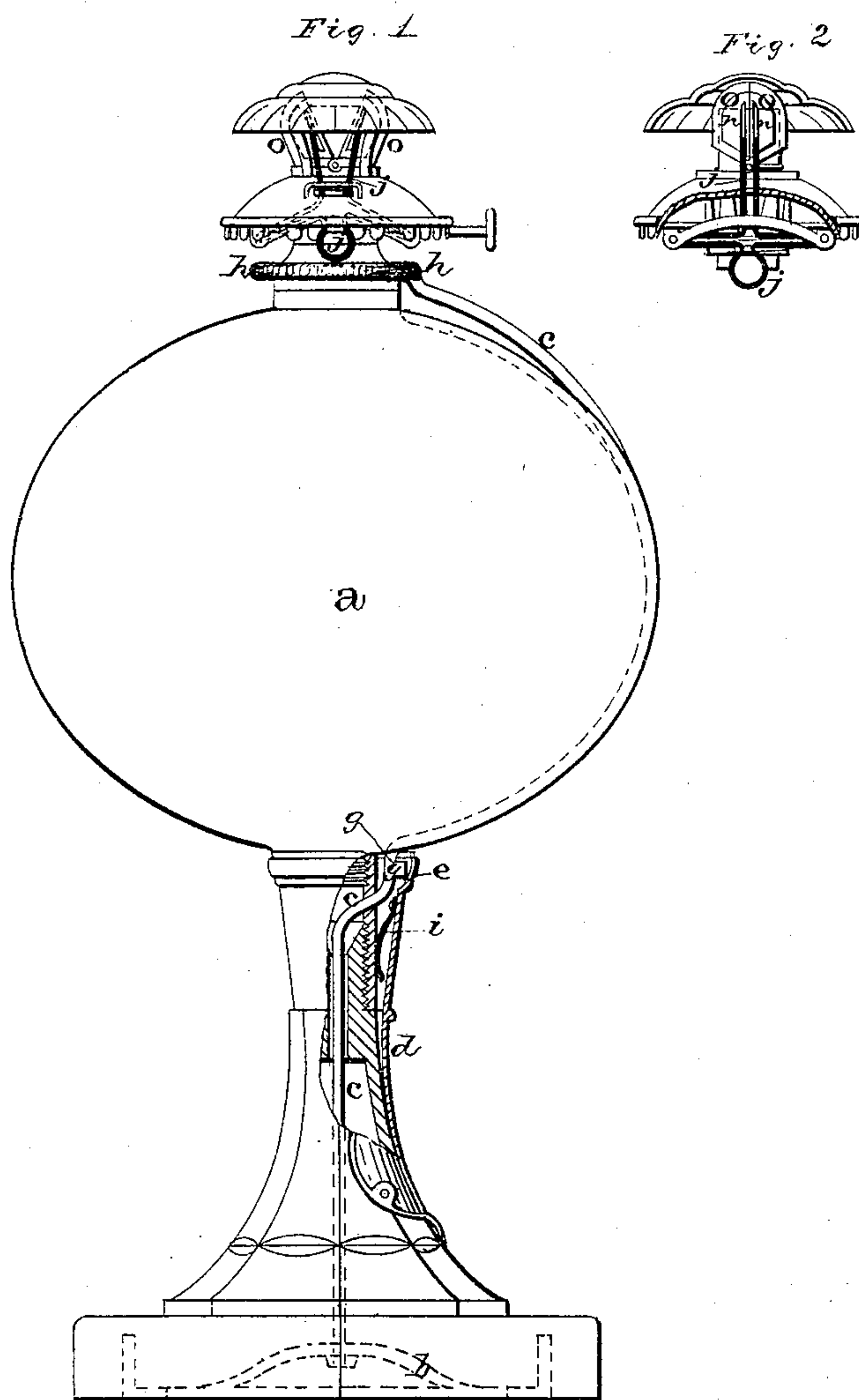


F. RHIND.
Lamp-Extinguishers.

No. 151,512.

Patented June 2, 1874.



