

No. 725,310.

PATENTED APR. 14, 1903.

W. F. YOUNG.
GAS LIGHT HEATER.
APPLICATION FILED DEC. 23, 1902.

NO MODEL.

Fig. 1.

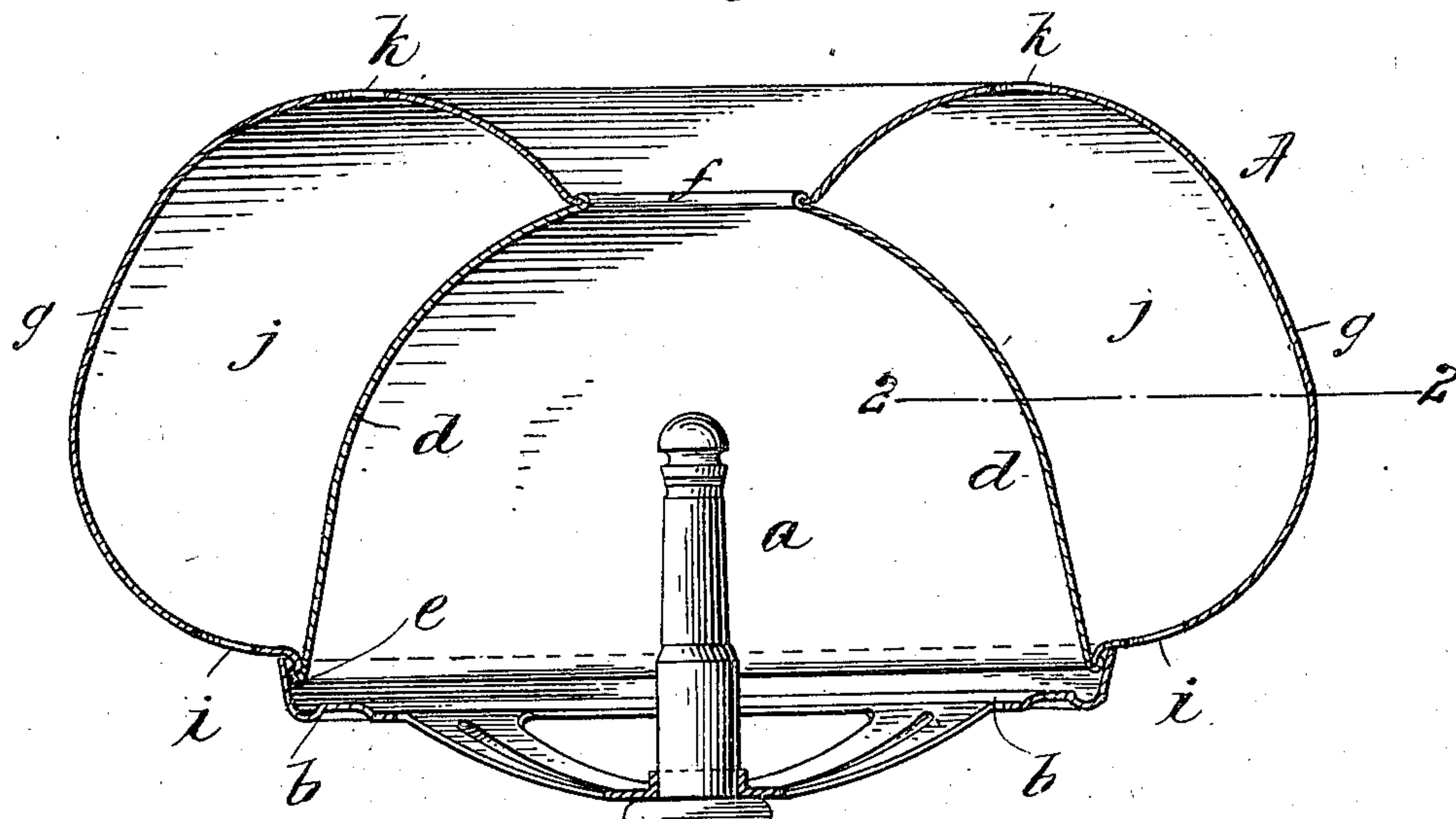
