(No Model.)

D. R. KLINE.

GAS BURNER.

No. 365,606. Patented June 28, 1887.

Fig. 1

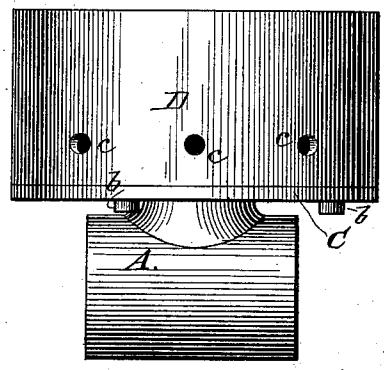
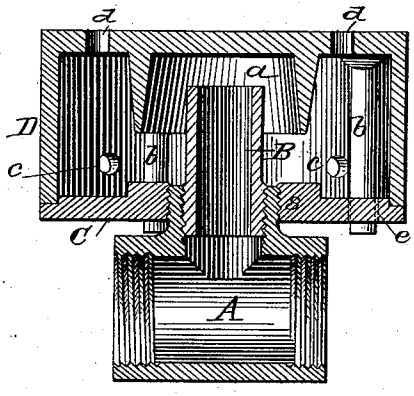


Fig. 2.



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DAVID R. KLINE, OF RIDGWAY, PENNSYLVANIA.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 365,606, dated June 28, 1887.

Application filed September 22, 1886. Serial No. 214,290. (No model.)

To all whom it may concern:

Be it known that I, DAVID R. KLINE, a citizen of the United States, and residing at Ridgway, in the county of Elk and State of Pennsylvania, have invented certain useful Improvements in Natural-Gas Burners, of which the following is a specification.

My invention relates to burners for natural gas; and it consists in the peculiar construction and arrangement of parts hereinafter described and claimed.

Figure 1 is a side elevation. Fig. 2 is a central vertical section.

In the drawings, A represents the supply-pipe, which is in the present case in the form of a T-coupling, for insertion in a length of pipe, but which may be a straight pipe or elbow. From this there rises a short vertical tube, B, around which and upon the edge of the T-coupling there is firmly seated by a screw-thread, *s*, a circular base-plate, C. Upon the outer edge of the base-plate there rests the lower edge of a cylindrical cap, D. When this cap is supported upon the base-plate C, the top of the tube B approaches quite closely to the top plate of the cap, and, projecting downwardly from this top plate and formed on or cast with the plate, is a pendent flange or skirt, *a*, which descends around the upper end of the tube. From the same plate there project downwardly three or more rods or studs, *b*, which pass through holes *e* in the base-plate C and serve to hold the detachable cap upon the base-plate in proper central position, but at the same time permit the cap to be easily lifted off to inspect or clean the burner. Through the cylindrical sides of the cap are formed a series of holes, *c*, and in the top are also holes *d*, through which two sets of holes the commingled and evenly-heated air and gas issue and burn with a blue flame of intense heat. As the gas with more or less air passes into the tube B from the service-pipe below, it is brought first in contact with the hot top plate of the cap and thence passes down and around the pendent skirt or flange *a*, being thereby held for a longer time in contact with the hot metal, which heats it more highly and secures a more perfect combustion when it issues from the cap through the jet-holes.

In defining my invention with greater clearness, I would state that I am aware that gas-burners of an approximate structure have heretofore been patented.

My invention is peculiar and distinctive in the following respects: The inlet-pipe A is formed with a nipple that is screw-threaded upon the inside to receive the tube B, and is also screw-threaded upon the outside to receive the internal screw-thread of the disk C, while the cap D, with its pendent flange, is made separately and cast in one piece, and is detachably held upon the supporting-base C. It will thus be perceived that all the parts of the burner are firmly but detachably connected together, and are mounted and sustained upon the inlet-pipe.

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

The combination of the inlet-pipe having a nipple screw-threaded both upon the inner and outer sides, the tube B, screwed into the inner thread of the nipple, the disk C, screwed upon the outer thread of the nipple, and the detachable cap D, with pendent flange *a*, supported upon the disk C, and provided with holes and fastening devices, substantially as shown and described.

DAVID R. KLINE.

Witnesses:
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