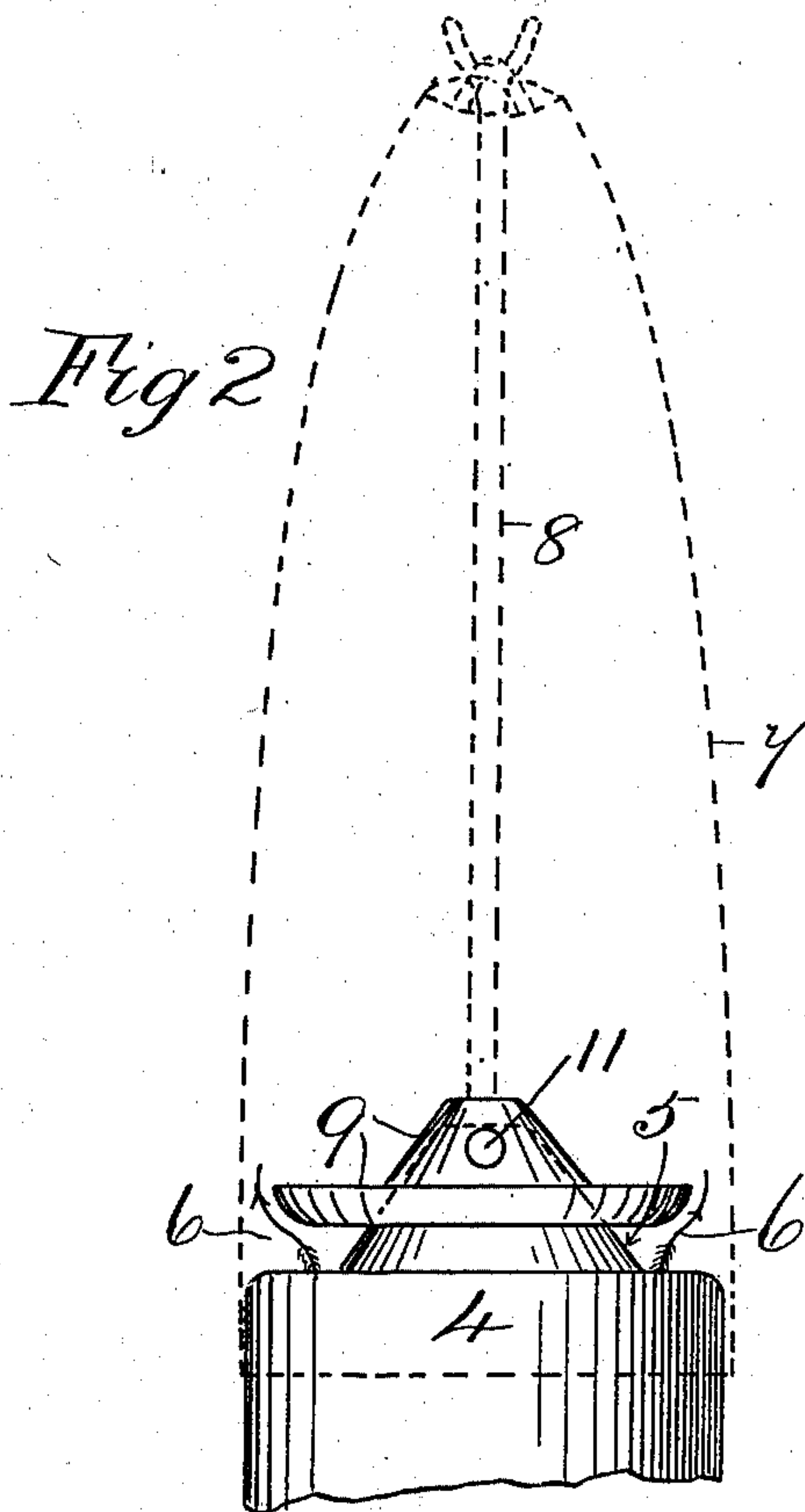
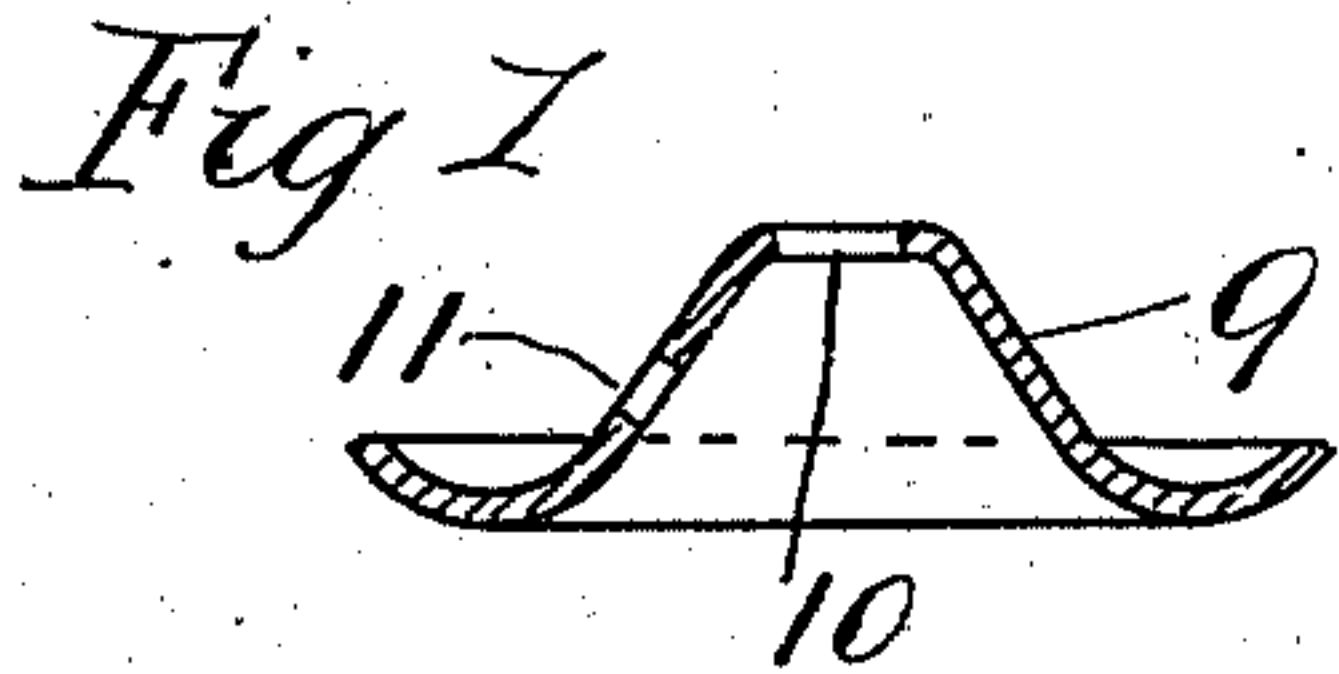