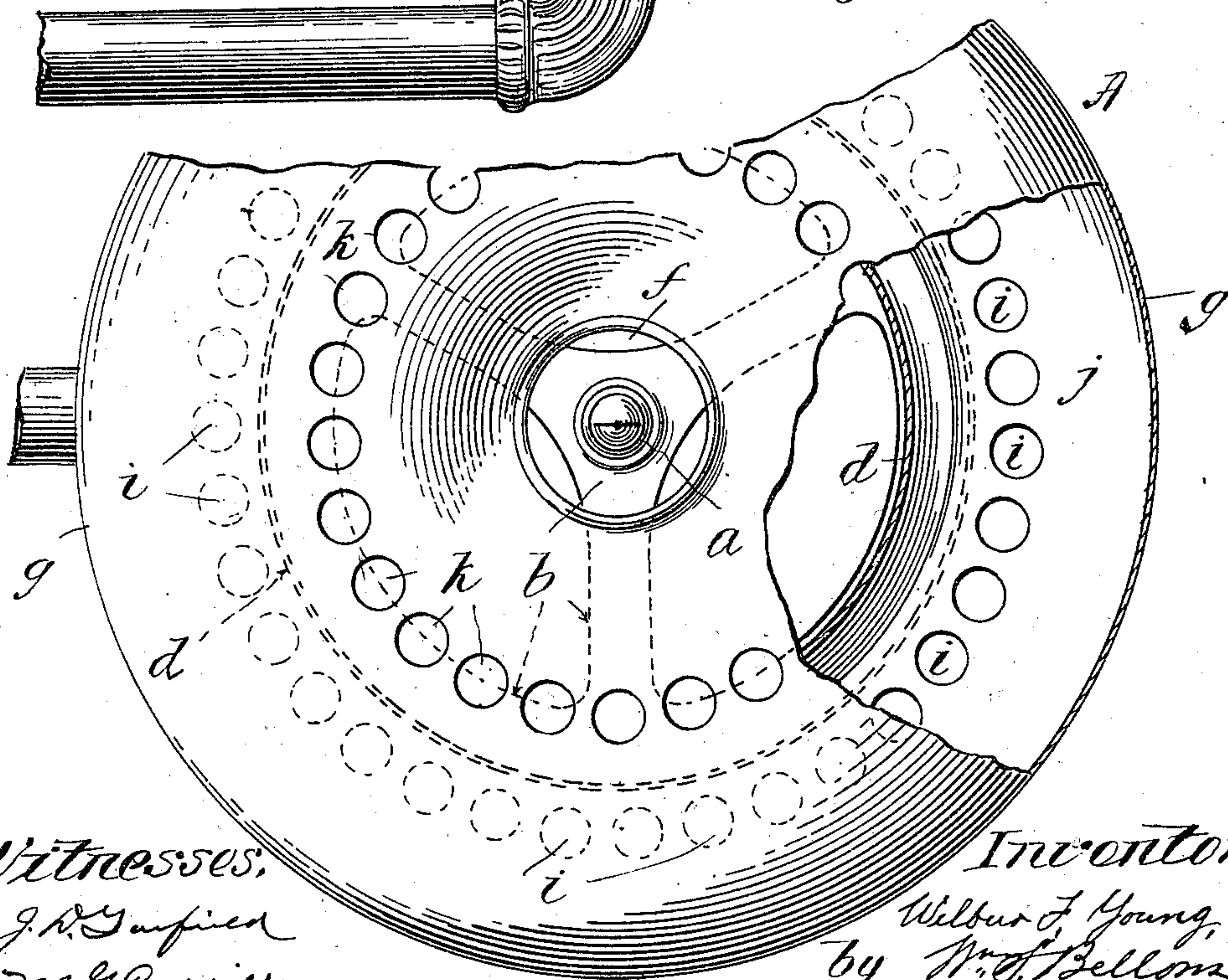


Fig. 2.



Witnesses:
J. R. Gifford
M. S. Crozier.

Inventor
Wilbur F. Young,
by W. C. Bellom,
Attorney.

