No. 663,560.

Patented Dec. 11, 1900.

B. H. COLVER.

GAS BURNER.

(Application filed July 30, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1

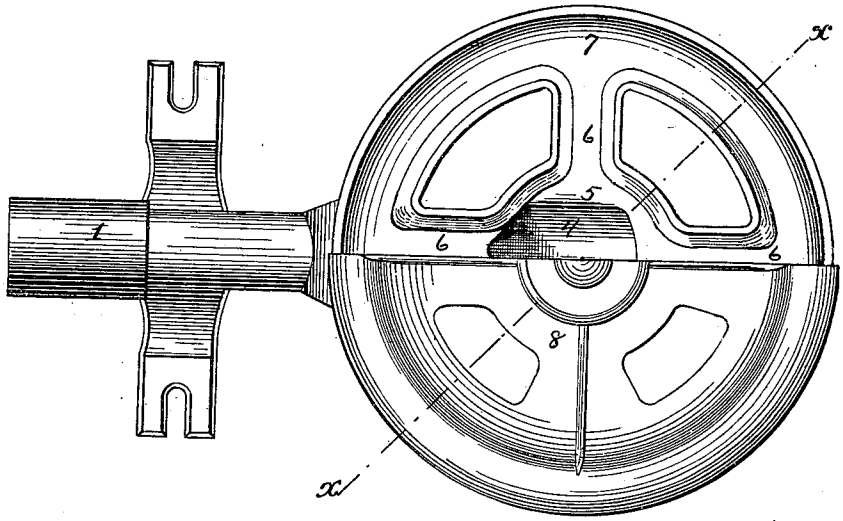


Fig. 2.

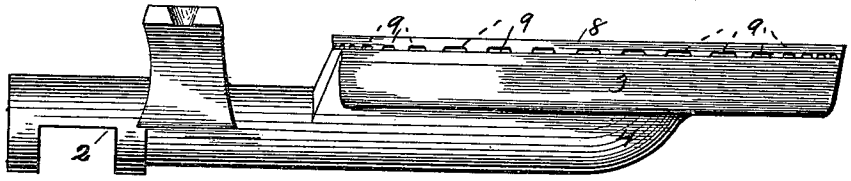
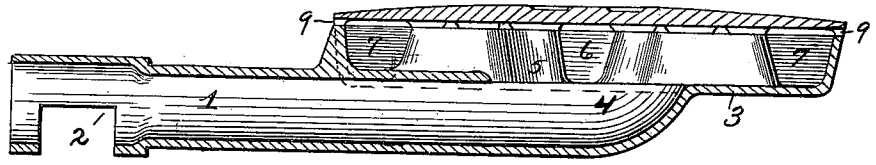


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

Fig. 4.

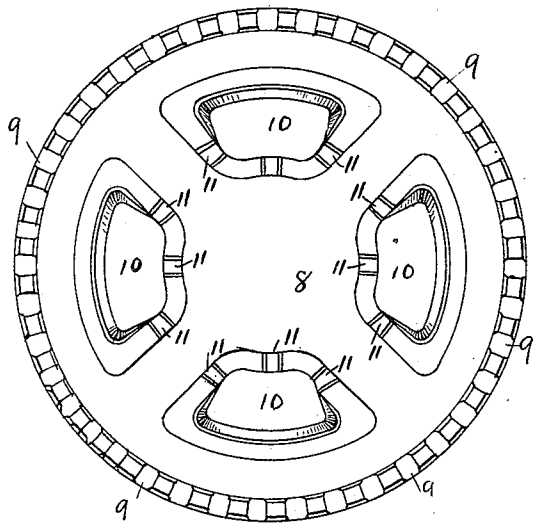
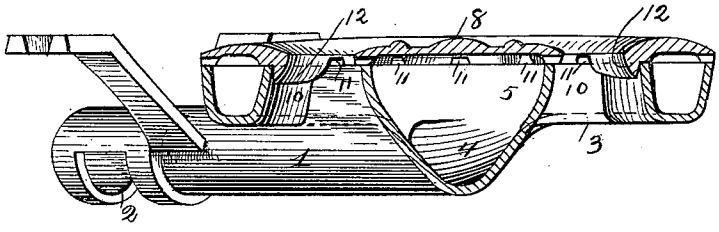


Fig. 5.



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UNITED STATES PATENT OFFICE.

BYRON H. COLVER, OF CLEVELAND, OHIO, ASSIGNOR TO THE ALL RIGHT MANUFACTURING CO., OF SAME PLACE.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 663,560, dated December 11, 1900.

Application filed July 30, 1900. Serial No. 25,221. (No model.)

To all whom it may concern:

Be it known that I, BYRON H. COLVER, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Gas-Burners, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in burners for gas-stoves and the object of the invention is to provide a burner in which a more perfect distribution of the mixed air and gas can be obtained and carried in equal volume to all parts of the burner.

My invention consists in a disk-shaped burner provided with a central inlet for the mixed gases and with radial and circumferential passages for distribution and in the various details of construction and combination and arrangement of parts, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the device, one-half of the upper portion or cap of the burner being cut away on the center line. Fig. 2 is a side view of the same. Fig. 3 is a longitudinal central section through the burner and supply-pipe. Fig. 4 is a bottom view of the top or cover of the burner, and Fig. 5 is a vertical section taken on diagonal line X X through Fig. 1.

In the views, 1 is the gas-inlet pipe, provided on the under side with the air-inlet 2. This pipe enters the disk-shaped burner-body 3 from below at the center at 4 and enters the cup-shaped chamber 5 and thence is diffused to the outer edge 4 through the passages 6, which radiate from the center. At the outer edge a circular chamber 7 encircles the burner.

The body of the burner is open above and covered by the disk-shaped cap 8, which is provided with narrow slits 9 at its margin, through which the mixed gases issue in the form of a blue flame when the burner is lighted.

It will be seen that passages 10 are formed through the body and cover of the burner between the radial or diametric passages 6, through which the air passes through the burner. Upon the inner margin of these passages are burner-slits 11 in the cover for the burner-flames. These are projected outwardly, and a large volume of air enters the larger openings, thus spreading the flame. The outer edges of the passages in the cover are provided with overhanging lips or flanges 12, which seal the large openings, and the flanges are continued about the sides of the passages up to the narrow burner-slits, thus preventing the escape of gas from the outer edge of the passages. If necessary, a bolt can be employed to hold the parts together.

It will be seen that the inflammable gases entering the burner-body from below fill the central chamber 5, and thence pass readily and in equal volume to the circular passage, in this manner feeding the inner and outer burner-slits and by the equal distribution of gas furnishing the same amount of heat to all parts of the burner.

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

In a gas-burner, a disk-shaped body provided with a central gas inlet and chamber, and with an outer circular chamber and with radial gas-passages, having vertical passages between their walls, in combination with a cover provided with corresponding air-passages and adapted to close the open top of the body portion and also provided with burner-slits about its periphery and about the inner margins of the air-passages, the said air-passages being closed on three sides by means of depending flanges from the cap, substantially as described.

BYRON H. COLVER.

Witnesses:
FRANK B. FOX,
CARL W. GERDUM.