W. H. WILBUR.

GAS-BURNER.

No. 182,254. Patented Sept. 12, 1876.

Fig. 1.

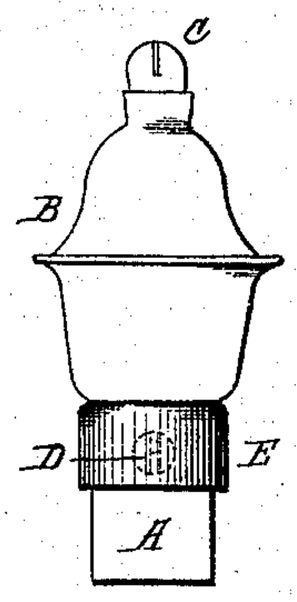


Fig. 2.

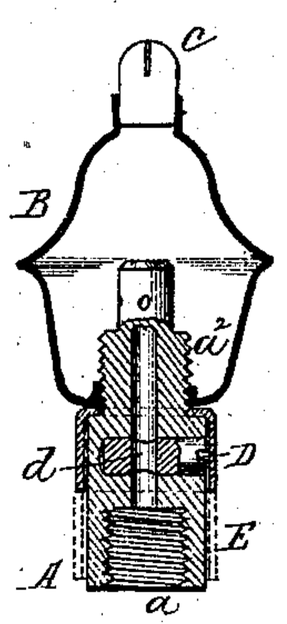


Fig. 3.

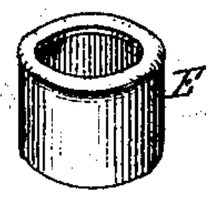
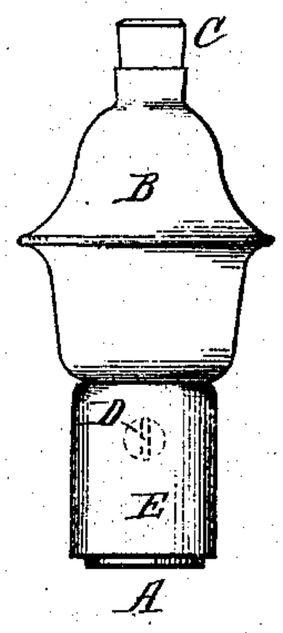


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM H. WILBUR, OF FALL RIVER, MASSACHUSETTS.

IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. **182,254**, dated September 12, 1876; application filed March 6, 1876.

To all whom it may concern:

Be it known that I, WILLIAM H. WILBUR, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification:

This invention relates to a new and useful improvement in that class of gas-burners which are provided with a regulating screw or plug, for regulating and controlling the flow of gas, for the purpose of economizing the same. With manufacturers and others who consume large quantities of gas, it is highly important that after the valve or regulating screw has been once set it should remain so, and not be tampered with by unauthorized persons. In the present exposed condition of such valve or regulating screw in the burners of this class, as heretofore constructed, its position may be readily changed by any person so as to increase the supply of gas, and thus defeat the objects of the consumer. My invention is designed to obviate this objection by combining with the burner a movable collar, adapted to set around the same, and cover and secure the end of the valve or regulating screw, and thus prevent unauthorized attempts to tamper with or change its position after it is once set.

In the drawing, Figure 1 is a side elevation of a gas-burner with my improvement applied; Fig. 2, a sectional view of the same; Fig. 3, a detached view of the collar, and Fig. 4 an elevation of gas-burner with the collar concealing the entire base.

In the drawing, the letter A represents the base of the burner, provided with an internally screw-threaded socket, *a*, for attaching it to the gas-pipe, with a shoulder, *a'*, and screw-threaded shank *a''*, at its upper end, for the reception of the chamber or casing B, which supports the burner-tip C.

The letter D represents a screw plug or valve passing transversely into the burner through the vertical passage in the same. This valve may be either a screw-plug, as before mentioned, or a plane plug, having a passage, *d*, in line with the vertical passage, and adapted to open or close the same, either wholly or partially, by turning, as in the ordinary stop-cock. The outer end of said screw plug or valve is provided with a transverse recess, for the reception of a screw-driver or other tool; and said plug or valve is of such length that it may be opened to its fullest extent without projecting beyond the outer wall of the base, so as not to interfere with the movable collar for covering and protecting the same.

The letter E represents said collar, constructed with an inwardly-projecting flange at its upper end, which sets upon the shoulder on the base of the burner A, when in place. Said collar is of such diameter as to fit neatly over the burner-base, and of such length as to entirely conceal the end of the screw-plug or valve when in place, being confined on the burner by screwing down the outer chamber or casing B upon the same.

In the present instance, I have described one particular form of burner and regulating valve or screw; but it is evident that my improvement may be readily applied to any other form of burner in which the regulating valve or screw is employed, and the protecting device, instead of being formed in the shape of a flanged ring, may be constructed with an internal screw-thread, and the exterior of the burner may be threaded, in order to secure it in place.

As thus constructed it is evident that the valve or regulating screw cannot be readily reached after it is once set, as the burner will have to be taken apart in order to remove the collar, which will effectually prevent all unauthorized attempts to tamper with the valve or regulating screw.

It is also evident that when said collar is fitted neatly to the base of the burner, and more particularly when said collar covers the whole of the burner-base, it appears to the uninitiated and casual eye to form a solid part of the burner, thus concealing the existence of the small screw-regulator. Thus, by this invention, the advantages of having a movable screw-regulator in the base of the burner are retained, and the disadvantages obviated, as follows: First, by concealing the existence of screw-regulator from unauthorized persons; second, by rendering it extremely difficult, if not impossible, to tamper with the same if said existence should be discovered.

Another device for retaining the collar on the base of the burner would be to slightly reduce in diameter that portion of the base covered by the collar, the extra diameter of the lower portion forming a shoulder for said collar to rest upon.

It is not necessary that the collar in all cases should be of a strictly circular form, but of such shape as to conform to the base of the burner to which it is applied.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with a gas-burner having an adjustable plug-valve passing transversely through the same, of a vertically-adjustable collar, fitting over the base of the burner, for concealing the plug-valve, as and for the object specified.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

WM. H. WILBUR.

Witnesses:

ADD. D. WELCH,

J. H. HASKINS.