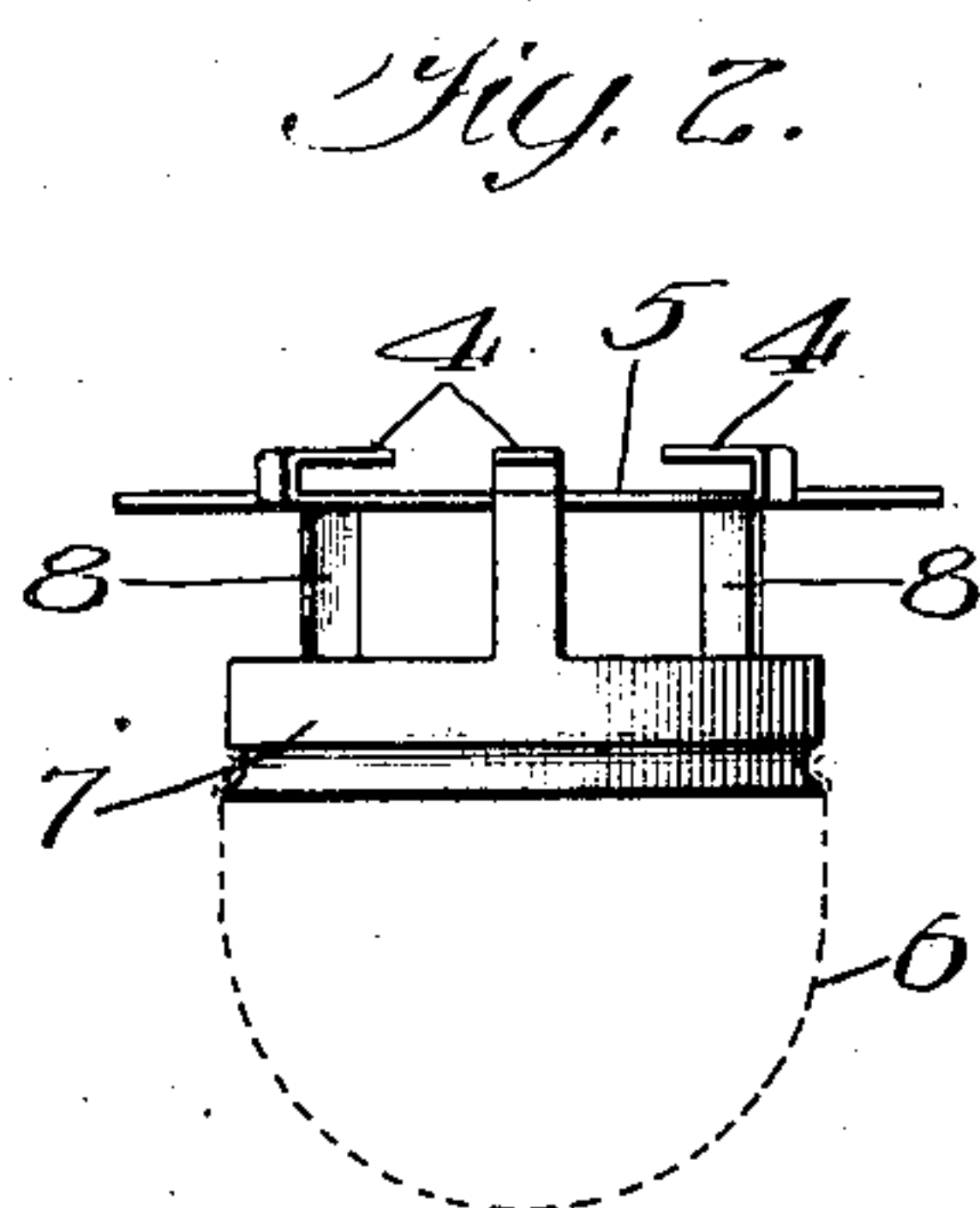