UNITED STATES PATENT OFFICE.

WILBUR F. YOUNG, OF SPRINGFIELD, MASSACHUSETTS.

GAS-LIGHT HEATER.

SPECIFICATION forming part of Letters Patent No. 725,310, dated April 14, 1903.

Application filed December 23, 1902. Serial No. 136,354. (No model.)

To all whom it may concern:

Be it known that I, WILBUR F. YOUNG, a citizen of the United States of America, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Gas-Light Heaters, of which the following is a full, clear, and exact description.

The object of this improved gas-light heater is to provide an appliance of simple and cheap construction which may be employed in conjunction with an ordinary gas-burner and in the place of and supported in the same manner as the ordinary glass globe, which without impairing the capabilities for illumination utilizes the products of combustion of the gas-light for heating the air in a material degree and yet the heating of the air being performed in a manner which does not vitiate the air by consuming the oxygen therein; and the invention consists in the appliance to constitute the combined burner-globe and heater which is hereinafter described, and set forth in the claims.

In the drawings, Figure 1 is a central vertical sectional view of the combined globe and heater, shown as supported in its coöperative relation to an ordinary gas-burner. Fig. 2 is substantially a plan view of the same, portions being broken out in horizontal section.

Similar characters of reference indicate the corresponding parts in both of the views.

In the drawings, A represents an ordinary gas-burner tip which is surrounded by the therewith-connected usual circular skeleton frame *b* for supporting the globe. In the present instance the globe A is composed of thin sheet metal comprising an inner wall *d*, of inverted-dome shape, having circular bottom openings *e* and having circular central top opening *f* of less diameter than the bottom opening, such globe, furthermore, comprising the outer annular wall *g*, which is of considerably larger diameter than the inner wall, the upper and lower portions of which are inwardly merged to and have connection by any suitable seam or joint with the inner wall *d* and all whereby the jacketed space or annular chamber *j* is produced, the same being entirely inclosed, except in so far as there are the series of lower air-inlet open-

ings *i* at the bottom and another series of air-outlet openings *k* at the top. The whole appliance, as described, made of thin light sheet metal, may be spun or struck up practicably and may rest in the same manner as the glass globes usually rest upon the skeleton circular frame *e*, which surrounds the burner. The cool air entering at the bottom becomes heated within the annular chamber *j* and emerges at the top *k* without coming into intimate and destructive connection with the gas-light flame, and the heated air emerging at the top of the device somewhat above the flame will be further heated by the heat from the burner-flame, which latter, however, is far enough removed from the upwardly-issuing heated air from the chamber *j* to be non-consuming of the oxygen. The inner surface of the inner dome-shaped wall will serve as a reflector for downwardly directing the light, such inner surface being, as desired, of polished metal, or it may be painted white, black, or any neutral or other color.

I am aware that various apparatuses have been proposed and constructed for application in connection with a gas-light burner in which the air may be heated by being brought within the range of the gas-light flame, and it is not, of course, my intention to claim anything which would extend to cover any of these appliances; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A combined gas-light globe, and air-heater consisting of a metallic casing having an inner wall of dome shape with large central bottom opening and smaller top central opening, and having an outer surrounding annular wall, the upper and lower portions of which are inwardly extended and merged into, and joined to, said inner wall, creating the inclosed annular air-heating chamber *j*, and said casing having a series of openings through its bottom outside of said bottom central opening, and openings *k* through its top outside of said top central opening, substantially as and for the purpose set forth.

2. The combination with a gas-light burner and the circular surrounding skeleton globe-supporting frame, of a metallic casing removably resting on said skeleton frame, which

metallic casing has an inner wall of dome shape with large central bottom opening and smaller top opening, and having an outer separated and surrounding annular wall, the upper and lower portions of which are merged into, and joined to, said inner wall, creating the inclosed annular or heating chamber *j*, and having a series of openings *i* through its bottom outside of said bottom central open-

ing, and top openings *k*, through its top outside of said top central opening, substantially as described.

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

WILBUR F. YOUNG.

Witnesses:

WM. S. BELLOWS,

A. V. LEAHY.