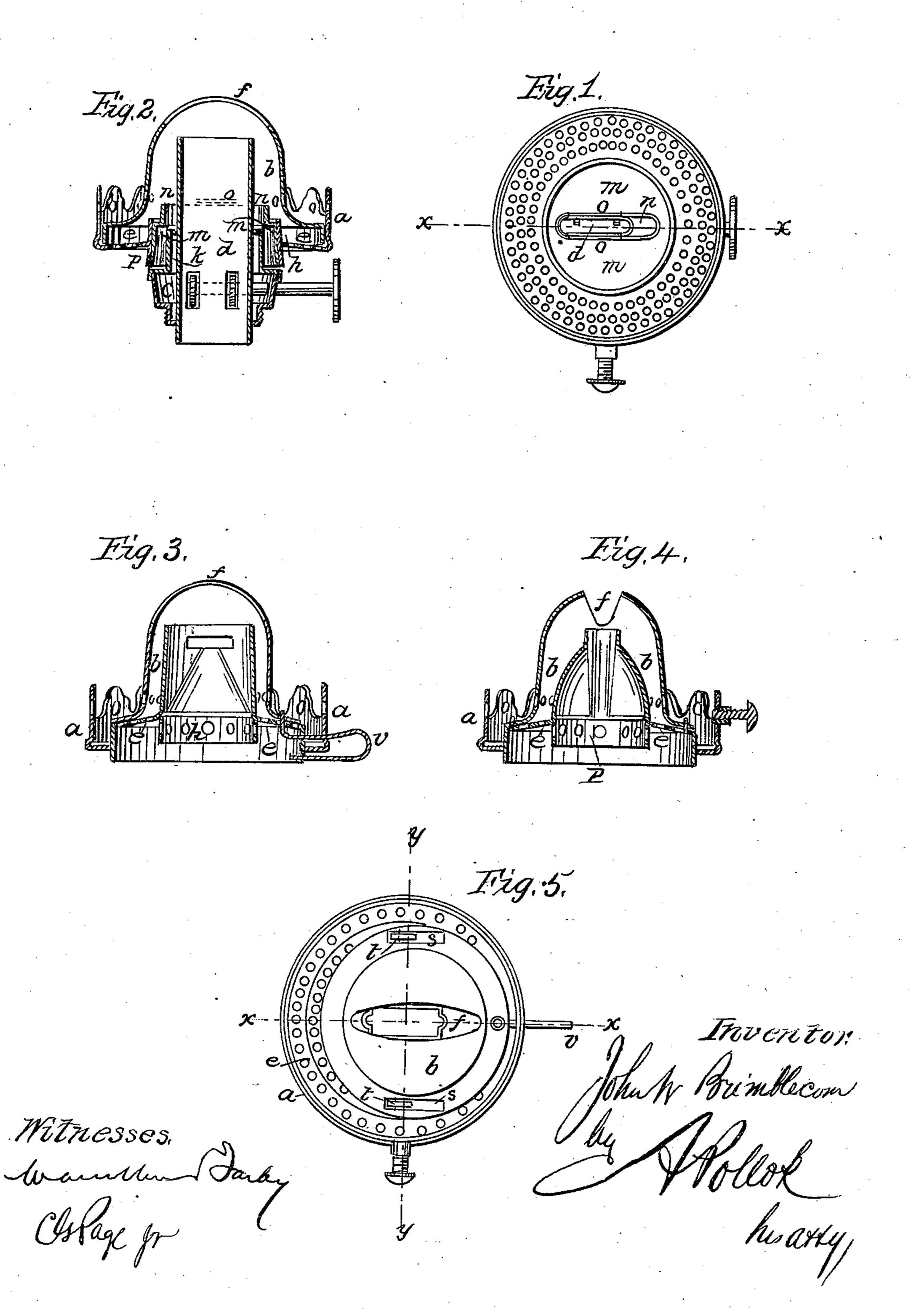
### J. W. BRIMBLECOM.

Lamp Burner.

No 76.592.

Patented April 14, 1868.



# Anited States Patent Pffice.

## JOHN W. BRIMBLECOM, OF LYNN, ASSIGNOR TO WILLIAM CARLETON, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 76,592, dated April 14, 1868.

#### IMPROVEMENT IN LAMP-BURNERS.

The Schedule referred to in these Petters Patent and making part of the same.