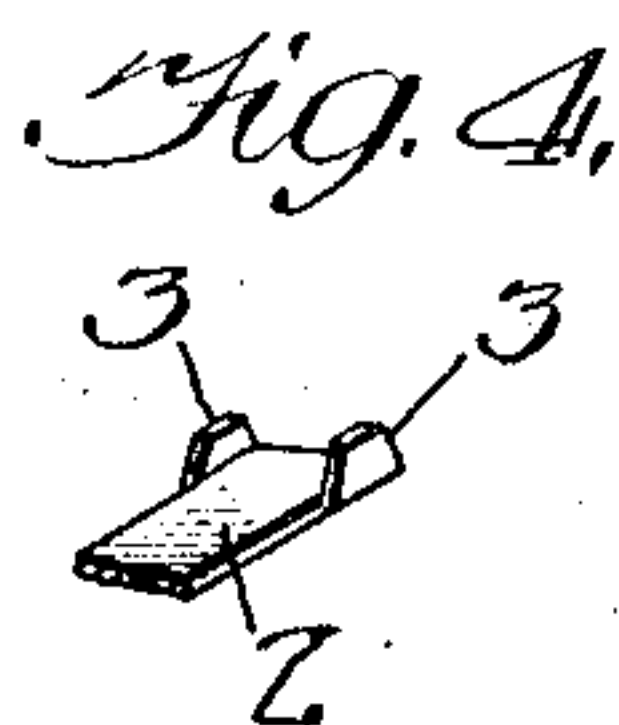
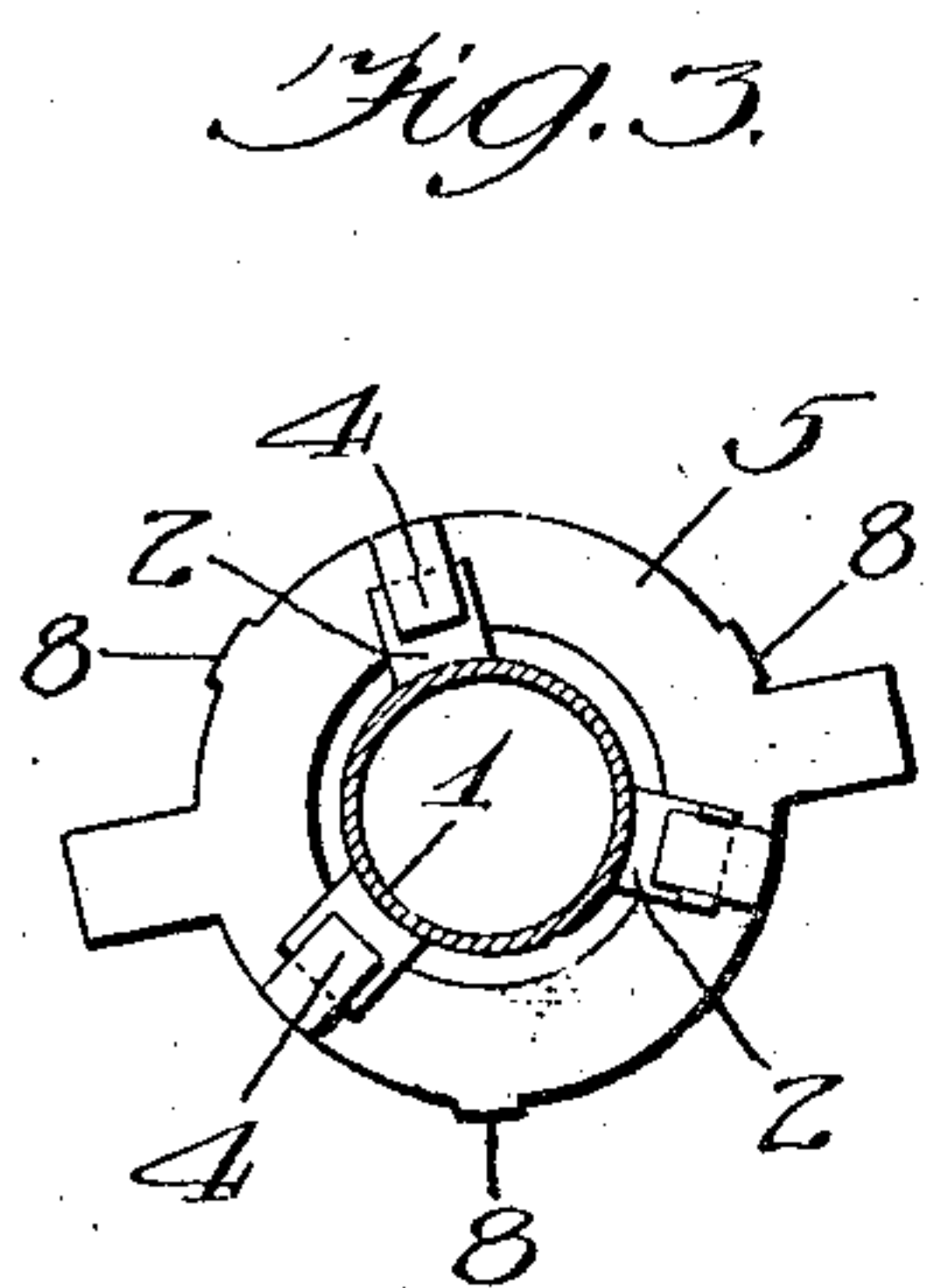
