

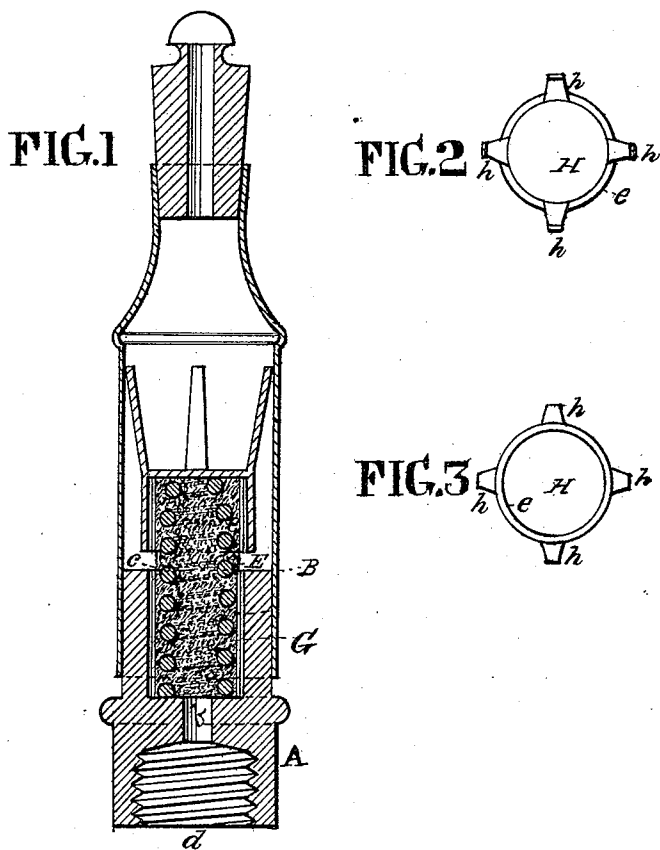
(No Model.)

C. S. FORD, Sr.

GAS BURNER.

No. 463,969.

Patented Nov. 24, 1891.



Witnesses.
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John S. ...

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UNITED STATES PATENT OFFICE.

CHARLES S. FORD, SR., OF EDEN, PENNSYLVANIA, ASSIGNOR TO GEORGE W. BRELSFORD, OF SAME PLACE.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 463,969, dated November 24, 1891.

Application filed February 20, 1891. Serial No. 382,249. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. FORD, Sr., a citizen of the United States, residing at Eden, in the county of Bucks and State of Pennsylvania, have invented a new and useful Improvement in Gas-Burners, of which the following is a specification.

The object of my invention is the construction of a gas-burner that will permit of the same being thoroughly and expeditiously cleansed from foreign matter collected within it by reason of the impurities contained in the gas that passes through it. The method heretofore in use to accomplish this has been to employ cotton wadding within the bore of the burner, which necessitates the removal of the base of the burner from its connection with the nozzle of the fixture, thereby frequently causing a leak of gas at the joint, a necessity for the use of tongs to effect a disengagement of same, time consumed, and, if the tip is tightly cemented, the danger of breaking it, thus necessitating its renewal. These difficulties are obviated in this invention, as will be more fully understood from the following detailed description.

The base portion of the burner is formed with a female screw-thread around the bore of its lower end for attachment to the nozzle of a fixture similar to those in common use. Attached with and sliding vertically upon the upper end of this base portion is the cylindrical upper portion, which forms a ground-joint connection with said base. This base portion has a central bore that extends vertically downward sufficiently far to form a chamber for the reception of the lower portion of a resilient truncated wire cone, whose upper end is seated within a tube dependent from a pronged plate, whose prongs hug the inner wall of the sliding cylindrical pillar or sleeve that encircles the circumference of the upper part of the base portion. A resilient wire cylinder, having incased within its coils a packing of asbestos fiber, is made to move alternately up and down in the bore of said burner by means of a tube dependent from a pronged plate whose prongs hug the inner

wall of a sliding pillar that encircles the stationary part of the pillar. This resilient cylinder extends above the base of the burner and into the tube attached to the pronged plate, so that depressing or elevating said pronged plate with its dependent tube impinging upon the upper end of said resilient cylinder compresses or releases said cylinder with its asbestos packing alternately as the cylinder is moved up or down, thus always keeping the asbestos packing separated and loose in its fiber and preventing matting.

By reason of the indestructibility of the asbestos packing by fire all foreign deposits from gas passing through it can be readily burned out without the removal of the resilient cylinder from the bore of the base by simply detaching the cylindrical upper portion and igniting the gas at the bore in which the asbestos packing is situated.

In the accompanying drawings, which make a part of this specification, Figure 1 is a vertical section of the improved burner. Figs. 2 and 3 are, respectively views of the upper and lower ends of the pronged plate H and its dependent tubular piece e.

A is the base of the burner, which is attached by means of its screw-thread *d* to the nozzle of a gas-fixture. *b* is a passage for the flow of gas. This base has a central bore *c* extending downward from its upper end, in which the resilient cylinder E, with its asbestos packing G, is situated. The upper end of this resilient cylinder projects above the bore in the base A, and said end fits within the tube *e*, dependent from the pronged plate H, which plate is provided with three prongs *h*, of a resilient nature, whose free upper ends are sprung tightly into the sliding cylinder B.

The foregoing description of the burner is to illustrate a means for the use of asbestos packing.

When the asbestos packing G has become clogged and inoperative by reason of its collection of impurities in the gas which passes through it, the sliding cylinder B is removed from its position, the gas turned on by means of the fixture-key, and flame ap-

plied to the orifice of base A, which burns out any foreign matter in the packing, leaving the same in its primitive state ready for renewed action.

5 I claim as my invention—

The combination of the pillar A with its bore c, the resilient cylinder E with its as-

bestus packing G, the pronged plate H with its dependent tube e, and sliding cylinder B, substantially as herein shown and described.

CHARLES S. FORD, SR.

Witnesses:

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