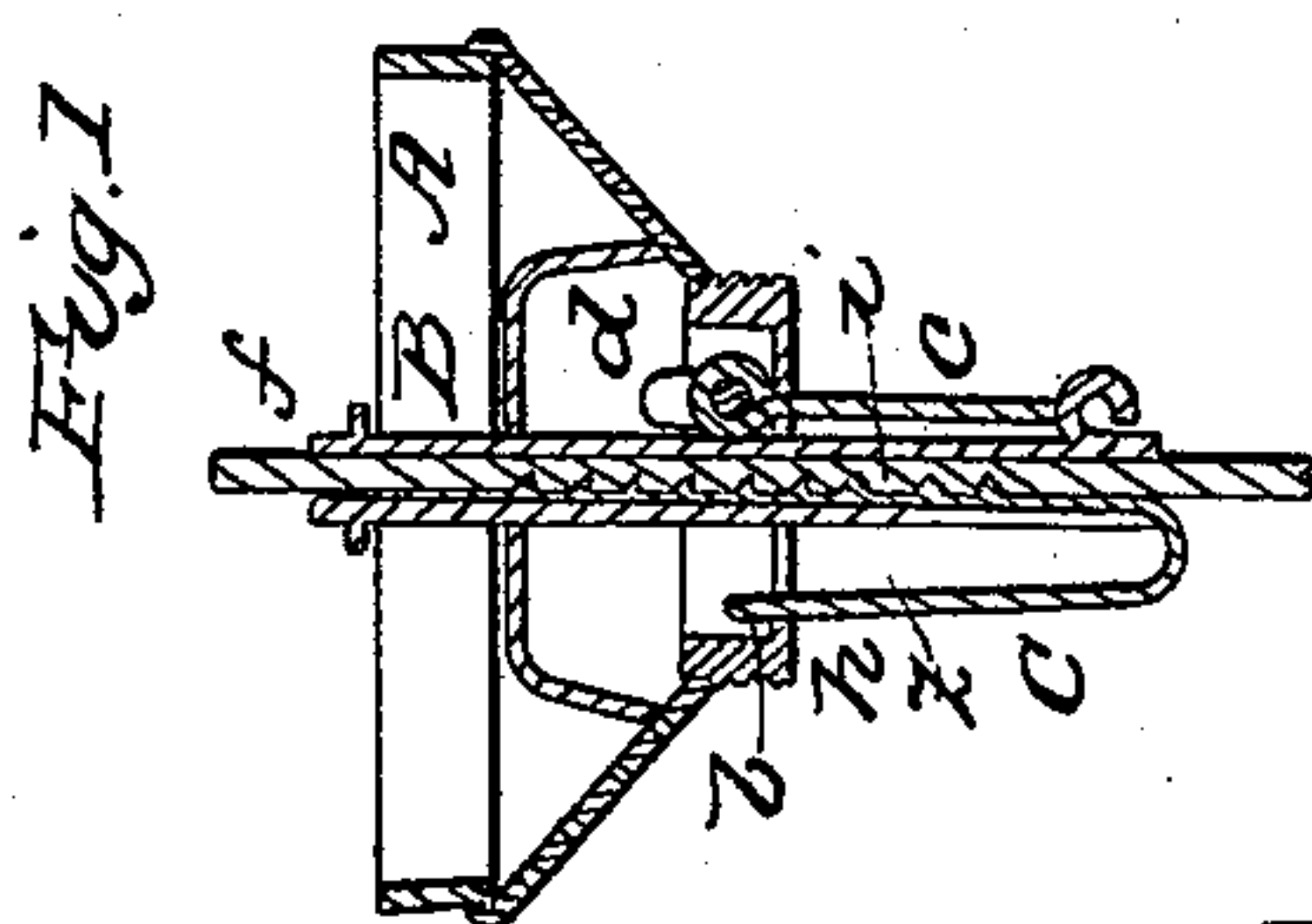