No. 749,553.

PATENTED JAN. 12, 1904.

G. GRICE & H. DEWEY.
INCANDESCENT GAS BURNER.
APPLICATION FILED AUG. 31, 1903.

NO MODEL.



Witnesses.

E. Hayward Powell.
J. Vernon Fellows.

Inventors
George Grice
Harry Dewey
per Charles J. Powell
their Attorney

UNITED STATES PATENT OFFICE.

GEORGE GRICE AND HARRY DEWEY, OF BIRMINGHAM, ENGLAND.

INCANDESCENT GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 749,553, dated January 12, 1904.

Application filed August 31, 1903. Serial No. 171,452. (No model.)

To all whom it may concern:

Be it known that we, GEORGE GRICE, a resident of 63 Jamaica Row, and HARRY DEWEY, a resident of 9 Bromsgrove street, Birmingham, England, subjects of the King of Great Britain, have invented new and useful Improvements in Incandescent Gas-Burners, of which the following is a specification.

Our invention relates to improvements in incandescent gas-burners; and its object is to provide improved means for intensifying the illumination of the mantles for such burners.

It is frequently found in incandescent-mantle burners that the flame renders luminous only a part of the mantle, generally near the top, and in other cases only on one side; and the object of this our invention is to overcome this objection by a very simple contrivance. We effect this by the means illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of the contrivance which forms our invention and which is to be applied to the ordinary burner. Fig. 2 shows its application to such a burner.

Only such parts of the burner are shown which are necessary to show the application of this our invention, in which 4 represents the upper part of the burner, which is usually provided with a central cone part 5, between which and the edge of the burner the gas issues in the direction of the arrows 6. The mantle 7 (indicated by dotted line) is carried in the usual manner upon the crutch 8, which rests in the central portion of the burner.

9 is a diffuser, which usually is stamped out of sheet metal, but may be made of any other suitable material and provided with a central hole at 10, through which the crutch 8 may pass after the said diffuser has been

placed upon the upper part of the burner. When a by-pass is used on the burner 4, a hole 11 may be provided in the diffuser to accommodate such.

The precise shape of the diffuser may be modified to suit variation in the shape of the upper part of the burner should it be so required. Thus the gas-flame proceeding from the burner is thrown outward, so as to insure its contact with the lower part of the mantle, from which it necessarily arises up the said mantle.

By these means we provide a ready and simple contrivance which is independent of the burner, which shall insure the flame striking against and rendering luminous the lower part of the mantle ere it reaches the upper part.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination with the burner provided with a central upwardly-projecting cone and a mantle suitably supported upon and about said burner, of an independent and removable diffuser supported upon such burner, said diffuser comprising a conical-shaped piece of sheet metal centrally apertured for the passage therethrough of the burner-support and provided at its lower edge with an annular upturned portion, substantially as and for the purpose described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEORGE GRICE.
HARRY DEWEY.

Witnesses:

C. HAYWARD POWELL,
T. VERNON FELLOWS.