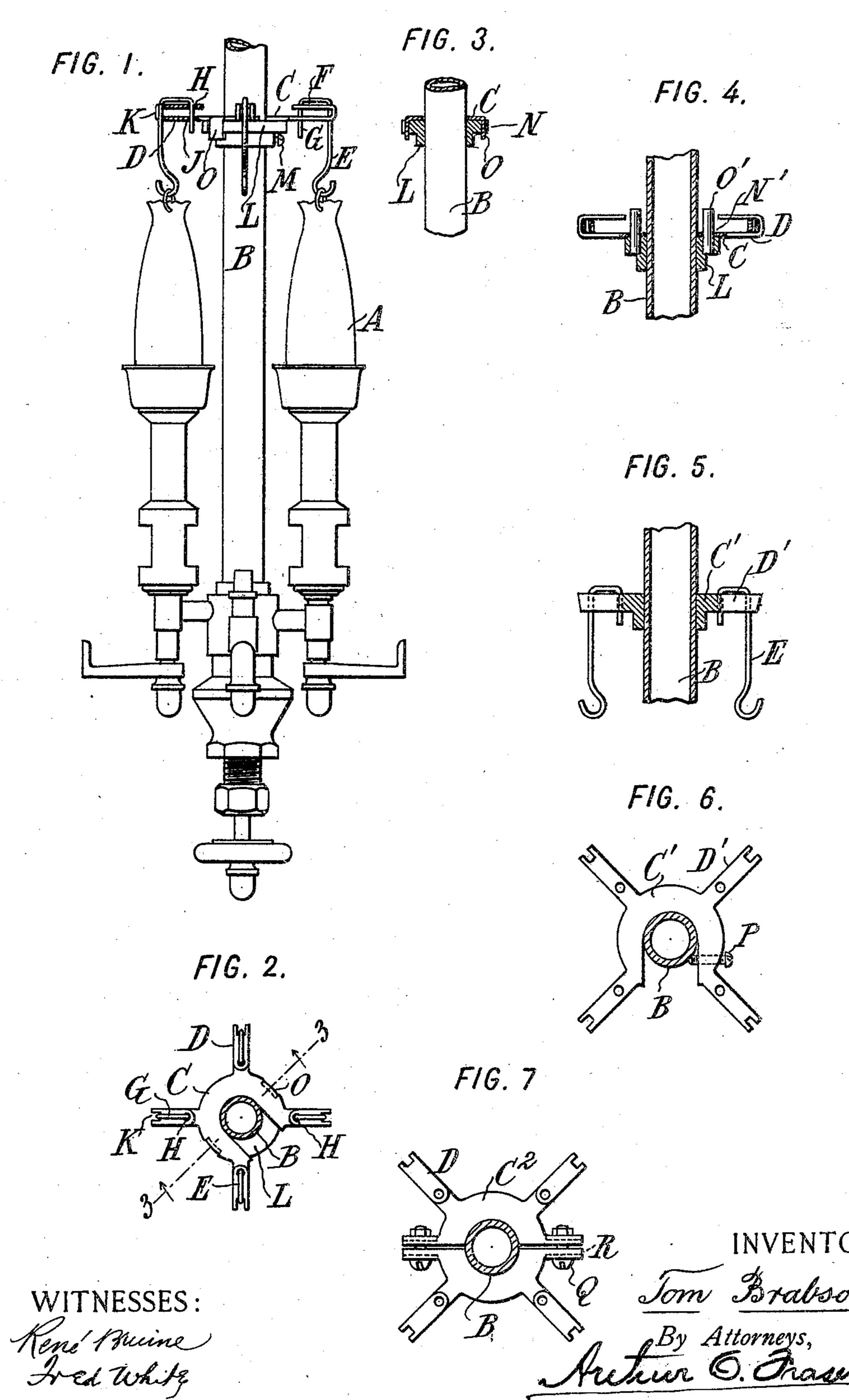
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## MANTLE HOLDER FOR INCANDESCENT LAMPS.

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## United States Patent Office.

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## MANTLE-HOLDER FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 794,158, dated July 11, 1905.

Application filed September 29, 1904. Serial No. 226,573.

To all whom it may concern:

Be it known that I, Tom Brabson, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State 5 of New York, have invented certain new and useful Improvements in Mantle-Holders for Incandescent Lamps, of which the following

is a specification.

In incandescent lamps suspended from over-10 head it is usual to support the mantle or mantles from a pipe or other depending rod alongside which the mantles are arranged. The mantle-holder being directly over the burners and incandescent mantles is subjected to a 15 most intense heat. The alternate intense heat and cold cause the holder to scale and to warp out of its original shape, so as to throw the mantles out of their proper position directly above the burners. The holders also unless 20 made quite heavy are liable to have one or more of their arms burned out entirely. The removal of the holders, as ordinarily constructed, is slow and laborious, the pipe having to be disconnected at its lower end and 25 the entire lamp lowered, so that the holder can be removed from the pipe endwise and a new one replaced in the same way. Consequently rather than spend this time and labor the burners are allowed to remain in their 30 warped condition and the efficiency of the lamp is reduced.

According to this invention a holder is provided which can be very readily applied to the pipe and removed therefrom without in-35 terfering with any other parts of the lamp. This facility of renewal permits the use of a light cheap sheet-metal holder which can be replaced by a new one in an instant when the old one becomes warped or burned out. A 40 more efficient lamp is thus secured and one | being preferably projections, pins, or the like which can be repaired at a lower cost than before with respect to the holders. Various other advantages are referred to in detail hereinafter.

