

T. S. PHILPOTT.

GAS BURNER.

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938,019.

Patented Oct. 26, 1909.

FIG. 1.

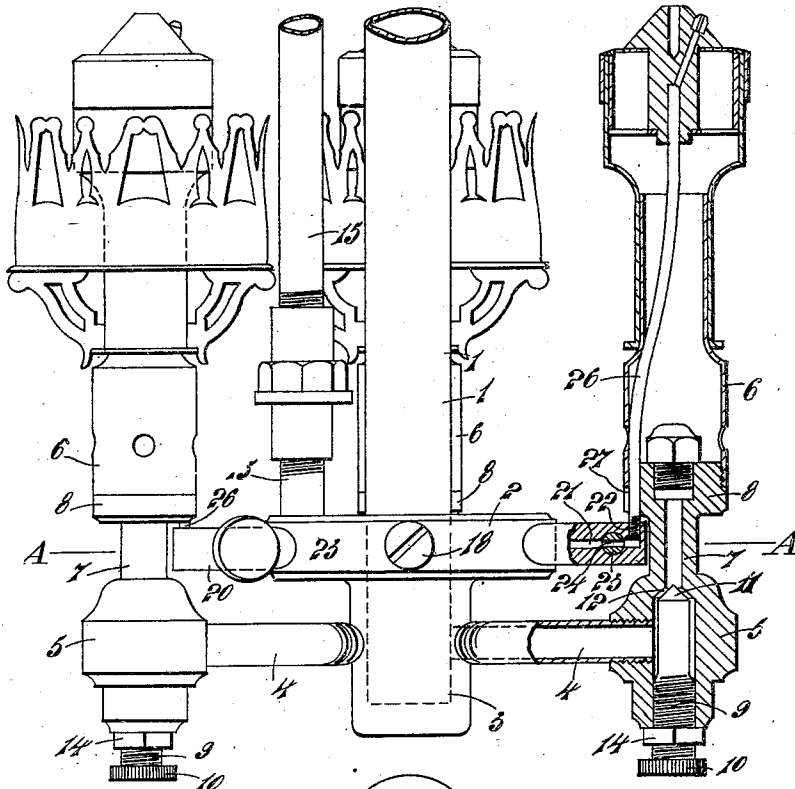
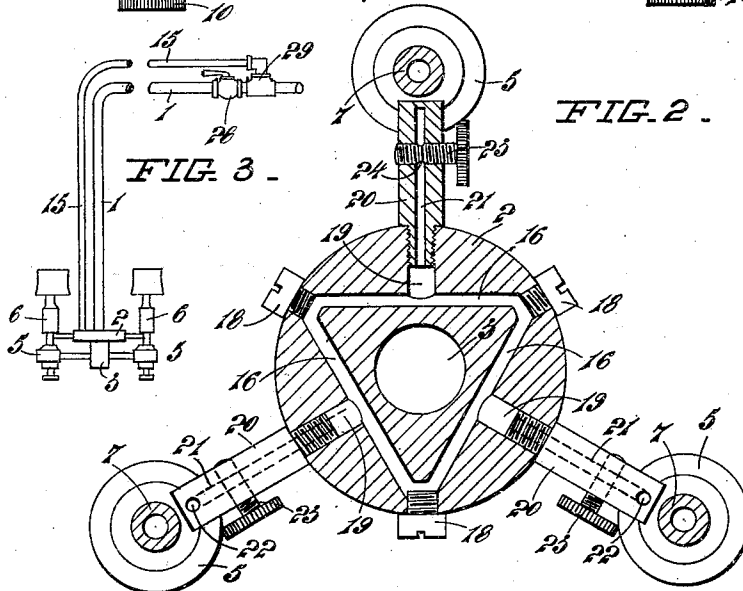


FIG. 2.

FIG. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

THOMAS STANLEY PHILPOTT, OF WELLINGTON, NEW ZEALAND.

GAS-BURNER.

938,019.

Specification of Letters Patent.

Patented Oct. 26, 1909.

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To all whom it may concern:

Be it known that I, THOMAS STANLEY PHILPOTT, a subject of His Majesty the King of Great Britain and Ireland, residing at 256 Lambton Quay, Wellington, in the Provincial District of Wellington, in the Dominion of New Zealand, have invented certain new and useful Improvements in or Relating to Gas-Burners, of which the following is a specification.

This invention relates to gas burners wherewith incandescent mantles are employed and a pilot light for re-lighting the main supply of gas to the burner.