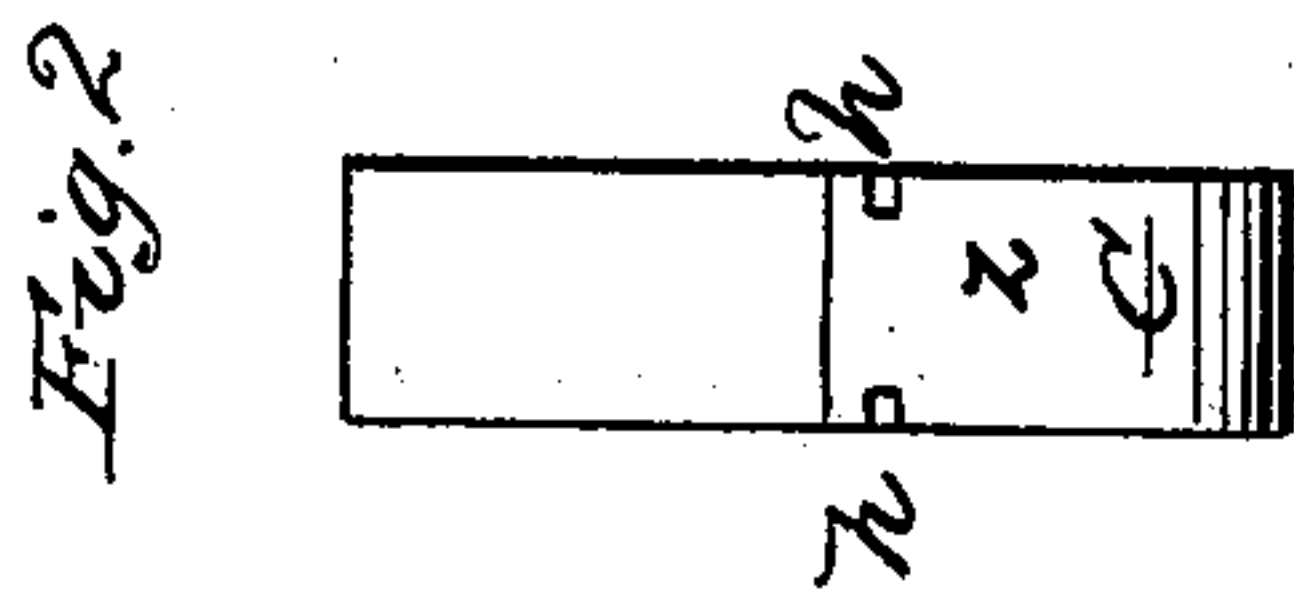
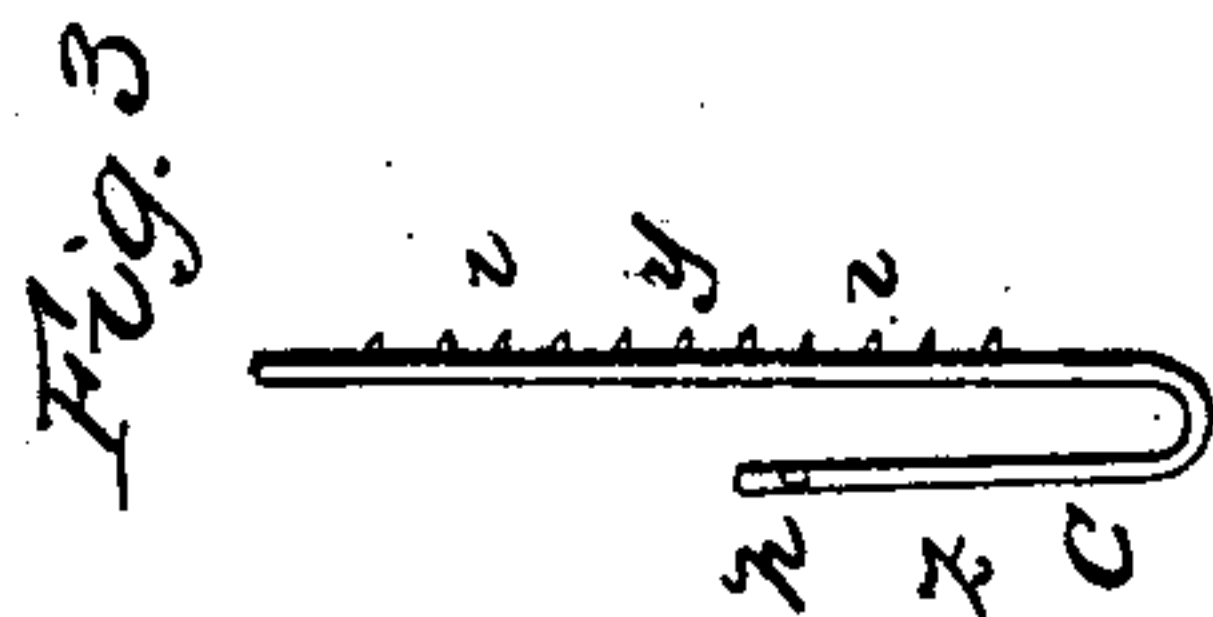
