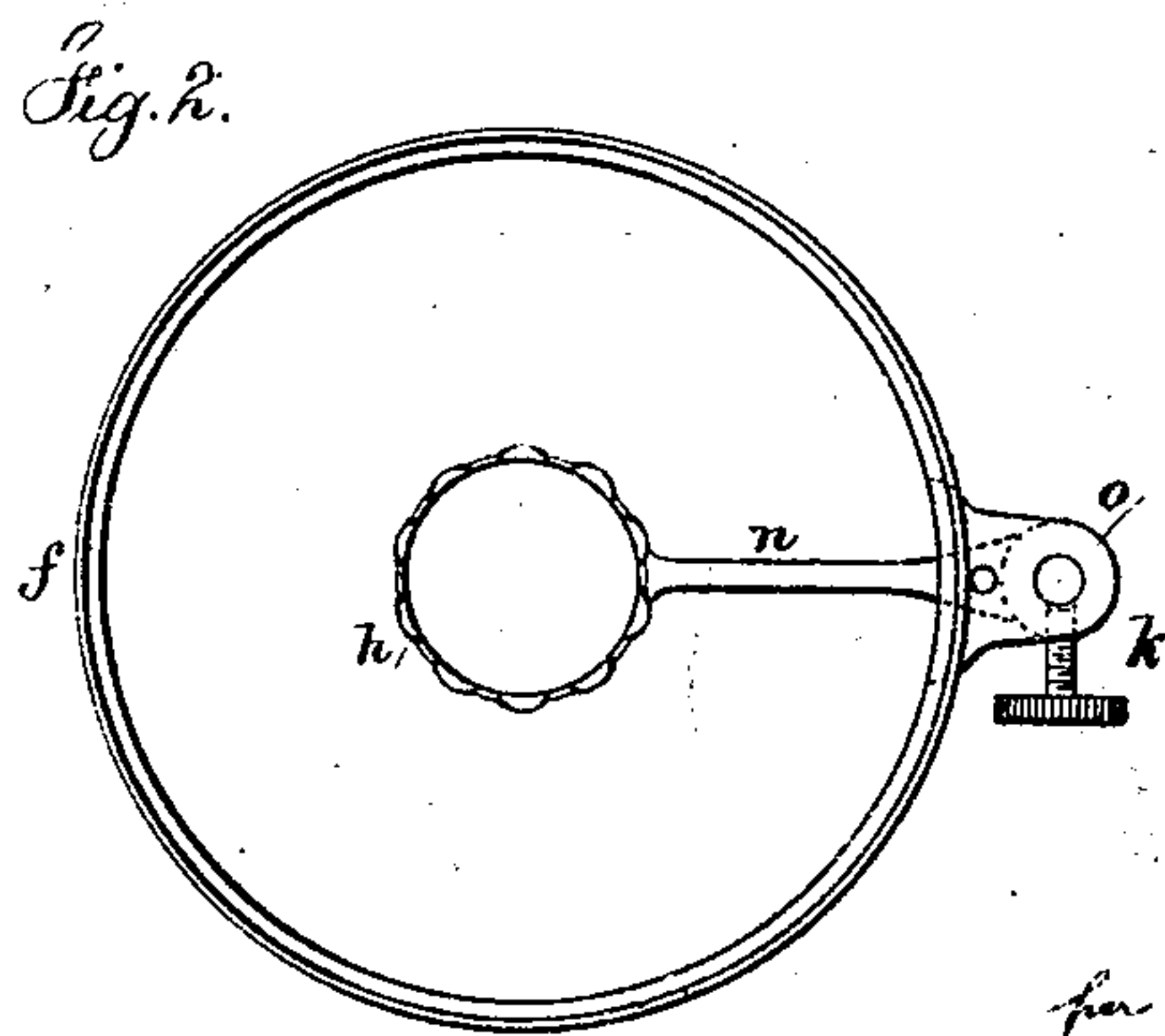