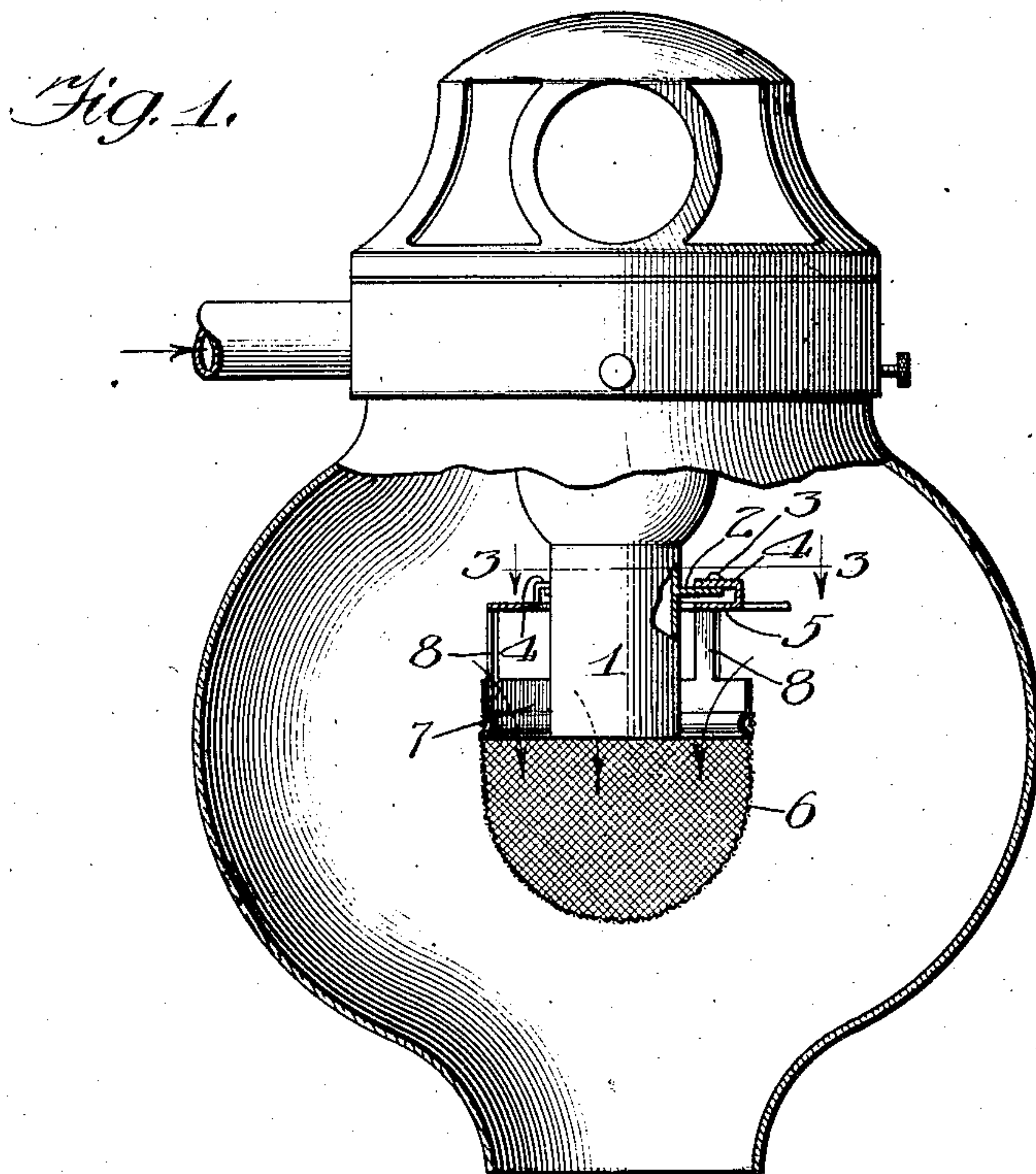