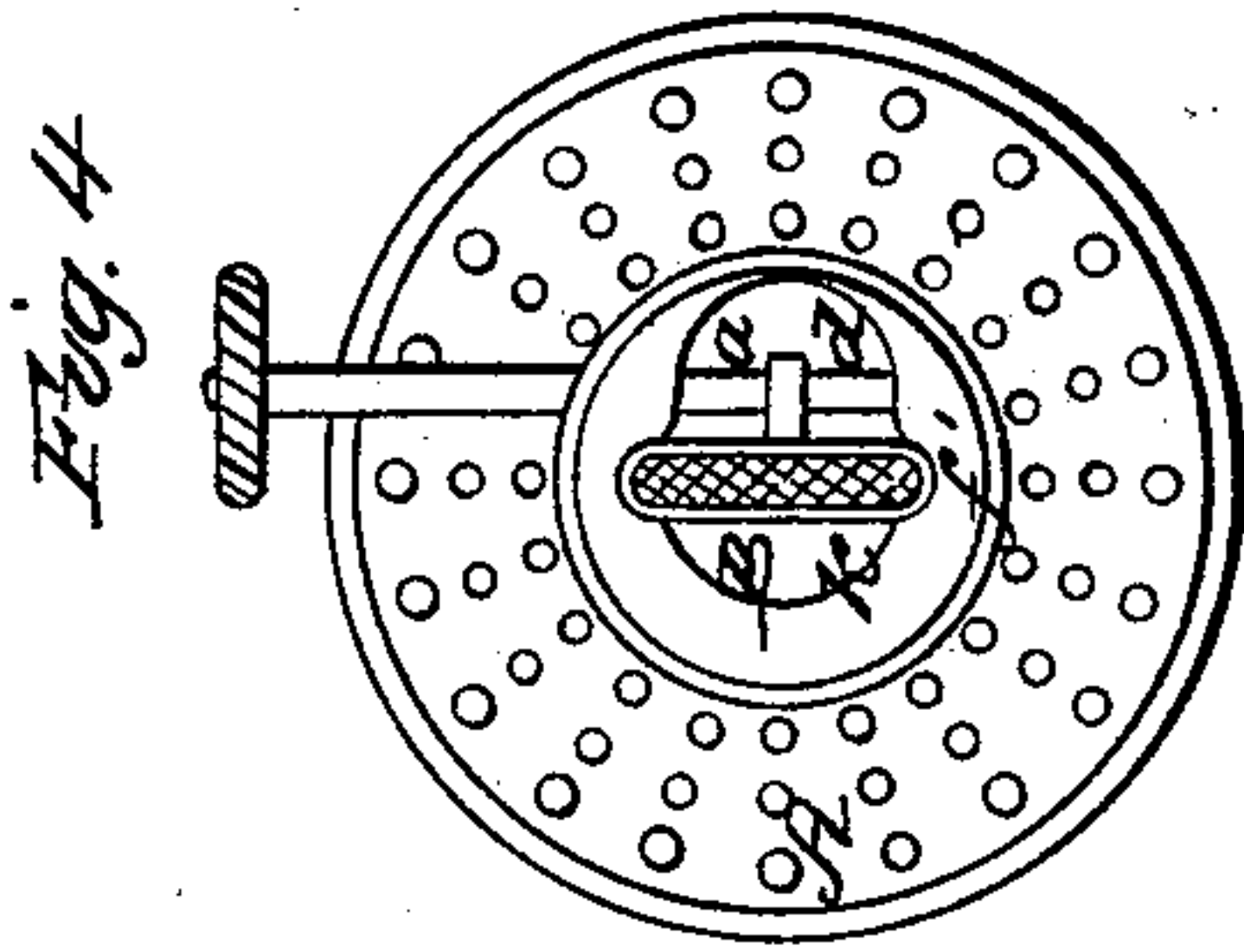