Witnesses
J. W. Farmer,
Edward J. Kaiser

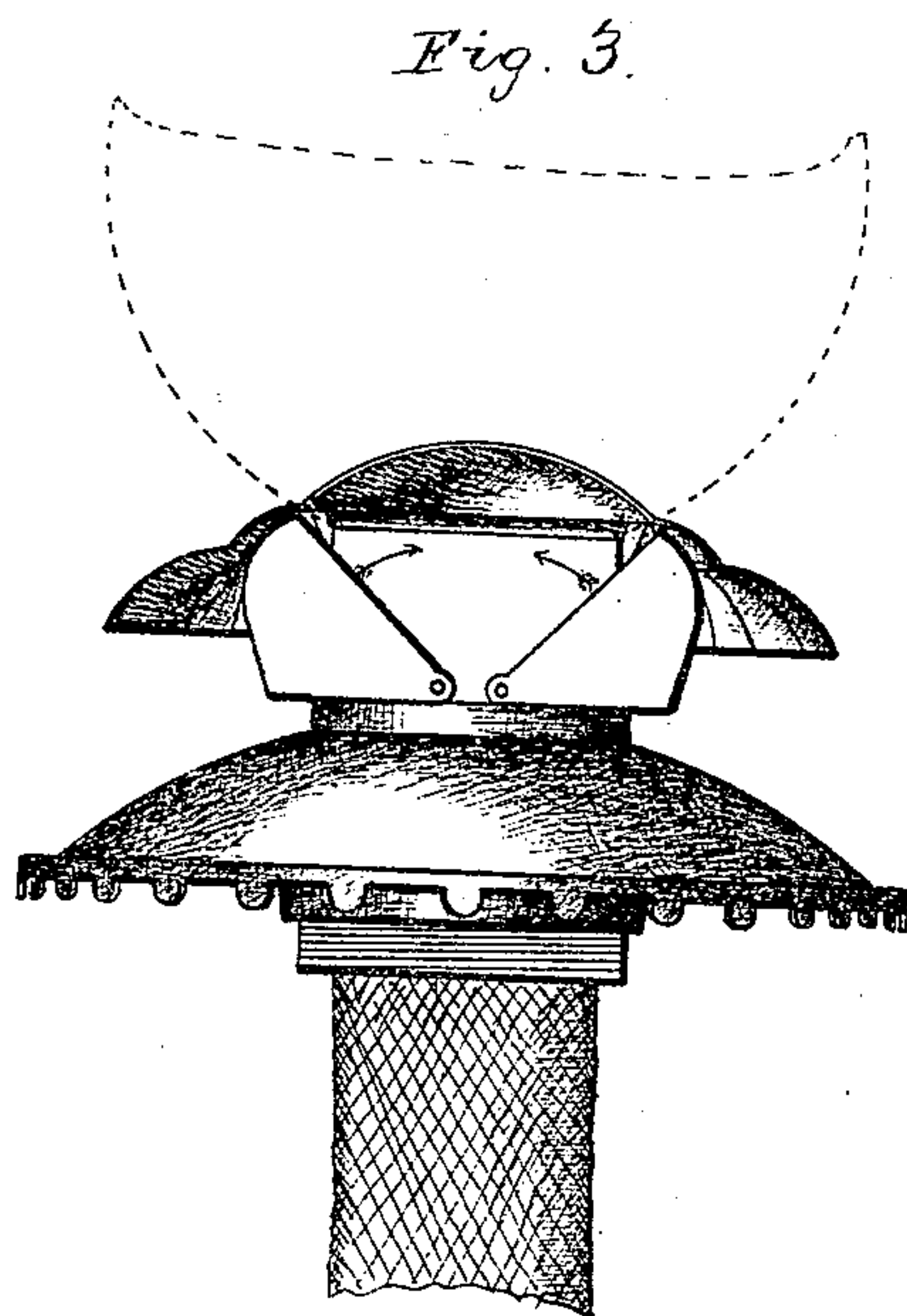
Inventor
Frank Rhind
per
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2 Sheets--Sheet 2.

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UNITED STATES PATENT OFFICE.

FRANK RHIND, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. **151,512**, dated June 2, 1874; application filed March 31, 1874.