No. 842,975.

PATENTED FEB. 5, 1907.

F. E. REICHARDT.
MANTLE SUPPORT.
APPLICATION FILED APR. 2, 1906.



Witnesses:
G. V. Domarus,
A. C. Bird

Inventor:
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UNITED STATES PATENT OFFICE.

FRIEDRICH E. REICHARDT, OF CHICAGO, ILLINOIS.

MANTLE-SUPPORT.

No. 842,975.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed April 2, 1906. Serial No. 309,565.

To all whom it may concern:

Be it known that I, FRIEDRICH E. REICHARDT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Mantle-Supports, of which the following is a specification.

My invention relates to mantle-caps designed for use in connection with gas-burners to hold the mantle in inverted position.

The object of the invention is to provide a mantle cap or holder which may be readily attached to and detached from a burner-tip and when attached will prevent vertical movement of the cap and accidental dislodging thereof from the burner-tip. This object is attained by the form of device shown in the accompanying drawings, in which—

Figure 1 is a general assembly view, chiefly in central vertical section, showing cap, mantle, burner, and exterior globe. Fig. 2 is a side view of the improved cap or holder. Fig. 3 is a plan sectional view taken on line 3-3, Fig. 1. Fig. 4 is a fragmentary perspective view showing one of the lugs which projects from the burner-tip.

Similar numerals refer to similar parts throughout the several views.

The tip 1 is cylindrical in form and has a number, usually three, lugs 2 projecting horizontally and radially therefrom. At the edges of one or more of these lugs are flanges 3 for retaining the clips 4 of the mantle-cap in position.

The mantle-cap proper consists of an annular plate 5, which is centrally apertured, so that it may fit around the burner-tip 1 without binding the same, but substantially without lateral play. Practically none of the gases of combustion pass between said plate and said tip, the tip deflecting them, so that they pass up around its outer edge. Extending radially inwardly from the outer portion of said plate at different points on the periphery are the aforesaid clips 4, which are adapted to support the cap in position upon said tip. Inasmuch as plate 5 lies below the lugs 2 and the clips 4 lie above them, vertical play is prevented, thereby assuring permanence and stability of the cap and mantle upon the tip. The parts are so designed that just enough vertical play is possible to permit the clips 4 from being raised clear of the flanges 3 on the lugs 2.

The mantle 6 is adapted to be slipped over the exterior surface of a mantle-ring 7, which

is rigidly supported from and beneath plate 5 by means of the hangers 8. The diameter of said ring is preferably approximately equal to the outside diameter of said plate. The hangers are preferably three in number, and in the best form of device the ring 7, and hangers 8, clips 4, will be formed of a single piece with plate 5, the whole being stamped out of a single sheet of metal. In order to afford sufficient passage for the escape of the gases of combustion, the ring 7 and consequently the upper edge of the mantle 6 are located at a considerable distance below plate 5. The gases therefore escape laterally outwardly over the upper edge of the mantle at a point below plate 5. The preferred manner of attaching the mantle to ring 7 is to have said ring formed with a peripheral and horizontal groove therein, which thus forms a pocket or seat in which an asbestos or similar cord or wire may lie, the mantle edge being held between such cord or wire and the exterior surface of said ring.

One of the advantages of this device is the fact that it remains firmly in position upon the burner-tip, and yet does not have to be rotated but a very slight amount in being attached and detached. In the design shown less than one-eighth of a complete turn is necessary to attach or detach the cap, and when once attached vertical play is substantially prevented.

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

In a burner, the combination of a burner-tip having a cylindrical wall and lugs projecting laterally therefrom; and a mantle-cap consisting of an annular plate circularly apertured to fit snugly over said tip to prevent lateral play, clips projecting upwardly from said plate and inwardly so as to rest upon said lugs, said lugs being thereby located between said plate and clips for preventing vertical play of said cap, and said cap also having a ring for supporting the mantle at a distance below said plate sufficient to afford an escape-passage between said plate and the top of the mantle.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

FRIEDRICH E. REICHARDT.

Witnesses:

HOWARD M. COX,

CLARA J. CHRISTOFFEL.