Lamp.

Patented June 19, 1860.



Witnesses  
 Gilbert Chumbl  
 Helen J Prentiss

Inventor  
Chas. J. Hale

# UNITED STATES PATENT OFFICE.

ELIAS J. HALE, OF FOXCROFT, MAINE.

## LAMP.

Specification of Letters Patent No. 28,749, dated June 19, 1860.

*To all whom it may concern:*

Be it known that I, ELIAS J. HALE, of Foxcroft, in the county of Piscataquis and State of Maine, have invented a new and useful Improvement in Lamps for Burning Hydrocarbon Fluids; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—  
Figure 1, is a longitudinal section of a lamp cap provided with my invention. Fig. 2, is a side view of the wick retainer as separated from the cap and wick tube. Fig. 3, is an edge view of the same. Fig. 4, is an underside view of the cup and exhibits the part on which the spring catch of the wick holder clasps.

The nature of my invention consists in making the wick holder with the spring clasp or so as to be detachable from the lamp cap and to extend up through the bottom of it and into the wick tube and bear against and hold the wick substantially as herein-after described.

In the drawings, A denotes the lamp cap provided with a flat wick tube B, such wick tube being movable vertically within the cap A, either by means of a cranked axle *a*, and a pitman *c*, applied to the cap and wick tube or by any other suitable devices. The lower end of the said pitman is hinged to the side of the wick tube. The wick retainer or holder C, is made of a thin plate or strip of metal bent round in form and provided with clasp notches *h*, *h*, as shown in Figs. 1,

2, and 3. The outer surface of the longer arm *y*, of the retainer C, should have small spurs or points *t*, *t*, projecting from it so as to enter the wick. The wick retainer so made is applied to the wick tube and lamp cap as shown in Fig. 1, the notched part of the retainer clasping upon the lower edge or flanch *h*, of the bottom part of the lamp cap and so as to hold the retainer in place while its longer arm or part is extended into the lower end of the wick tube and up the said tube against the wick *f*, as shown in the drawings. A wick retainer so made and applied can be easily removed from the cap, as by pressing the shorter arm *z*, of such retainer toward the wick tube, such arm will be so unclasped from the cap as with the wick and the rest of the retainer to be capable of being simultaneously withdrawn from the wick tube. The particular advantage of this peculiar spring catch wick retainer is, that it enables the wick to be applied to the wick tube with great facility.

I claim—

My improved wick retainer as made not only with a spring clasp, by which, it may be readily attached to or detached from the cap as described, but so as to extend up through the lower end of and into the wick tube and against the wick essentially as hereinbefore specified.

ELIAS J. HALE.

Witnesses:

GILBERT CHANDLER,  
MELLEN G. PRENTISS.