

J. B. VAN PATTEN.  
Gas Illuminators.

No. 136,565.

Patented March 4, 1873.

Fig. 1.

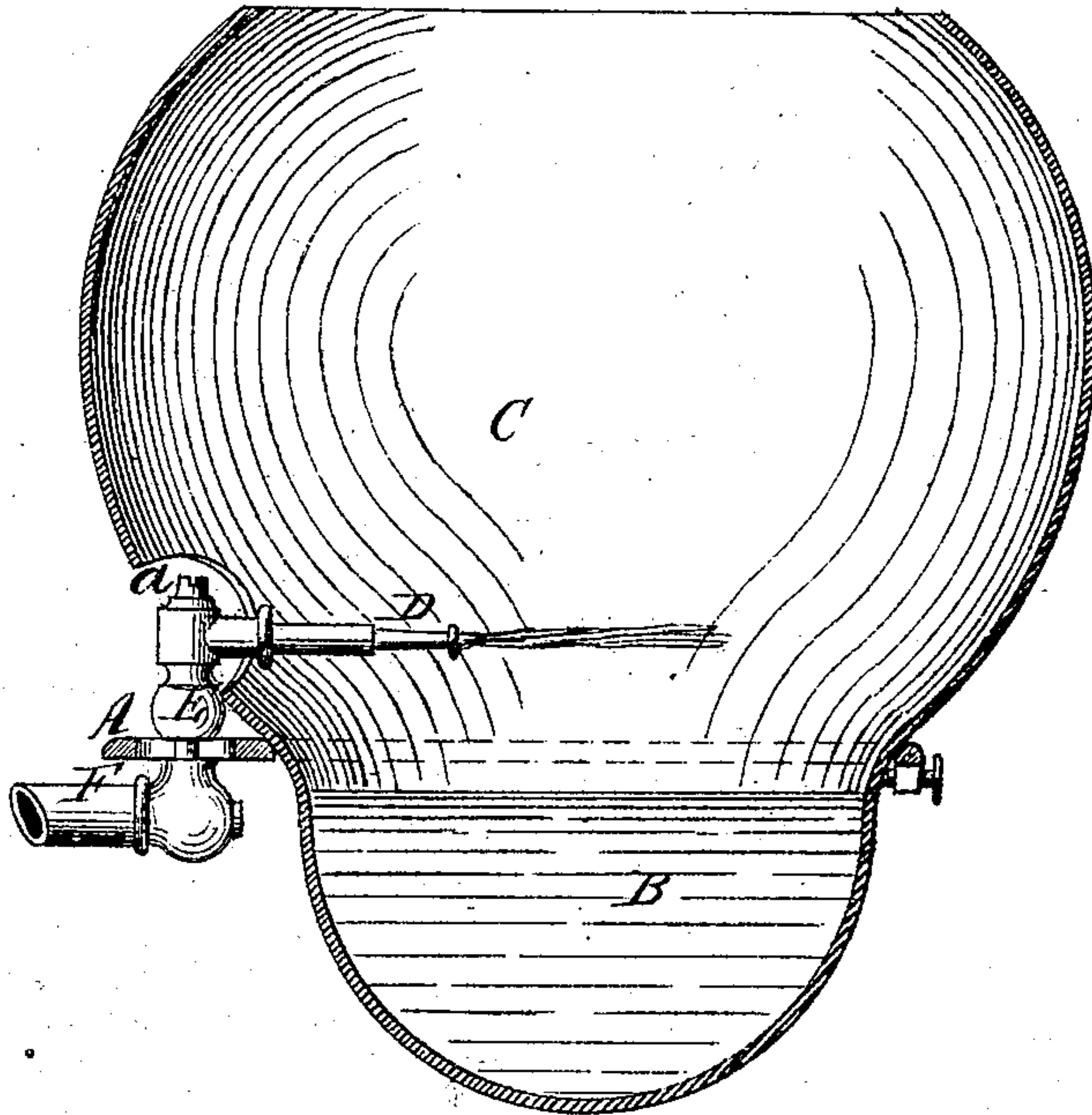
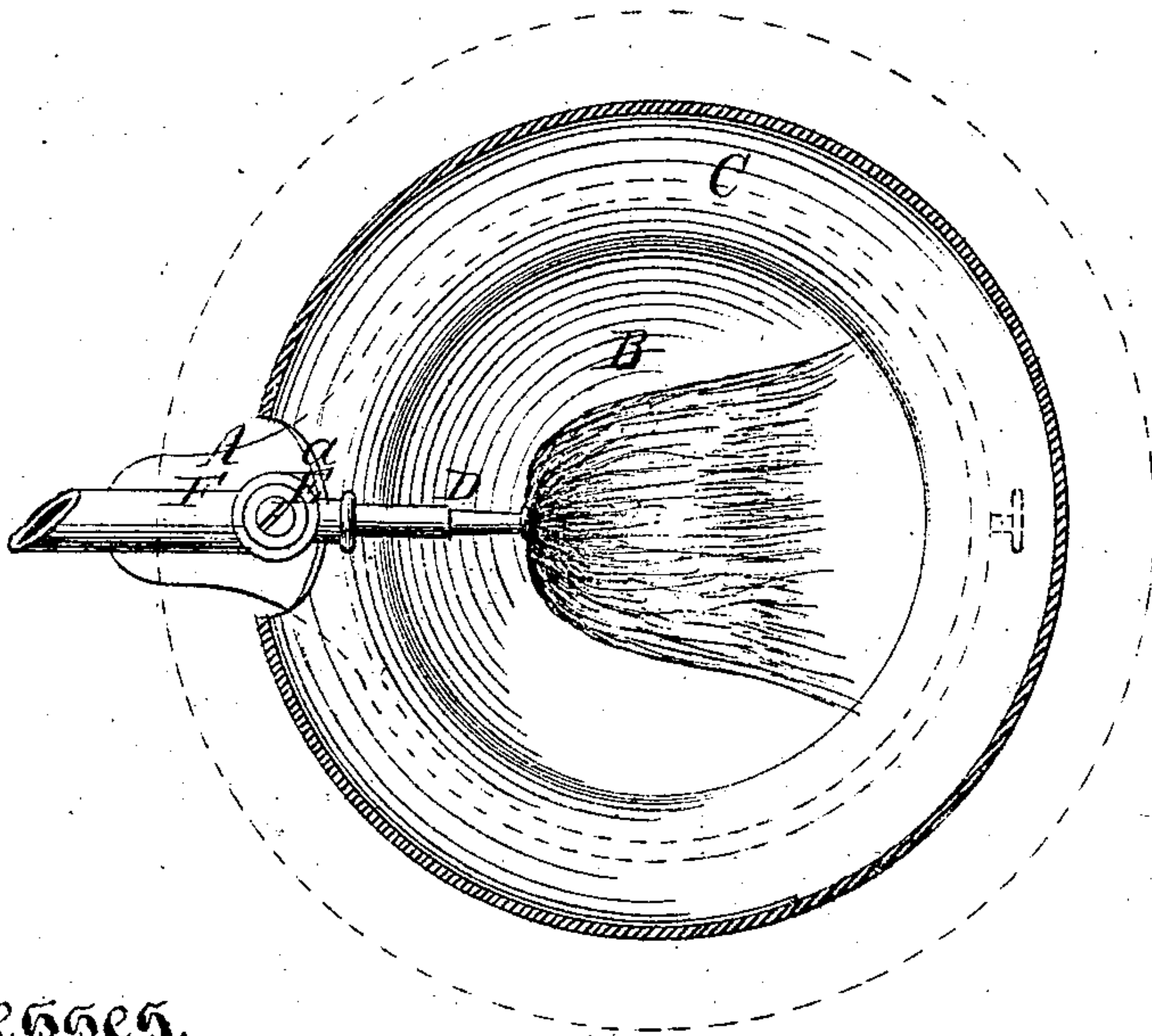


