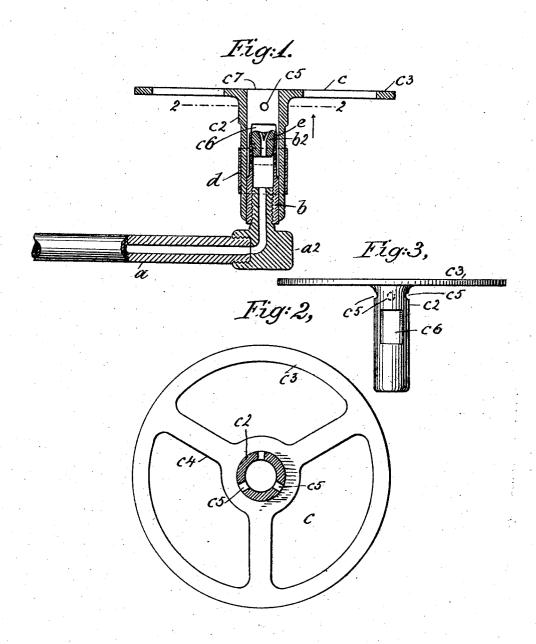
No. 845,297.

PATENTED FEB. 26, 1907.

## P. J. FOLEY.

HEATING ATTACHMENT FOR GAS BURNERS. APPLICATION FILED JAN. 22, 1906.



INVENTOR
Patrick J. Troley

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

PATRICK J. FOLEY, OF JERSEY CITY, NEW JERSEY.

## HEATING ATTACHMENT FOR GAS-BURNERS.

No. 845,297.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed January 22, 1906. Serial No. 297,112.

To all whom it may concern:

Be it known that I, PATRICK J. FOLEY, a citizen of the United States, and residing at Jersey City, in the county of Hudson and 5 State of New Jersey, have invented certain new and useful Improvements in Heating Attachments for Gas-Burners, of which the following is a specification such as will enable those skilled in the art to which it apper-10 tains to make and use the same.

This invention relates to heating attachments for gas-burners; and the object thereof is to provide an improved device of this class which is designed to be connected with 15 an ordinary gas-burner having an ordinary burner-tip and which may be applied for use without changing the tip and detached therefrom, so that the tip may be used as an ordinary illuminating-burner whenever nec-

20 essary.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are des-25 ignated by suitable reference characters in each of the views, and in which—

Figure 1 is a sectional side view of an ordinary gas-fitting provided with the usual burner tube and tip and showing my im-30 proved heating attachment connected therewith, all of said parts being in section; Fig. 2, a transverse section on the line 2 2 of Fig. 1, and Fig. 3 a side view of the burner attachment.

In the drawings forming part of this specification, I have shown an ordinary gas-fixture comprising a tube a, provided at one end with a coupling  $a^2$ , with which is connected an ordinary illuminating-burner b, provided 40 with a burner-tip  $b^2$ , and in the practice of my invention I provide a heating attachment comprising an open-work plate or support c, having a central depending tubular member or sleeve  $c^2$ , adapted to be slid onto
45 the gas-burner tube b. The open-work plate
or support c comprises, in the form of construction shown, a rim  $c^3$  and radial arms  $c^4$ ; but this support may be made in any desired manner. The sleeve  $c^2$  is provided just be-50 low the support c with radial ports or passages c5, three of which are shown, and below these and centrally of the tube or sleeve  $c^2$ said tube or sleeve is provided with oblong side openings  $c^6$ , and mounted on said tube or 55 sleeve is an adjustable sleeve member d by

be regulated. When constructed in this manner, the tube or sleeve  $c^2$  of the support c serves as an ordinary Bunsen burner, and in practice the gas escapes through the 60 burner-tip  $b^2$ , and air entering through the side openings c6 mingles therewith, and the gas and air thus mingled escapes through the ports or passages c<sup>5</sup> and is burned in a circle

around and beneath the support c.

Any suitable vessel may be placed on the support c for heating water, milk, or any other material, and when the said vessel is placed on the support c the central bore or passage through the tube or sleeve  $c^2$  of said 70 support, which is normally open, is practically closed by said vessel, and very little, if any, gas will escape, except through the ports or passages  $c^5$ ; but if any gas should escape at the opening  $c^7$  it will be deflected by the bot- 75 tom of the vessel and will ignite and burn together with the gas escaping through the ports or passages  $c^5$ .

The central bore or passage through the tube or sleeve  $c^2$  of the support c is made 80 open at both ends in order to facilitate casting of the support; but the said bore or passage where it passes through the support c may be closed, if desired.

In the construction shown the upper end 85 of the burner-tube b is slightly smaller in diameter than the inner ciameter of the tube or sleeve  $c^2$ , and this forms an annular chamber or space around the upper end of the burner-tube, as shown at e, which facili- 90 tates the mingling of the air which enters through the side ports or passages  $c^6$  with the gas escaping from the tip b.

This device is simple in construction and operation and may be applied to ordinary 95 illuminating-gas burners whenever desired and may be detached therefrom whenever necessary, in which last event the burner may be used as an ordinary gas-burner.

Having fully described my invention, what 100 I claim as new, and desire to secure by Let-

ters Patent, is-

1. A heating attachment for illuminatinggas burners, comprising an open-work plate forming a support and provided with a cen- 105 tral depending tubular sleeve adapted to be slipped onto the burner-tube so as to inclose said tube and the burner-tip, said tubular sleeve being greater in diameter than the top portion of the burner-tube forming there- 110 between a space and being provided adjawhich the size of the slots or openings comay I cent to the plate with radially-arranged

ports or passages, and below said ports or passages with vertically-arranged slots or

openings, leading to said space.

2. A heating attachment for illuminating5 gas burners, comprising an open-work plate
forming a support and provided with a central depending tubular sleeve adapted to be
slipped onto the burner-tube so as to inclose
said tube and the burner-tip, said tubular
to sleeve being greater in diameter than the top
portion of the burner-tube forming therebetween a space and being provided adjacent to the plate with radially-arranged
ports or passages, and below said ports or

passages with vertically-arranged slots or 15 openings leading to said space, and an adjustable sleeve mounted on said tubular sleeve and adapted to regulate the size of said slots or openings.

In testimony that I claim the foregoing as 20 my invention I have signed my name, in presence of the subscribing witnesses, this

20th day of January, 1906.

PATRICK J. FOLEY.

Witnesses:

C. E. Mulreany.

F. A. Stewart.