Hitherto a by-pass for admitting a supply of gas to a pilot light has been constructed in the following way:—In a tap fitted to a burner, and which is operated each time the burner is brought into use, a groove has been provided in the plug of the cock, which groove allowed a supply of gas to pass to a pilot light when the cock was turned off. In another system, which is usually designated a "pilot service", a number of burners are supplied from one common gas main and the pilot lights for such burners are supplied from an independent and common pilot gas pipe. In this case the whole of the burners are extinguished by a cock usually at some distance from the burners and the pilot gas tube is connected to the main on the side of the tap remote from the burners. The pilot gas was led to the gas burner by means of a small tube connected to a nipple outside the burner and it was therefore necessary to make a considerable number of bends in the small tube and further there was difficulty in removing the socket by which the said tube was connected to its nipple in the case of renewals, or for cleaning purposes. The result was that corrosion rapidly set up in the bends of the small tube and it was impossible to remove the tube and clean it owing to the bends preventing the entrance of a wire and the difficulty or impossibility of removing the socket after it had been in use for some time.

The object of my invention is to provide a pilot tube in a pilot service which is practically straight so that there is very little lodgment for deleterious matter within the tube and so that a wire can be readily passed through the tube, the parts being so constructed that the burner itself can be readily taken apart and cleaned.

A further object of my invention is to pro-

vide means whereby any burner in a cluster of burners supplied by a common gas main can be readily regulated and adjusted independently of the other burners in the cluster whereby the illuminating power of the burners may be readily equalized.

The drawings illustrate the form which I prefer my invention to take.

Figure 1, is an elevation partly in section of a chandelier having three burners, Fig. 2, is a sectional plan on line A—A Fig. 1, Fig. 3, is a diagrammatic view showing the piping.

The main gas pipe 1 is connected to a base consisting of a boss 2 having an integral well 3. Branch pipes 4 lead from the well 3 and are supplied at their outer ends with a base 5 upon which is supported a burner 6 known as the Avon top burner. The base has a neck 7 and a collar 8. The gas passing from each branch pipe 4 to its burner is readily regulated by a screw 9 having a milled head 10 and a conical end 11. The said conical end being capable of closing upon a valve seat 12 formed in the burner. A lock-nut 14 is adapted to lock the screw after its adjustment has been effected. The pilot gas tube 15 is connected to the boss 2 wherein a triangular channel 16 is formed, communication between the apexes of the triangle and the exterior of the boss being closed by screws 18. Holes 19 are formed from the exterior of the boss to the triangular channel 16 and are fitted with plugs 20 provided with holes 21 extending throughout nearly their whole length.

Holes 22 at the end of the plugs and at the top thereof meet the holes 21, which are traversed by screws 23 having holes 24 and by turning the screws 23 the holes 24 will allow more or less gas to pass as desired. Each hole 22 receives a pilot tube 26 which is practically straight and passes through a groove 27 in the collar 8 and thence through the burner 6. The tube 15 is carried back to a position beyond the main tap 28 (see Fig. 3) where it is connected to the main by a tee 29 or any other ordinary means.

I have shown the pipes 1 and 15 exposed to view, but if desired they may pass inside a casing in a well known manner.

When it is desired to clean the pilot tube 26 or the base 5 the burner 6 is unscrewed from the base 5 and the pipe 26 is unscrewed from the plug 20 and the base is then unscrewed from the branch pipe 4 and the

screw 9 removed leaving all the parts including the tube 26 readily accessible for cleaning.

What I do claim and desire to secure by Letters Patent of the United States is:—

1. In a gas system employing a pilot service, a burner base having a neck and collar, means for supplying gas to the base, a burner fitting the base, a hollow plug projecting below the collar and a practically straight pilot tube screwed into the plug and passing through a groove in the said collar and into the interior of the burner, substantially as set forth.
2. In a gas system employing a pilot service, a burner base having a neck and collar, means for supplying gas to the base, a burner fitting the base, a hollow plug passing below the collar, a practically straight tube screwed into the plug and passing through a groove in the said collar and into the interior of the burner, and a screw fitting the base and having a milled head and conical end adapted to close upon a valve seat within the base and a lock-nut upon the screw, substantially as set forth.
3. In a gas system employing a pilot service, a burner base having a neck and collar,

a base consisting of a boss and an integral well, branch pipes leading from the said well, a burner base having a neck and collar with which the branch pipe communicates, a burner fitting the base, a hollow plug projecting below the collar and a practically straight pilot tube screwed into the plug and passing through a groove in the said collar and into the interior of the burner, a pilot gas pipe connected to the base and communicating with the hollow plug, substantially as set forth.

4. In a gas system employing a pilot service, a base consisting of a boss and an integral well, there being a triangular channel in the boss, screws closing the apexes of the channel, hollow plugs communicating with the channel, pilot tubes communicating with the hollow plugs, and means for supplying gas to the channel, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

THOMAS STANLEY PHILPOTT.

Witnesses:

ERNEST SMITH BALDWIN,
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