Fig. 2.



Witnesses.  
C. Wahlen,  
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# UNITED STATES PATENT OFFICE.

JOHN B. VAN PATTEN, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN GAS-ILLUMINATORS.

Specification forming part of Letters Patent No. 136,565, dated March 4, 1873.

*To all whom it may concern:*

Be it known that I, JOHN B. VAN PATTEN, of the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Gas-Illuminators; and I do hereby declare the following to be a full, clear, and exact description, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a vertical central section of this invention. Fig. 2 is a horizontal section of the same.

Similar letters indicate corresponding parts.

This invention consists in forming a hemispherical cup for containing water or other liquid with a globular extension, said globular extension being provided with an opening in the side thereof to admit a gas-burner, which is extended horizontally over the said cup within the globe, in such a manner that the said globe forms a guard or shield for the gas-flame, and prevents the flickering which takes place when the flame is left uncovered and exposed to the direct action of currents of air.

In the drawing, the letter A designates an annular bracket or frame, which forms a support for my combined cup and globe B C, which two are formed in one piece. The cup part B is intended to be filled with water or other liquid, as seen in Fig. 1, so that when a gas-flame is placed over it the rays of the flame will pass through the liquid contained in said cup and diverge in issuing from the bottom of the same. From the cup part B rises the globular extension C, being formed

in one and the same piece with the cup, and being provided with an opening, *a*, in the side thereof to admit a gas-burner, D, which is connected by suitable intermediate joints E with a gas-pipe, F, for feeding the flame.

In gas-illuminators in which the flame is projected over a hemispherical cup without a shield or globular extension, it has been found that the flame is caused to flicker or waver by reason of the gas-flame being exposed to the currents of air, which have the effect to diminish or deteriorate its illuminating powers; whereas by my invention the flame is provided with a guard or shield, and is fully and perfectly protected from the currents of air, and the tendency to flicker is prevented to a great degree.

I am aware that gas-illuminators have been made in which the gas-burner is placed entirely uncovered over a hemispherical cup containing water, and I do not claim this as my invention; but

What I do claim as new, and desire to secure by Letters Patent, is—

The combined shield and liquid-cup B C, formed in one piece, with an intermediate and horizontal shoulder for bearing on a horizontal bracket or frame, A, and an opening, *a*, for the passage of a horizontal burner, D, so as to project the flame over the liquid in the cup C, substantially as and for the purpose specified.

JOHN B. VAN PATTEN.

Witnesses:

EDWARD TAYLOR,  
WILLIAM W. LYTLE.