S. P. KASE.
Reflector.

No. 208,607. Patented Oct. 1, 1878.

Fig. 1.

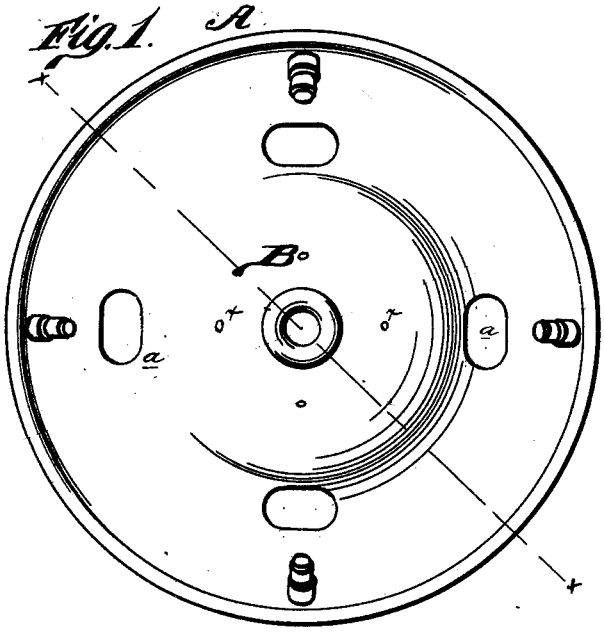
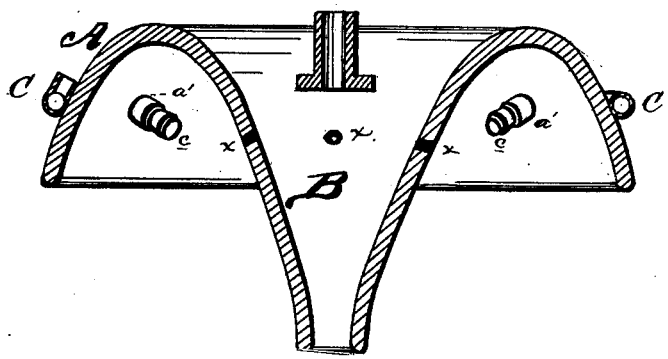



Fig. 2.

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# UNITED STATES PATENT OFFICE.

SIMON P. KASE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN REFLECTORS.

Specification forming part of Letters Patent No. **208,607**, dated October 1, 1878; application filed July 14, 1877.

*To all whom it may concern:*

Be it known that I, SIMON P. KASE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Reflectors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my reflector, and Fig. 2 is a central vertical sectional view of the same.

The nature of my invention consists in a reflector made of cast-iron or other metal, having its reflecting-surface enameled or coated with porcelain, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

In the drawings I have shown a reflector, A, made in the form of an inverted bowl, and provided with a conical center-piece, B, the exterior surface of which forms a part of the reflector.

The entire reflector A B is made of cast-iron, but it may be made of any kind of metal; and its reflecting-surface is enameled or coated with porcelain composition, said composition having a larger proportion of ground glass or frit than is usually employed in porcelain to increase its reflecting properties.

The bowl A is perforated with chimney or draft holes *a*, and also with apertures to receive the gas-burners at *a'*. These are arranged at intervals to suit the purpose, equal numbers of each being provided.

C represents the gas pipe or reservoir, and it surrounds the bowl A, the jets or burners *c* passing through the perforations *a'*.

Upon the portion B the sides are perforated opposite the gas-jets, where the flame would heat the enamel, at *x*, to allow for uneven contraction and expansion, and prevent cracking or breaking of the porcelain material. This composition may be similar to that used in lining cast-iron hollow ware, but has a larger proportion of pulverized glass.

The reflector may be made of any size—oblong, round, flat, or in any desired shape—and has the burners *c c* so arranged as to stand with the broad side of the flame facing the surface of the reflector. The enamel or porcelain coating may be made white or colored, as desired.

Reflectors of this construction are cheap to manufacture, and may be used in any place where an increase of light is desirable without increasing the number of burners used. They will reflect and disseminate the light sufficiently to dispense with one-half the burners commonly used.

I am aware that it is not new to perforate a reflector to receive a gas-jet or to furnish chimney-outlets for the same.

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

1. As a new article of manufacture, a reflector made of cast-iron or other metal, and enameled or coated with porcelain, substantially as and for the purposes herein set forth.

2. The reflector A B, of cast metal, coated with a porcelain composition having a predominant proportion of ground glass or frit, provided with draft-holes *a* and orifices *x*, and perforated at *a'* to receive the burners, in combination with the pipes C, surrounding the bowl A, and with the series of jets *c*, adapted and arranged to serve as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SIMON P. KASE.

Witnesses:

JNO. A. GLENN,

THEOPHILUS N. CORBYN.