### TO WHOM IT MAY CONCERN:

Be it known that I, John W. Brimblecom, of Lynn, in the county of Essex, and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Burners; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a top view of a burner made in accordance with my invention, with the deflector removed.

Figure 2 is a section of the same on the line x x, fig. 1.

Figures 3, 4, and 5 represent another method of applying the invention. Fig. 5 is a top view of the burner;

figs. 3 and 4 are sections on the lines x x and y y respectively, in fig. 5.

In the use of lamp-burners, it often happens that the flame from the lighted wick flares, or rises higher on one side than on the other, so that when the body of the flame is raised to the proper height, a portion of it will be elevated to such a degree as to cause the lamp to smoke. This is occasioned usually by the uneven turning of the wick, or the unequal distribution of air to the flame, or by other causes which tend to prevent perfect combustion.

The object I have in view is to obviate this defect, and to this end my invention consists in making the deflector of the burner adjustable with respect to the wick-tube, in the direction of the length of the slot in the said deflector, so that the ends of the slot may be caused to approach or recede from the respective ends of the wick contiguous to them, and thus direct the greater quantity of air to that part of the flame requiring it. In the accompanying drawings I have illustrated the manner in which my invention is or may be carried into effect.

The burner shown in figs. 1 and 2 is one of that class of burners in which the chimney-holder, a, and deflector, b, are removable from the base, c, and wick-tube, d. Over the cap k of the base a second cap, m, is placed, whose base rests on a flange formed by the lower part of the cap k. The top of the cap is slotted at n, so as to fit tightly upon the sides of the wick-tube. The length of the slot, however, is greater than the width of the tube, so that the cap m may have a lateral and sliding play with respect to the tube. Upon the cap, which is held down in the position described by means of shoulders or projections, o, formed on the wick-tube, fits a sleeve, p, which carries the chimney-holder, deflector, and perforated air-distributer plate e. The slot f in the deflector is of course located above the wick-tube in the usual manner. By sliding the cap m to one side or the other, it will be seen that the deflector will be moved in like manner, one end of the slot f being brought nearer the wick-tube, and the other, of course, removed a corresponding distance from the tube. Thus the distance between either end of the slot and the adjoining or contiguous end of the wick in the tube may be increased or diminished, so as to enlarge or contract the passage between the two, and consequently increase or diminish the quantity of air passing up through that part of the slot.

If, therefore, the wick be unevenly trimmed, or if other causes, as above mentioned, intervene to prevent equal combustion—this being indicated by the smoke given out from the flame—the deflector, by means of the cap m, is moved to the right or left, as occasion requires, so as to enlarge the opening between the part from which the smoke arises and the adjoining end of the slot f, and thus increase the quantity of air or oxygen supplied to that part. By this means the flame can be made perfectly even, and all flaring and smoking prevented.

In the burner represented in figs. 3, 4, and 5, the deflector alone is adjustable with respect to the wick-

tube, the chimney-rest and all other parts remaining stationary.

The base of the deflector rests on the air-distributing plate, and has formed in it, on each side of the dome, a slot, s, parallel with the wick-tube and general direction of the slot f in the dome. When the deflector rests upon the air-distributer plate, with its slot f in proper position above the wick-tube, the slots f in the stude or projections f, which serve to hold the deflector in position, at the same time allowing a lateral movement, (similar to that which it has in the burner shown in fig. 1,) limited by the length of the slots f. The lateral movement of the deflector is in this instance effected by means of a handle, f, attached to the deflector, and

passing out from the burner. By drawing out the handle, or pressing it in, the deflector can be adjusted so that the slot f will occupy the required position with respect to the wick-tube.

Numerous other modes of effecting the adjustment of the deflector will readily suggest themselves to those skilled in the art to which this invention pertains, and I do not wish to be understood as limiting myself to those which I have above described, in order to illustrate the principle of my invention; but

What I claim, and desire to secure by Letters Patent, is-

A lamp-burner, in which the deflector is capable of being adjusted, with respect to the wick-tube, laterally, or in the direction of the length of the slot in the said deflector, substantially as and for the purposes herein shown and described.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

JOHN W. BRIMBLECOM.

#### Witnesses:

CHARLES E. ABBOTT, CHAS. K. BRADFORD.