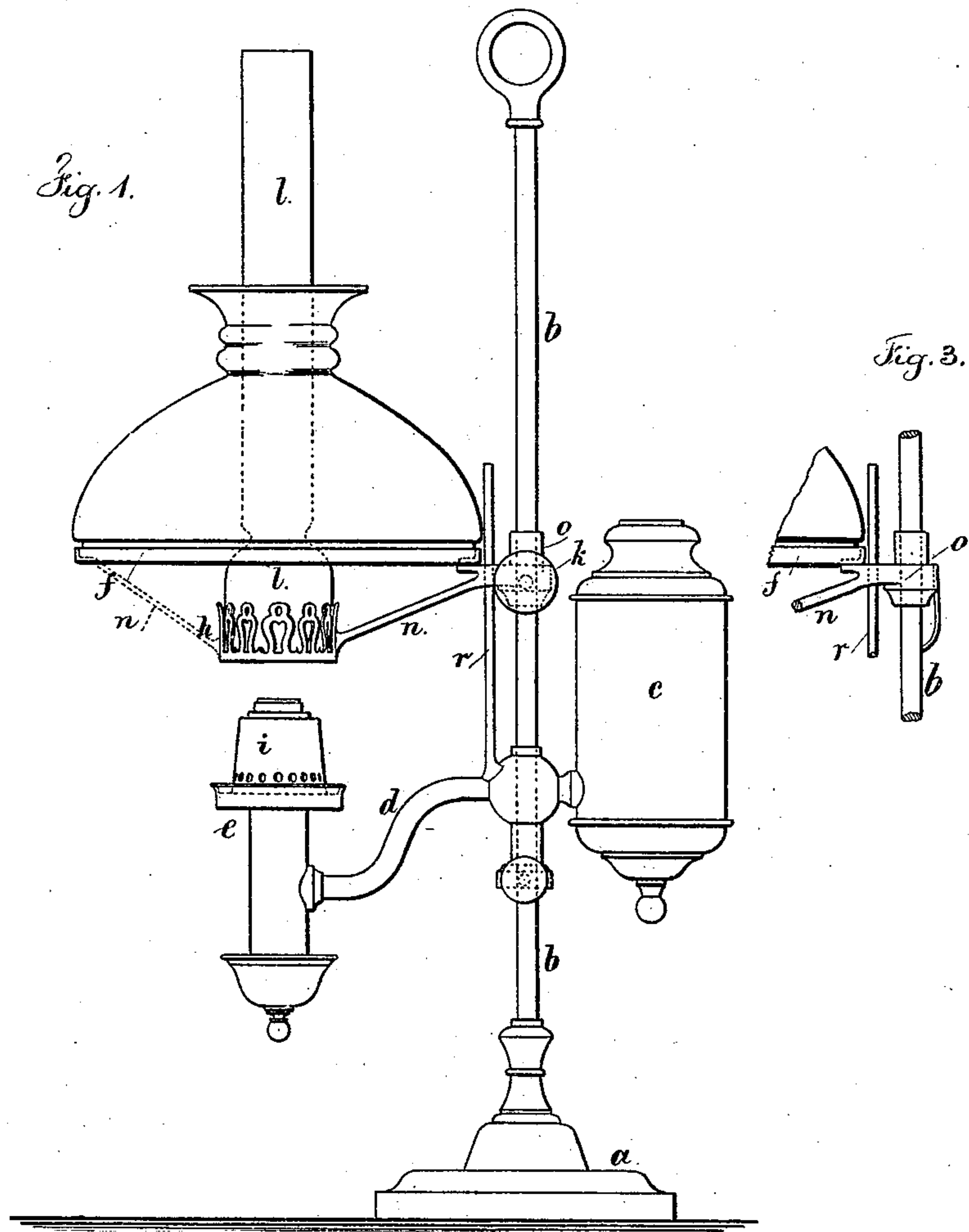


