INCANDESCENT GAS-LAMP.

SPECIFICATION forming part of Letters Patent No. 654,801, dated July 31, 1900.

To all whom it may concern:

Be it known that I, RAGLAND MOMAND, a citizen of the United States, residing in the city of New York, State of New York, have invented certain new and useful Improvements in Incandescent Gas-Lamps, of which the following is a specification.

My invention relates to incandescent gas-lamps.

I will describe an incandescent gas-lamp embodying my invention and then point out the novel features thereof in the claims.

In the accompanying drawings, Figure 1 is a vertical section view, partly in elevation, of an incandescent gas-lamp embodying my invention. Fig. 2 is a top view thereof, the globe being omitted.

Similar letters of reference designate corresponding parts in both figures.

A represents the mixing-tube of the Bunsen burner commonly employed in incandescent gas-lamps, a shell which may be turned to regulate the size of the air-openings in its bottom, and c a connecting-nipple by which the lamp is supported on the gas-supply.

B represents a shell having an annular protuberance b and a tube portion b', which surrounds the mixing-tube A. This tube b' may be of any desired length, and consequently the shell B will be supported a greater or less distance above the end of the tube A.

C represents a shell provided with an annular extension c, which surrounds the shell B and rests on the protuberance b. The shell C is provided with an interior shoulder c', which serves as a rest for the shell c', having openings c". I have shown the shell c' as being substantially conoidal, though it may be of any other desired shape. The shells c' and B form a chamber to permit of a better mixing of the air and gas.

c', c" represent annular and exterior shoulders on the shell C. The shoulder c' is adapted to support a shade or globe holder G. This latter may be of any desired construction. The shoulder c' is adapted to support a shell E, the wall e' of which is inclined and surrounds the portion e' of the shell C. The portion e' is inclined to correspond to the wall 50 of the shell E. The shell E, together with the portion e', forms another mixing-chamber for the air and gas after it escapes from the shell c' through its openings. The horizontal wall e of the shell E carries a conical or conoidal part e', which projects downwardly and into the shell c'. This part is to cause the air and gas to pass out of all the openings in the shell c' in order that a substantially equal supply of air and gas can be made to all the burners carried by the shell. The wall e is also provided with a plurality of openings e", in which burners are fitted. In the drawings I have shown the wall e as having six openings, three of which are closed by plugs e". Within each opening a shoulder e' is provided for supporting its burner. Each burner comprises, essentially, a perforate shell e' and a tube e", inclosing the shell e'. The perforate shell serves as a mixing-chamber, and its shape is substantially conoidal in order that a space may be provided between it and its inclosing tube. The top of the shell e' is preferably serrated in order that the air and gas may escape to the mantle F, of refractory material. The wall of the tube e" may be straight or inclined, as desired.

H represents a post or rod supported at one end in the part e' and provided at its other end with a cap h. The cap h is provided with a plurality of slots or cuts h", in which one end of each of a plurality of supports h' is held. The other end of each support is preferably formed with a hook, with which the loops of the mantles are engaged.

I claim as my invention is—

1. In an incandescent gas-burner, the combination of an air and gas mixing tube, a perforated shell located above the end of said tube and constituting a mixing-chamber, a second shell inclosing said perforated shell and constituting another mixing-chamber, a plurality of burners carried by said shell, and a plurality of mantles of refractory material supported above said burners.

2. In an incandescent gas-burner, the combination of an air and gas mixing tube, a perforated shell located above the end of said
tube and constituting a mixing-chamber, a second shell inclosing said perforated shell and constituting another mixing-chamber, a plurality of burners carried by said shell for supplying air and gas to a plurality of mantles located above said burners, and a substantially cone-shaped part carried by said second shell projecting into said perforated shell, substantially as described.

3. In an incandescent gas-burner, the combination of an air and gas mixing tube, a perforated shell supported above said tube and constituting a mixing-chamber, a second shell inclosing said perforated shell and constituting a second mixing-chamber, and a plurality of burners carried by said second shell for supplying air and gas to a plurality of mantles of refractory material located above the burners, each of said burners comprising a perforated shell and a tube inclosing said shell.

4. In an incandescent gas-lamp, the combination of an air and gas mixing tube, a perforated shell supported above said tube, a second shell inclosing said perforated shell and carrying a plurality of burners, a post or rod carried by said second shell, a cap carried by said rod, having a plurality of cuts or recesses, and a support for a mantle located in each of said slots.

5. In a gas-burner the combination of a gas and air mixing tube, a chamber in communication with said tube and having perforated walls for effecting the more thorough mixing of the gas and air from said tube, a shell inclosing said chamber for forming an outer chamber, and a plurality of gas-burners in communication with said outer chamber, substantially as described.

6. In an incandescent gas-lamp, the combination of a post, a cap having a plurality of slots or cuts extending longitudinally of the cap, carried by said post, a plurality of arms carried by said cap and extending radially therefrom, one end of each arm being provided with means for detachably holding it in a slot or cut and its other end formed into a hook, a mantle suspended from each hook, and a burner for each mantle.

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

RAGLAND MOMAND.

Witnesses:

JOHN E. ROESER,
GEORGE HENRY RAYMOND.