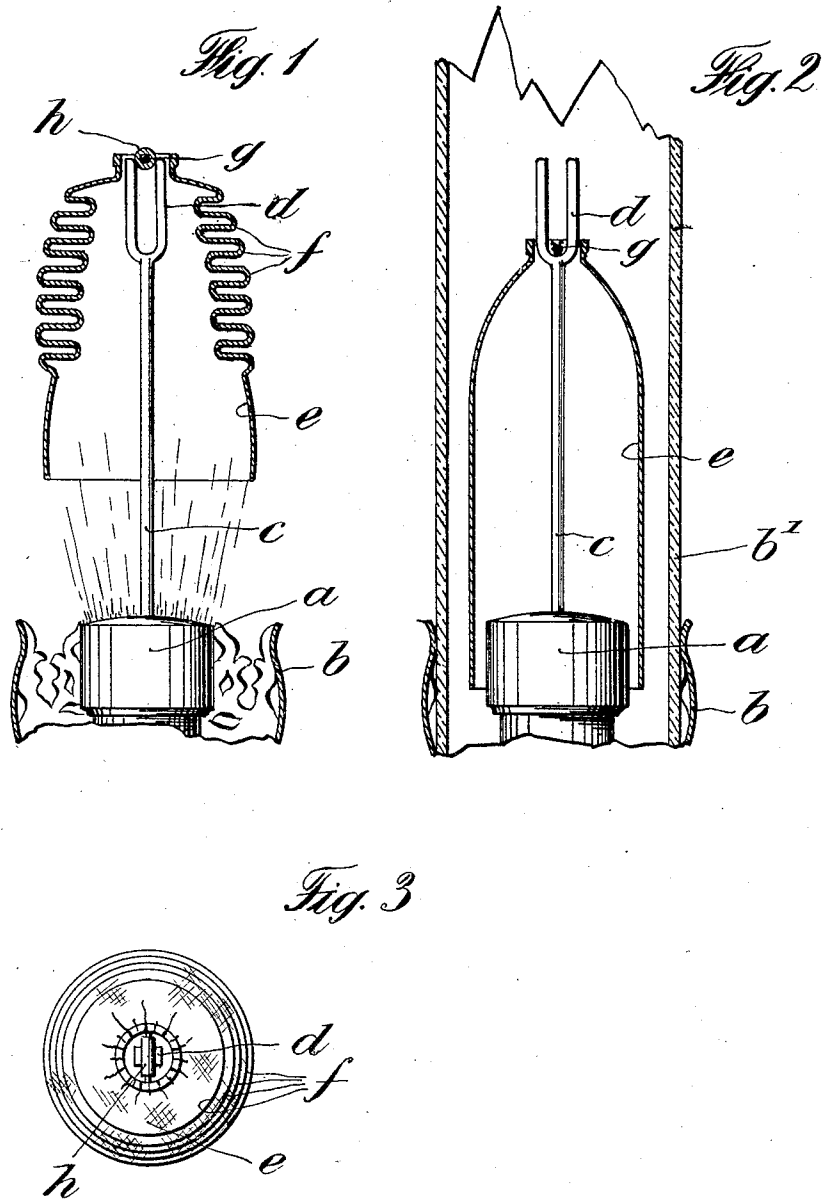


M. WEICKERT.
 INCANDESCENT MANTLE FOR GAS BURNERS.
 APPLICATION FILED JUNE 19, 1909.

944,928.

Patented Dec. 28, 1909.



Witnesses:

[Signature]

[Signature]

Inventor

Max Weickert

[Signature]

James L. Norris

[Signature]

UNITED STATES PATENT OFFICE.

MAX WEICKERT, OF PLAUE, GERMANY.

INCANDESCENT MANTLE FOR GAS-BURNERS.

944,928.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed June 19, 1909. Serial No. 503,241.

To all whom it may concern:

Be it known that I, MAX WEICKERT, manufacturer, a subject of the German Emperor, residing at Plauen, in the Kingdom of Saxony, Germany, have invented certain new and useful Improvements Relating to Incandescent Mantles for Gas-Burners, of which the following is a specification.

The specification of my British patent No. 2572 of 1908 describes a method of burning off uncalcined incandescent mantles on the burner, by means of an elongated fork, so as to afford to the asbestos-eye of the mantle the freedom of motion, which is necessary for obtaining a sufficiently long mantle in view of the shrinkage caused by the calcination.

I have found, that after the burning of the mantle the lower part of the latter, or of the incandescent body obtained by the calcination of the mantle, is not sufficiently hardened, and consequently is liable to break during the motion of the lamp or through other mechanical shocks.

The present invention has for its object, to avoid these defects. For this purpose the asbestos-eye of the mantle is inclosed in a small tube or sleeve of aluminium or other metal, preferably in the shape of a coil which melts only in the heat of the flame, after the lamp cylinder has been mounted in its place, the width of the said tube or coil being such, that it will be held in the upper end of the fork. Moreover, the mantle is considerably shortened before being mounted on the burner, by the formation of zig-zag folds in the fabric, similar to those of a concertina.

The accompanying drawings represent an example of a device embodying my invention.

Figure 1 shows the folded mantle mounted on the burner, before being incinerated or burned. Fig. 2 shows the same mantle after incineration, Fig. 3 is a plan of the device shown in Fig. 1.

a is the burner top carrying the pin or needle *c* provided at the upper end with a long fork *d*. The mantle *e* is provided with folds *f* and its suspension string *g* carries a sleeve *h* of aluminium or other suitable metal.

b is the ordinary metal collar for holding the lamp-cylinder *b'*.

The mantle provided with an aluminium coil or tube and with folds is mounted on the burner pin or needle provided with extended fork, and after the burner has been fixed in the lamp, the gas is ignited. The mantle will at once burn to ashes, without causing the metallic coil to melt. As soon as the cylinder is mounted in its place, the coil will melt, owing to the increase of temperature thus produced, and the eye will slide down and rest in the fork of the needle. At the same time the folds of the mantle will disappear, and the latter will assume a faultless shape.

During the short time of the melting of the metal coil the lower part of the mantle or incandescent body is also exposed to intense heat, causing it to harden sufficiently, so that the lower part of the incandescent body will offer sufficient resistance to mechanical shocks.

What I claim is:—

1. The combination of an extensible incandescent mantle for gas burners, with a metallic sleeve adapted to surround the eye of the mantle and to melt, after the lamp-cylinder has been mounted on the burner, substantially as described.

2. The combination of an incandescent mantle provided with folds, with a metallic sleeve adapted to surround the asbestos-eye of the mantle and to melt, after the cylinder has been mounted on the burner, substantially as described and for the purpose specified.

3. The combination of an extensible incandescent mantle for gas-burners with a metallic coil forming a sleeve around the eye of the mantle and adapted to melt in the heat of the flame after the mantle has been mounted on the burner, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MAX WEICKERT.

Witnesses:

ALFRED KROBEL,
MAX WEICKERT, Jr.