The accompanying drawings illustrate certain embodiments of the invention.

Figure 1 illustrates in side elevation a cluster-lamp with an improved mantle-holder. Fig. 2 is a plan of the holder in place. Fig.

3 is a section on the line 3 3 of Fig. 2. Fig. 50 4 is a similar section of another style of holder. Figs. 5 and 6 are respectively a longitudinal section and a plan of another style of holder. Fig. 7 is a plan of still another form.

In the embodiment illustrated the mantles 55 A are arranged around the central pipe B, and the holder is supported from said pipe.

Referring to Figs. 1 to 4, the holder comprises a ring C open at one side to permit its application onto the pipe and having one or 60 more arms D, from which the mantles depend through the intermediation of wire hangers E. The holder may be cheaply made by stamping it out of sheet metal, preferably brass, the arms being formed of considerable depth 65 by bending over the ends F of the metal considerably above its original plane. The depth thus given to the arms serves to prevent swinging of the hanger E in a direction transverse to its supporting-arm. The hanger is 7° provided with a hooked upper end G, and in order to permit the easy application of the same and also to hold it rigidly in position apertures H and J are provided in the end F and the body B of each arm, through which 75 apertures the hooked end G of the hanger is dropped, and the vertical slot K is formed in the outer end of the arm, in which slot the shank of the hanger E lies. In replacing a mantle the hanger E can be very quickly lift- 80 ed off the arm and replaced thereon.

Any suitable means for preventing the holder from sliding on the pipe may be provided. For example, a permanent heavy ring L may be fastened by set-screws M in posi- 85 tion to sustain the mantle-holder and mantles.

Means are also provided for fixing the holder against rotation about the pipe, these on one part fitting into suitable apertures or 90 recesses upon the other. For example, in Fig. 3 the fixed ring L is provided with one or more vertical slots N in its periphery, and the sheet-metal holder C is provided with corresponding ears O, bent down at the edge of 95 the ring of sheet metal and fitting within the slots N. It is advantageous to have the devices O upon the outer edge, so that if they

become stuck in place and broken off from the rest of the holder they can be easily removed to make room for a new holder. Another device for preventing rotation of the 5 holder is shown in Fig. 4, in which pins O' in the fixed ring Lare arranged to pass through apertures N' in the removable holder C.

The mantle-holder instead of merely resting upon a fixed ring or other projection on ro the pipe at a fixed elevation may be provided itself with means for fixing it upon the pipe at any desired elevation. Likewise instead of being of sheet metal it may be made of a casting or the like. For example, the holder 15 of Figs. 5 and 6 comprises a casting having a central ring C' open at one side to admit the pipe B and having arms D' of sufficient depth and provided with suitable holes and slots to receive and hold the hanger E in a manner 20 similar to that described in connection with the sheet-metal holder. The holder may be applied to the pipe at any desired height and clamped thereon by a set-screw P, or instead of forming the ring in one piece it may be 25 formed, Fig. 7, in two half-rings C2, the opening at the center of which is large enough to admit the pipe B, after which the half-rings are brought nearly together, screws Q being passed through flanges R, bent down from 3° the plane of the half-rings C2 to clamp the holder on the pipe.

With the holder of Figs. 1 to 4 the substitution of a new holder is effected by merely lifting and withdrawing the old holder sidewise. With the construction of Figs. 5 to 7 it is only necessary to turn a screw and withdraw the holder sidewise.

Though I have described with great particularity of detail certain devices embodying the invention, yet it is not to be understood therefrom that the invention is limited to the specific embodiments disclosed. Various modifications thereof may be made by those skilled in the art without departure from the invention.

What I claim is—

1. In an incandescent lamp, the combination of a pipe, a support on said pipe, and a sheet-metal mantle-holder adapted to be held

by said support, said holder having a central 50 opening through which the pipe may pass, and a lateral opening to admit the pipe to such central opening, whereby such holder may be freely attached to and detached from said pipe.

2. In an incandescent lamp, the combina- 55 tion of a pipe, a support on said pipe, a mantle-holder adapted to be held by said support, said holder having a central opening through which the pipe may pass, and a lateral opening to admit the pipe to such central opening, whereby such holder may be freely attached to and detached from said pipe, and means for fixing said holder against rotation relatively to the pipe.

3. A sheet-metal mantle-holder for incan- 65 descent lamps, having an arm D with ends F bent back to increase the depth of the arm.

4. The combination with a supporting device having suitable recesses, of a mantle-holder having ears O for engaging said re-70 cesses and determining the angular position of the holder relatively to its support.

5. A mantle-holder comprising a ring of sheet metal having an arm D with a bent-back end F for supporting a mantle, and having 75 an ear O for determining its angular position.

6. The combination of a pipe B and a fixed ring L thereon, of a sheet-metal mantle-holder comprising a ring C having a central opening adapted to receive said pipe and open 80 at the side to admit said pipe, and having an arm D for holding a mantle.

7. The combination of a pipe and a fixed ring L thereon, of a sheet-metal mantle-holder comprising a ring C having a central 85 opening adapted to receive said pipe and open at the side to admit said pipe, and having an arm D for holding a mantle, said ring being provided with a groove N in its periphery and said mantle-holder with an ear O fitting in 90 said groove.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

TOM BRABSON.

Witnesses:

Domingo A. Usina, Fred White.