UNITED STATES PATENT OFFICE.

FRANK G. WRIGHT, OF SAN DIEGO, CALIFORNIA.

GAS-SAVER FOR GAS-BURNERS.

1,217,854.


To all whom it may concern:

Be it known that I, FRANK G. WRIGHT, a citizen of the United States, and resident of San Diego, in the county of San Diego and State of California, have invented a new and useful Gas-Saver for Gas-Burners, of which the following is a specification.

This invention relates to devices for saving gas; and some of the objects of my improvement are, to save gas by directing the heat produced by the flame of a gas burner against the utensil used thereon and preventing its dissipation around the sides of the utensil; to provide a gas saver which is easily adjustable to burners of various diameters, and may be locked in adjusted position, which is simple of construction, easily and quickly and, therefore, cheaply manufactured, and may be delivered to the user at a low price, and which is light in weight. These and other objects I attain by means of the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view; Fig. 2, a top plan view; Fig. 3, a section on the line A—B of Fig. 1; Fig. 4, a side elevation, showing the device in place on the stove burner.

Similar reference numbers refer to similar parts throughout the several views of the drawings.

The gas saver, 1, comprises a thin band, 2, of iron or other sheet material, of comparatively low heat conductivity. The band 2 is wound to form more than one convolution. Its ends, 3 and 4, are bent approximately at right angles to the body, to form projections, 5 and 6, by means of which the ends may be pushed around with the fingers, to slide the convolutions on each other and close or open the gas saver and thus adjust it to adapt it to various size burners.

Near each end 3 and 4, are provided clips, 7, which embrace the convolutions and hold the band in the form of a coil. The clips 7 are shown in Figs. 1, 3 and 4 as punched out of the body of band 2 and lapped over the edges of the band, the one at the top and the other at the bottom.

I am aware that mantles and like devices for gas burners have been made, for the purpose of concentrating the flame and the heat. To this end the mantles and the like have been made conical or funnel shaped. I have considered this inadvisable, because intense heat on a comparatively small area of the utensil will cause the material cooking to scorch or burn, and often ruin the utensil. It is preferable and more economical to apply the heat to a comparatively large area of the utensil. An additional reason for this is that the material of which most utensils are made is a slow conductor, and, therefore, if the heat applied is concentrated and intense, it can not be absorbed adequately and must be rejected, radiated and reflected downward and wasted. I have, therefore, formed my gas saver with perpendicularly walls and adapted it for adjustment to the full area of the burner to which it may be applied. It will be understood, however, that if the space between the burner and the utensil is left open, much heat which would otherwise be absorbed escapes around the sides of the utensil. The device is therefore placed upon the burner, 10, and under the grate, 11, and closes the open space between these, leaving only the spaces between the grate bars, for the escape of the products of combustion.

To increase the efficiency of the saver, I prefer to line the band 2 with asbestos or other heat insulating material, 8. The thin iron band, however, which soon becomes covered with a film of oxid on both sides, is a poor conductor of heat and serves the purpose of the saver quite well, but the efficiency is increased by the insulating lining.

It will be understood that this device can be manufactured at low cost and sold at a low price, and, therefore, may be acquired by persons in moderate circumstances, who can appreciate the saving attained thereby. Moreover, its simplicity of construction and operation is such that any one of ordinary intelligence may understand its application and successful use.

Having thus described my invention, so that any one skilled in the art pertaining thereto may make and use it, I claim—

1. The combination with a gas stove, of an appliance resting upon the burner and disposed under the burner arms, comprising a band of heat insulating quality, the ends of said band overlapped, clips up-set from the band adjacent each end thereof and arranged to straddle the overlapped end for slidingly locking the ends to the intermediate portion to form a cylindrical shell and permit expansion and contraction.
2. The combination with a gas stove, of an appliance resting upon the burner and disposed under the burner arms, comprising a band of heat insulating quality, the ends of said band overlapped and bent laterally to form finger holds, clips upset from the band adjacent each end thereof and arranged to straddle the overlapped end for adjustably locking the ends to the intermediate portion to form a cylindrical shell.

FRANK G. WRIGHT.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."