To all whom it may concern:

Be it known that I, FRANK RHIND, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of my invention relates to an improvement in lamps; and it consists in, first, a combined extinguishing device and flame-spreader, which is so hinged to the ends of the wick-tube that when opened outward it forms a break or check to the current of air that rises up along the ends of the flame, and prevents it from spreading; second, in a ring secured to the upper end of the operating-rod, and the spring by which the extinguisher and spreader is operated; third, in the devices by which the operating-rod is prevented from closing the extinguisher, all of which will be more fully described hereafter.

Figure 1 is a side elevation of my lamp complete. Figs. 2 and 3 are similar views of the burner alone, drawn upon an enlarged scale.

a represents an ordinary lamp, having a hollow base and standard, in which are placed the foot *b* and operating-rod *c*, in the usual manner. Pivoted to the side of the standard, near its base, is the hand-plate *d*, which extends upward to the base of the bowl, and has a notch, *e*, formed in its upper edge. Upon the outer edge of the rod *c*, just at the point where it begins to curve upward, is formed a projection, *g*, which, when the plate *d* is closed inward by the pressure of the hand, catches in the notch *e*, and prevents the operating-rod from moving either up or down. As soon as the pressure of the hand is removed, the spring *i* throws the plate outward again, so as to release the rod, and leave it free to operate. Upon the upper end of the rod *c* is formed a ring, *h*, which fits over the mouth of the bowl, and upon which the lower part of the operating-spring *j* rests. By thus forming a continuous ring for the bearing of the spring, it matters not in which direction

the burner is turned, as the spring will always have a bearing, and the trouble of having to adjust a foot under the spring each time the burner is taken off entirely done away with. Pivoted to the upper end of the wick-tube are two curved wings, *o*, which swing up over the top of the wick, so as to extinguish the flame from the ends of the tube, instead of from the side, as has generally been the custom heretofore. These wings are made sufficiently wide, so that when pressed back from over the top of the wick they strike against the top of the burner, and break the current of air which rises up along the edge of the flame, and prevents it from spreading. By thus forming these wings, and having them, when thrown back, rest upon the top of the burner, an extinguisher and flame-spreader is formed by the same device. Extending outward from the side of each wing is a slotted ear, *n*, in which the upper ends of the spring *j* catch, for the purpose of moving the wings back and forth. This spring, bent in the shape shown, is held in position by two pins or studs secured to the under side of the burner, so that when pressed upward by the ring, the two upper ends are forced apart so as to throw the wings outward.

If so desired, the hand-plate may be stamped from a sheet of spring metal, and fastened rigidly to the base of the standard, and thus do away with the spring *i*.

I am aware that an extinguishing device pivoted to the top of the wick-tube, so as to move over the wick from the edge, is not new, and I disclaim such.

My device not only acts as an extinguisher, but is so formed as to act as a flame-spreader at the same time.

I am also aware that a spring having its end bent so as to project through the standard of the lamp, and catch in a notch in the operating-rod, is old, the same being shown in my own patent, No. 142,730.

This device, in practice, is found to be objectionable in several respects, which objections are entirely overcome by my present arrangement of parts, and which is intended as an improvement on my said patent.

Having thus described my invention, I claim—

1. A combined lamp-extinguisher and flame-spreader, formed of two pivoted wings that move up over the flame from the ends, and which, when thrown back, exclude the currents of air which rise upward at the ends of the wick, and cause the flame to spread, substantially as set forth.

2. The combination of the spring *j*, bent as shown, and secured to the under side of the burner, with the slotted pivoted wings *o*, the wings being made to open backward when an upward pressure is applied to the under side of the spring, substantially as set forth.

3. The combination of the hand-plate *d*, hav-

ing a notch formed in its upper end, with the operating-rod *c g*, substantially as shown.

4. The combination of the rod *C*, having the ring *h* secured to its upper end, with the bent spring *j* and hinged and slotted extinguisher *o*, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of March, 1874.

FRANK RHIND.

Witnesses:

JACOB BRENNER,
BENJN. F. SMITH.