(No Model.)

A. ANGELL.  
STUDENT'S LAMP.

No. 270,719.

Patented Jan. 16, 1883.



Witnesses

Chas. H. Smith  
J. Hail

Inventor

Albert Angell.

per Lemuel W. Terrell

# UNITED STATES PATENT OFFICE.

ALBERT ANGELL, OF EAST ORANGE, NEW JERSEY; ASSIGNOR TO CHARLES F. A. HINRICHS, OF BROOKLYN, NEW YORK.

## STUDENT'S LAMP.

SPECIFICATION forming part of Letters Patent No. 270,719, dated January 16, 1883.

Application filed December 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT ANGELL, of East Orange, in the State of New Jersey, have invented an Improvement in Students' Lamps, of which the following is a specification.

Lamps have been made with a globe or shade holder surrounding and connected with the chimney-holder, and in Argand lamps the chimney-holder has been removable from the burner for lighting or trimming, as seen in Letters Patent Nos. 240,763 and 247,580.

In students' lamps that are provided with shades there is considerable trouble in trimming and lighting, because the shade and the chimney have to be lifted off separately and then replaced, and sometimes the base of the chimney has upon it a thin film of oil, which greases anything upon which it is placed.

The object of my present invention is to sustain the chimney in a student's lamp by a connection to the standard and independent of the burner, so that the lamp-burner may be lowered from the chimney, or the chimney and shade raised from the burner for lighting or trimming, and the reverse when the chimney and burner are brought together. By this improvement the parts are supported from the standard independently of each other, and the lighting and trimming are much more easily accomplished than heretofore.

In the drawings, Figure 1 is a side elevation of a student's lamp with the burner separated from the chimney. Fig. 2 is a plan of the chimney-holder and shade-holder, and Fig. 3 shows a spring applied to the stock of the shade-holder for sustaining the holder and chimney when the latter is separated from the burner.

The base *a*, standard *b*, reservoir *c*, oil-tube *d*, burner *e*, and shade or globe holder *f* are of the usual character employed in student's lamps.

The chimney holder or springs *h* may be separate from the cone or deflector *i*, as shown; or they may be connected together, as in aforesaid patents. If they are connected together, then the cone and chimney will remain together when separated from the burner. I however have shown the chimney-springs *h* as grasping the lower part of the chimney *l* and forming a chimney-holder, and the cone as surrounding the burner. The chimney may be supported by any desired character of holder. The chimney springs or holder re-

ceive their support from the same source as the shade or globe holder *f* through the medium of one or more arms, *n*, extending from the shade-holder or the stock of said shade-holder to the chimney-holder.

The stock *o* of the shade-holder is not supported by the oil-pipe or a socket thereon, as most generally employed, but it is supported by the standard *b*. I either use a clamp-screw, as shown at *k* in Figs. 1 and 2, or a friction-spring at the eye of the stock surrounding the standard, as in Fig. 3, so as to produce sufficient friction for sustaining the shade and chimney when raised up to separate the chimney from the burner or for holding the chimney and shade while the lamp and its burner are lowered to separate the latter from the chimney.

I provide a guide-rod, *r*, fastened at its lower end to the oil-tube and going through a hole in the stock of the shade-ring. This serves to bring the chimney-holder base properly into place when the chimney and burner are brought together.

The base of the cone or the gallery surrounding the wick-tube is to be made slightly flaring at its upper edge to facilitate the guiding of the base of the chimney to its proper place.

In place of the rod *r*, the standard may be prismatic; or it may have a groove in it or a rib upon it, the sliding portion of the shade-holder stock and of the lamp being made to fit the standard and be guided by it.

I claim as my invention—

1. The combination, with the base, standard, reservoir, and burner in a student's lamp, of a shade or globe holder and a chimney-holder, and means for connecting these to the standard independently of the support for the other portions of the lamp, substantially as set forth.

2. The combination, with the standard, the reservoir, the oil-tube, and the burner, of a shade-holder and a chimney-holder, means for connecting the same to and supporting them by the standard, and a guide-rod, *r*, substantially as set forth.

Signed by me this 29th day of November, A. D. 1882.

ALBERT ANGELL.

Witnesses:

GEO. T. PINCKNEY,  
WILLIAM G. MOTT.