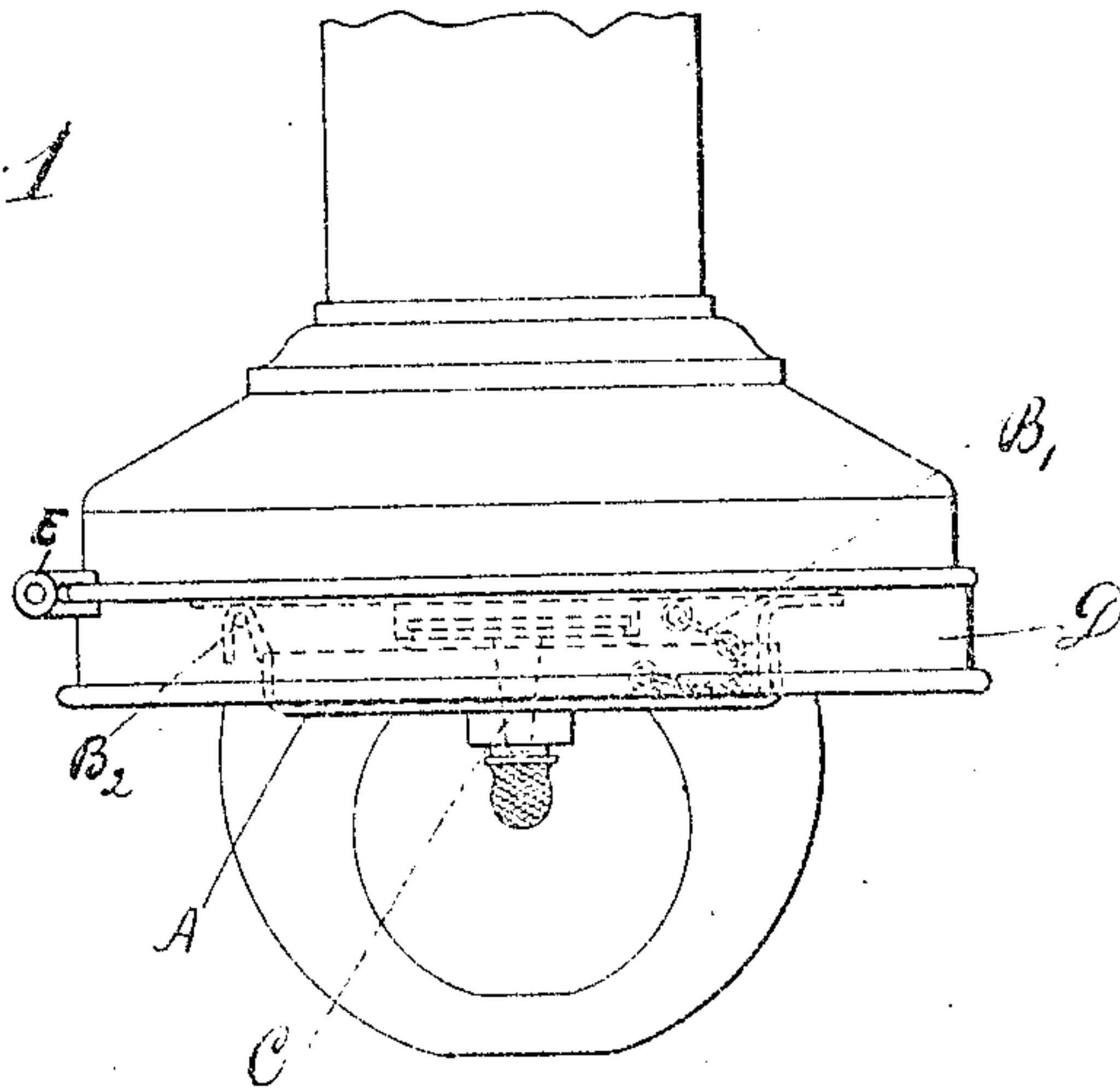


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 APPLICATION FILED AUG. 6, 1908.

