## H. HEIDORN.

HOLDER OR HEAD FOR INCANDESCENT GAS MANTLES.

APPLICATION FILED AUG. 6, 1903.

Fig. 1

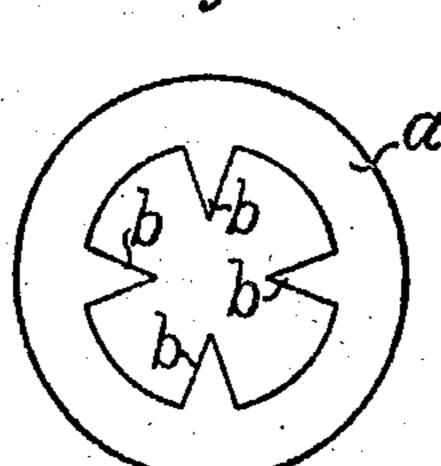


Fig. 2

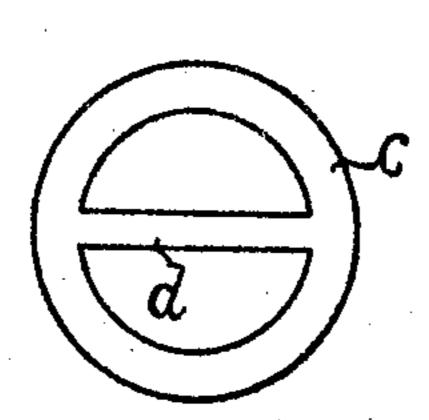


Fig. 3

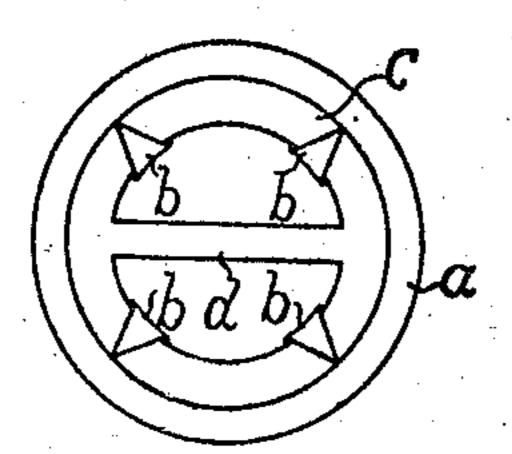
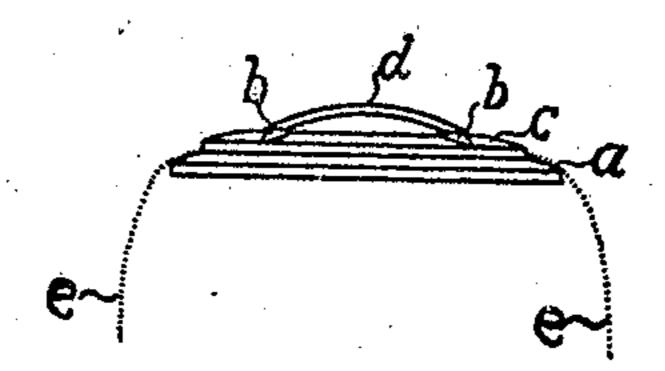


Fig. 4



Whithnesses.

Auga Herdon

## UNITED STATES PATENT OFFICE.

HUGO HEIDORN, OF HAMBURG, GERMANY.

## HOLDER OR HEAD FOR INCANDESCENT GAS-MANTLES.

No. 805,911.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed August 6, 1903. Serial No. 168,444.

To all whom it may concern:

Be it known that I, Hugo Heidorn, a citizen of the Empire of Germany, and a resident of Hamburg, in the Empire of Germany, have 5 invented certain new and useful Improvements in Incandescent-Mantle Supports, of which the following is a specification.

This invention relates to supports for incandescent mantles, and has for its object to 10 provide means for supporting an incandescent mantle, the use of which insures an efficient support of the mantle and prevents the sosupported mantle from being subjected to injurious strains—the cause of rapid deteriora-15 tion and consequent uselessness. For this purpose the invention consists of an incandescent-mantle support comprising a mantlesupporting disk and means for clamping the mantle to the same, as will be more fully de-20 scribed hereinafter and finally pointed out in the claims.

In the accompanying drawings, which are on an enlarged scale, Figure 1 is a plan of a mantle-supporting disk. Fig. 2 is a plan of 25 a clamping-disk. Fig. 3 is a plan of a complete support or holder, and Fig. 4 is a side view showing the mantle in dotted lines.

Similar letters of reference indicate corre-

sponding parts.

Referring to the drawings,  $\alpha$  represents a flat ring or disk provided with inwardly-projecting flexible teeth b and having its top face slightly curved inward or circularly inclined. On this disk a the mantle e rests and is thereby 35 supported, the object of the curved top face being to offer a smooth seat to the mantle to subject it to no projections and to prevent thereby unequal strains. The flat ring or disk c, (shown in Fig. 2,) of somewhat smaller diam-40 eter than the disk a, is also slightly curved inward at its upper face and is provided with an arched transverse connecting-piece d, which is adapted to rest on a forked or hook-shaped supporting-rod well known in the art, so not 45 shown nor to be described in detail.

Having placed the upper end of the mantle on the supporting-disk a, the second disk c is placed on top of the upper end of the mantle and disk a and the teeth or projections b50 turned over, so as to press the disk c against

the supporting-disk a, and thereby clamp the mantle between the disks and firmly secure and support the same.

The disks  $\alpha$  and c, which are preferably of thin sheet metal, may be made of any other 55 durable fireproof material, as as bestos or such.

Various modifications may be used without departing from the spirit of my invention, the main object of the same being to provide means on which the mantle uniformly rests 60 and to which it is securely attached.

My invention does away with the asbestos thread-holder, which is drawn through the top edge of the mantle and tied and which in the manufacture of the mantle necessarily in- 65 creases its costs. Further disadvantages are that when the mantle is exposed to vibrations independent of as well as due to ignitions circles very readily appear immediately below the top, that in the course of use the curva- 70 ture of the upper part of the mantle gradually becomes less and so the upper part of the mantle pointed, thereby decreasing the incandescence and lighting effect of the mantle, and that due to unequal strains arising from im- 75 proper support the sides of the mantle easily crack and frequently cause the breaking of the chimney. These disadvantages are obviated by my improved and herein-described means.

When packing mantles provided with my 80 improved support in cardboard packages, it is proposed, as the improved support is somewhat heavier than the old asbestos threadsupport, to provide supports of paper, cardboard, or sheet-metal, or the like, conforming 85 to the shape of the mantle, and to push these under the pendant of the incandescent mantle—that is, under the transverse piece d and so keep the mantles firmly in position. A packing-support as described prevents the 90 mantles from being damaged by concussions and renders the so-packed mantles by far more durable than when packed with wadding in the ordinary cardboard packing.

I claim as new and desire to secure by Let- 95 ters Patent—

1. A support for incandescent mantles, comprising a mantle-supporting disk, a clampingdisk, and means for pressing said clampingdisk against the mantle-supporting disk for 100 securing the mantle interposed between the disks.

2. In an incandescent-mantle support, the combination, with a mantle-supporting disk 5 having inwardly-projecting teeth and having a curved upper face, of a second disk having a cross-piece and a curved upper face, said disks being adapted to clamp the interposed

.

mantle on bending the teeth of the mantle-supporting disk against the second disk.

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

HUGO HEIDORN.

Witnesses:

E. Strahlendorf,

M. WENDT.