

No. 757 219.

PATENTED APR. 12, 1904.

G. OBERLAENDER.
IGNITING ATTACHMENT FOR BURNERS.

APPLICATION FILED JULY 27, 1903.

NO MODEL.

Fig:1.

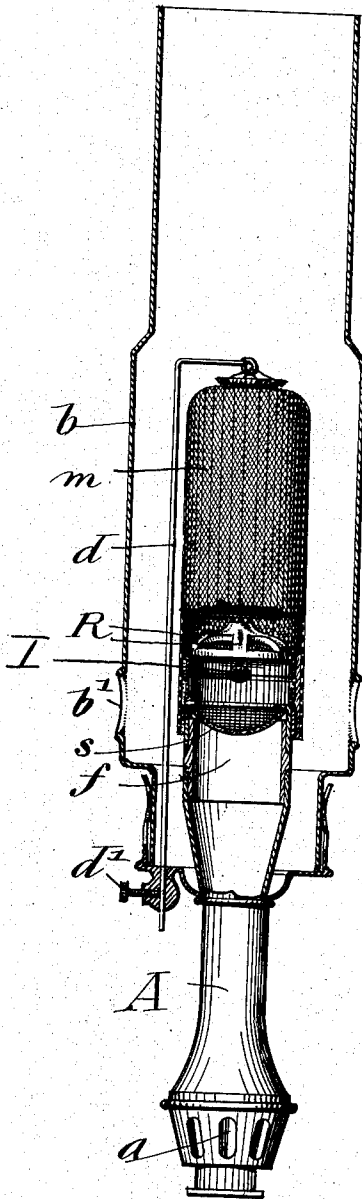


Fig:2.

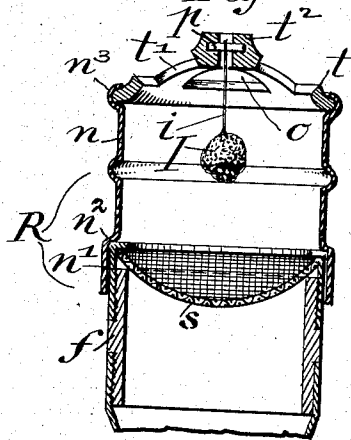


Fig:3.

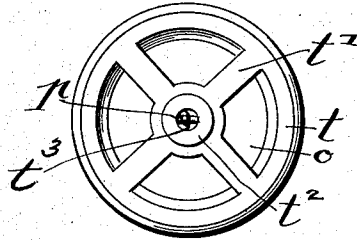


Fig:4.

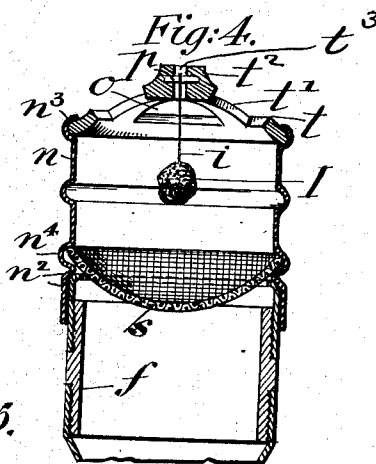
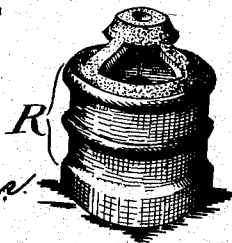


Fig:5.



WITNESSES

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IGNITING ATTACHMENT FOR BURNERS.

SPECIFICATION forming part of Letters Patent No. 757,219, dated April 12, 1904.

Application filed July 27, 1903. Serial No. 167,072. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV OBERLAENDER, a citizen of the Empire of Germany, residing in New York, borough of Bronx, and State of New York, have invented certain new and useful Improvements in Igniting Attachments for Burners, of which the following is a specification.

It is well known that when a current of combustible gas impinges against platinum sponge the sponge is brought to incandescence and the gas ignited thereby. It has been proposed to arrange such platinum sponge in the central part of the incandescent mantle; but it has been found that with such an arrangement some time elapses before ignition takes place and that a considerable quantity of gas gathers in the upper and lower parts of the mantles which when the sponge is brought to incandescence explodes, whereby the attendant concussion accompanying the ignition of the gas causes an appreciable decrease in the life of the incandescent mantle and so aggravates the main objection—frequent renewal of the same.

This invention relates to igniting attachments for burners, and more particularly to igniting-caps which may be easily applied to any burner-tube, and when once applied it is only necessary to turn the cock of the burner and so permit a current of gas to impinge against a platinum sponge suitably attached to said cap and in this manner ignite the gas as soon as it leaves the burner, without the objectionable explosion accompanying ignition by matches, portable ignition devices, &c.

The object of this invention is to obviate the objections above referred to by providing a device which is easy to manufacture, simple to apply, and commendable for general adaptation.