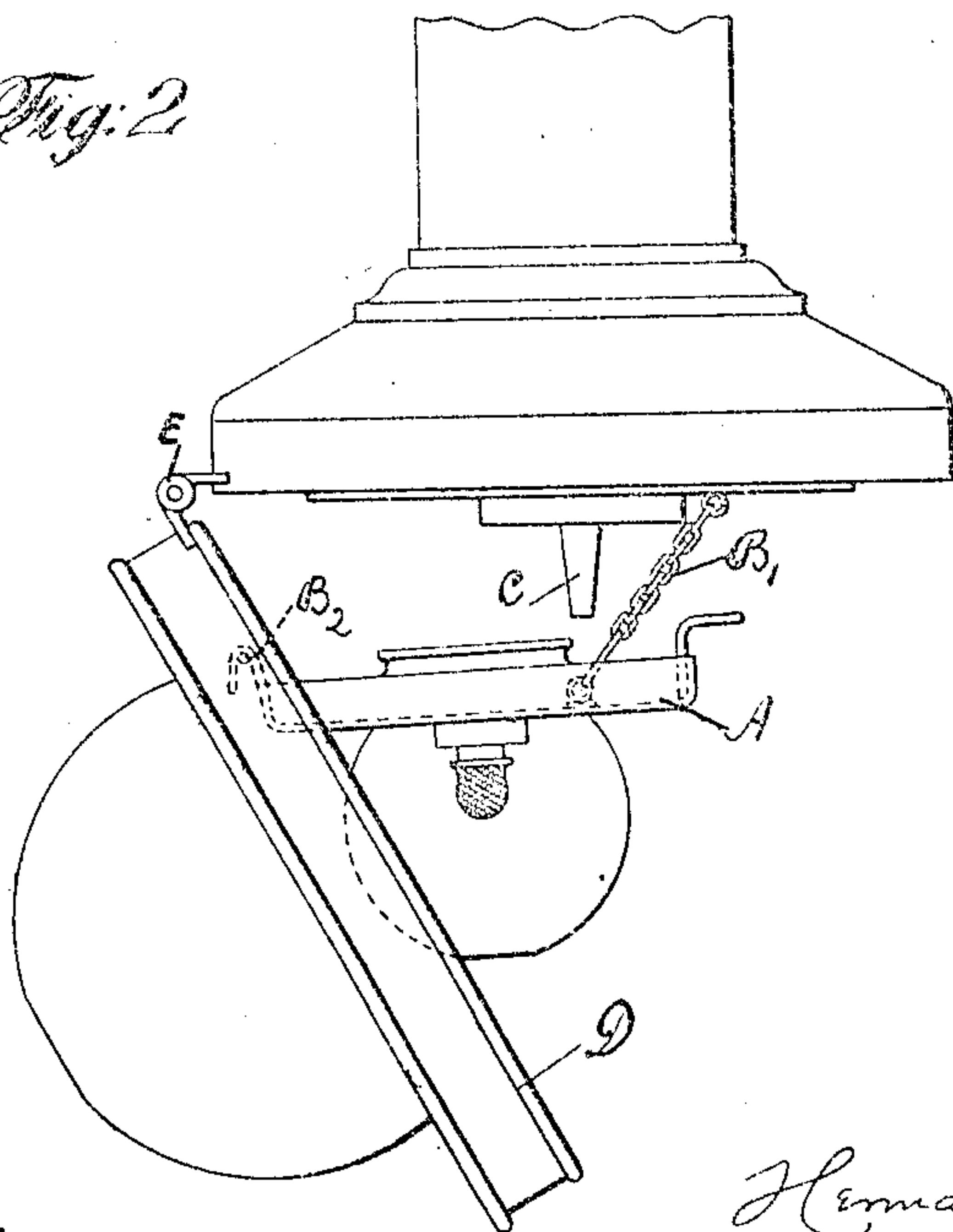
927,770.

Patented July 13, 1909

*Fig. 1*



*Fig. 2*



Witnesses:  
*Rud. Fiegler*  
*Annie J. Swine*

*Hermann Blau* Inventor

By his Attorney *Louis Hicks*

# UNITED STATES PATENT OFFICE.

HERMANN BLAU, OF AUGSBURG, GERMANY.

## INCANDESCENT GAS-LAMP.

No. 927,770.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed August 6, 1908. Serial No. 447,279.

*To all whom it may concern:*

Be it known that I, HERMANN BLAU, citizen of Germany, residing at Augsburg, Bavaria, Germany, have invented certain new and useful Improvements in Incandescent Gas-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 is appertains to make and use the same.

This invention relates to incandescent gas-lamps and has for its object the construction of such lamps in a manner that will prevent explosions therein and the other advantages hereinafter pointed out.

In the accompanying drawings forming part of this specification, Figure 1 is an elevation of an incandescent gas-lamp made in accordance with this invention showing the parts thereof when closed and in normal position; Fig. 2 is an elevation of the same lamp showing the parts thereof when opened to permit ignition of the Bunsen flame.

In the case of incandescent gas lamps of large dimensions, such as are used for lighting railway carriages, in which the incandescent body is mounted on or in the reflector, the latter being arranged within the outer glass bell cover or shade of the lamp and removable with the same, it frequently happens that when the lamp is closed after lighting the Bunsen flame an explosion occurs which may injure the mantle or glass shade of the lamp. This explosion is caused by the gas which collects in the space inclosed by the reflector and the outer bell cover when the gas tap is turned on before letting down said outer cover with the reflector. After letting down the outer cover with the reflector and then lighting the Bunsen flame, the outer bell glass together with the reflector is swung back into place, and it is then that the mixture of gas and air contained within said bell cover is ignited and causes an explosion.

The present invention prevents such an explosion by the arrangement that the reflector is automatically moved out of the outer bell cover when the latter is let down and again automatically moved into its place when the bell cover is swung back into position; in this way the interior of the bell cover is thoroughly ventilated and any gas which has collected there is removed.

In the form of construction here illustrated in Figs. 1 and 2 of the drawings, the reflector

(A) is on the one side hinged to the bell cover (D) at (B<sub>2</sub>) and is held on the other side by a short chain (B<sub>1</sub>), when the bell cover is let down; normally, however, when the bell cover is in place, the reflector rests within the mouth of this bell cover, being supported in any suitable manner, as by hooks attached to the reflector and resting upon pins secured to the bell cover, as illustrated at (B<sub>2</sub>). On one side of the reflector, the support therefor, consisting, as shown, of a hook and pin, should, as stated, form a hinge, as at (B<sub>2</sub>). The hook shown on the opposite side of the reflector may rest on a like pin, but does not form a hinge with the pin. The chain (B<sub>1</sub>) is of such length that when the bell cover is let down the reflector will remain suspended half way between the burner and the outer bell cover (D). The latter is hinged at (E) to the body of the lamp containing the burner (C).

The chain (B<sub>1</sub>) acts to withdraw the reflector from the cover, when the cover is let down, and the chain aids in supporting the reflector while the cover is down, as shown in Fig. 2. The chain, being flexible or collapsible, does not interfere with the return of the reflector to its normal position, as shown in Fig. 1, when the cover, after being let down, is swung back into its normal position, carrying the reflector with it.

The action of this device is as follows: When the bell cover (D), containing the reflector (A), is let down, the latter will first take part in the movement of the former until the Bunsen burner becomes accessible, and will then, by means of the chain (B<sub>1</sub>), be moved out of said bell cover, thereby allowing the gas therein collected to escape. When the bell cover is swung back the reflector will again take up its former position in the bell cover. In this way a thorough ventilation of the interior space of the bell cover is attained, and an explosion therefore becomes impossible.

What I claim as my invention and desire to secure by Letters Patent, is:

1. In an incandescent gas-lamp, the combination of a part provided with a burner, a cover for said part, a reflector, a hinge connecting the reflector with the cover and means for withdrawing the reflector from the cover during the opening movement of the cover, substantially as described.

2. In an incandescent gas-lamp, the combination of a part provided with a burner,



a cover for said part, a hinge connecting the cover with said part, a reflector, a hinge connecting the reflector with the cover and means for withdrawing the reflector from the cover during the opening movement of the cover, substantially as described.

3. In an incandescent gas-lamp, the combination of a part provided with a burner, a cover for said part, a hinge connecting said cover with said part, a reflector provided with an incandescent body, a hinge connecting the reflector with the cover and a support connecting the reflector with the part provided with the burner, said support being flexible and of such length that when the cover is let down the reflector will be moved out of the cover, substantially as described.

4. In an incandescent gas-lamp, the combination of a part provided with a burner, a cover for said part, a hinge connecting the cover with said part, a reflector carried by said cover and movable therewith, a hinge connecting the reflector with the cover and a support connecting the reflector with the part provided with the burner, said support being flexible and of such length that when the cover is let down the reflector will be moved out of the cover, substantially as described.

5. In an incandescent gas-lamp, the com-

bination of a cover and a reflector inclosing a space between them, a hinge connecting the reflector with the cover and means to withdraw the reflector from the cover when the cover is withdrawn from the gas-lamp, substantially as described.

6. In an incandescent gas-lamp, the combination of a cover and a reflector inclosing a space between them, a hinge upon which the cover can turn, a hinge connecting the reflector with the cover and means to withdraw the reflector from the cover when the cover during its opening movement is turned upon its hinge, substantially as described.

7. In an incandescent gas-lamp, the combination of a part provided with a burner, a cover and a reflector inclosing a space between them, a hinge upon which the cover can turn, a reflector carried by the cover and movable therewith, a hinge connecting the reflector with the cover and means to withdraw the reflector from the cover when the cover during its opening movement is turned upon its hinge, substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

HERMANN BAU.

Witnesses:

MATHILDE K. HELLER,  
LOUIS MUELLER.