For this purpose the invention consists of an igniting-cap for incandescent gas-burners comprising a sleeve attachable to the upper part of a burner-tube, a top for said sleeve provided with openings, and means supported within said sleeve and below said top capable of incandescence, incandesced when impinged by a current of combustible gas, as will be

fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of my improved igniting-cap as applied to an incandescent gas-burner, showing the incandescent mantle broken away for clearly showing the cap. Fig. 2 shows a central section of the burner-tube provided with the usual screen and showing the igniting-cap applied thereto. Fig. 3 shows a top view of the cap shown in Fig. 2. Fig. 4 shows a central section of the igniting-cap applied to a burner-tube, showing the cap provided with a screen; and Fig. 5 shows a perspective view of my improved igniting-cap as brought into the market as an article of manufacture.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a gas-burner provided with the usual air-openings *a* and with a chimney *b*, provided with air-openings *b'* at its lower part. The burner is also provided with a rod *d*, which is vertically adjustable by means of a screw *d'*, which supports an incandescent mantle *m*. On the upper tubular part of the burner *a* is applied an igniting-cap R, which supports a platinum sponge I in the path of the combustible gas-current passing through the burner *f*. The burner-tube *f* is provided at its upper part with the usual screen *s*. The platinum sponge I is incandesced when brought in contact with the combustible gas, which incandescence ignites the combustible gas, and so lights the lamp without any portable ignition means, as matches, tapers, &c.

The igniting-cap R consists of a cylindrical part or sleeve *n*, made of suitable material, preferably sheet metal, the lower part of which is provided with a part *n'*, of somewhat larger dimension than the part *n*, so as to form a shoulder *n''*, by means of which the sleeve *n* rests on the upper part of the tube *f*. The upper part of the cylindrical sleeve *n* is provided with an annular part *n'''*, in which is seated the top or suspending part *t* of the cap. This top *t* is preferably made of magnesium, clay, or other non-combustible material, and

consists, essentially, of several radial parts t' , forming segmental openings o between the same and terminating in the central part t^2 , which is provided with a transverse pin p , to which a platinum wire z , with a platinum sponge l suspended thereby, is attached. The top t is also provided with a central opening t^3 , in which the mantle-supporting rod d can be placed when central support of the same is preferred.

Very often attachable caps provided with screens are sold with the incandescent gas-mantles and are not arranged in the burners, as shown in Fig. 2. In applying my improved igniting means to said burners it becomes necessary to arrange the screen s in the igniting-cap R , as shown in Fig. 4, for which purpose the sleeve n is provided with an annular part n^4 , in which the sleeve may rest. The cap R , consisting of the sleeve n and the top t , may be formed in one piece—in fact, it may be any means attachable to the burner-tube and may be made of any suitable material or shape conforming to an efficient operation, the main feature of the invention being in providing a portable attachment for burners easily manufactured and complete in and for itself by means of which the gas may be ignited.

My improved igniting-cap may be easily manufactured and brought into the market in the form shown in Fig. 5 and may be purchased at a small cost and applied by any one to the burners already in use or may be sold either as a separate cap or with the burners as a part integral therewith.

The great disadvantage of gas-burners which has caused many to adopt the electric light—namely, the use of matches—is overcome by my improved igniting-cap, as it is only necessary by the use thereof to turn the cock of the burner. Matches are not only very often a source of inconvenience, but are also objectionable on account of the danger of fire attendant the use of the same. Furthermore, when the gas-jet of the improved igniting-cap is accidentally left open the gas emanating

from the burner will immediately ignite, whereby the flame produced will give knowledge of the fact. The ignition of the gas will have the further advantage that the gas will be ignited and burned while emanating from the burner, and so remove the danger of gas asphyxiation. When applied to gas-burners provided with incandescent mantles, the absence of explosions, with attendant concussions, insures a longer life to the same, no matches are required for its ignition, and all injury caused by falling matches is obviated. The igniting-cap being complete in and for itself forms an article of manufacture which may be produced in large quantities, so reducing the cost of each cap correspondingly.

The improved igniting-cap may be applied to any burner by any one without requiring any changes in the same, and may be, due to its simplicity, manufactured at a low cost, giving thus ample reason for general adoption.

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

1. An igniting-cap for incandescent gas-burners, comprising a sleeve attachable to the upper part of a burner-tube, a top for said sleeve provided with openings, and means supported within said sleeve and below said top capable of incandescence when impinged by a current of combustible gas, substantially as set forth.

2. An igniting-cap for incandescent gas-burners, comprising a sleeve attachable to a burner-tube, a top for said sleeve provided with openings, a screen in said sleeve, and means supported within said sleeve below said top and in proximity to said screen capable of incandescence when impinged by a current of combustible gas, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAV OBERLAENDER.

Witnesses:

C. P. GOEPEL,
C. M. KELLY.