Nov. 12, 1946. D. PESIN 2,410,997

SOCKET FOR FLUORESCENT LAMPS

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Fig. 2

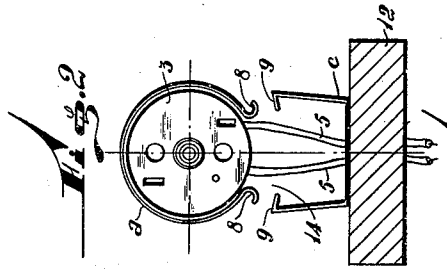


Fig. 4

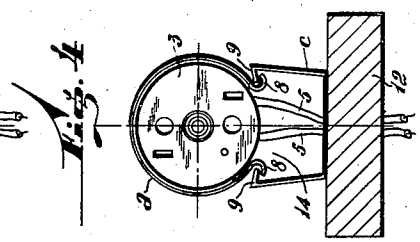


Fig. 1

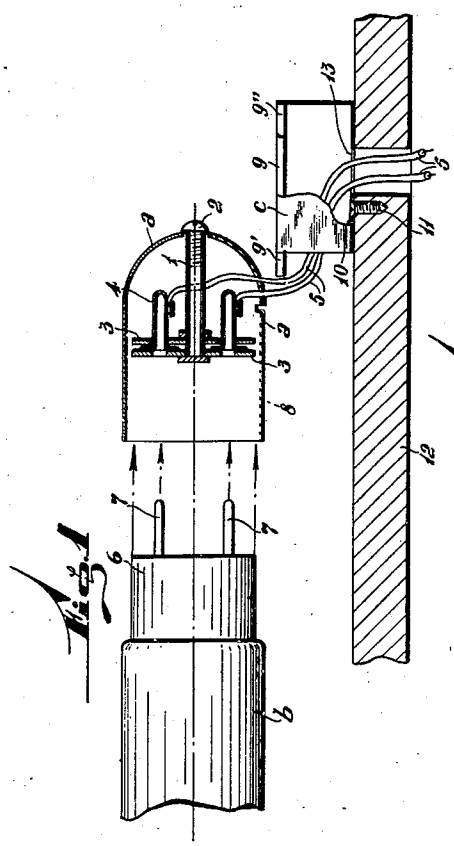
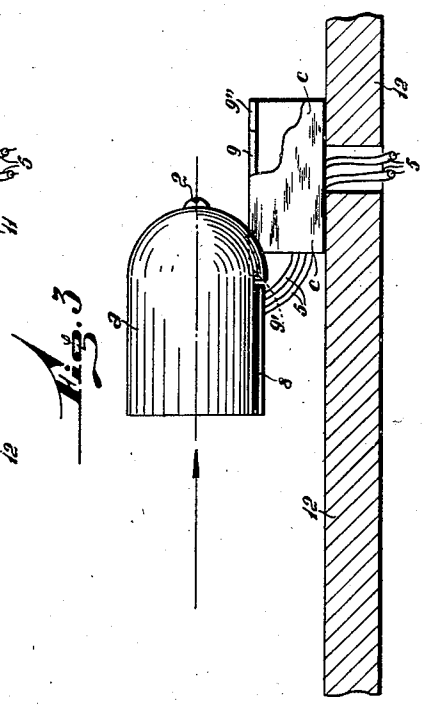


Fig. 3



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Fig. 6

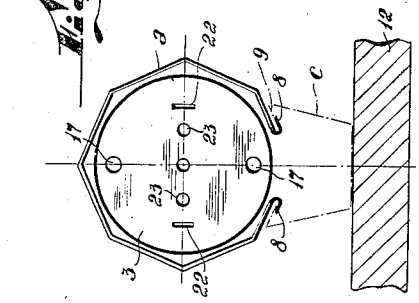


Fig. 8

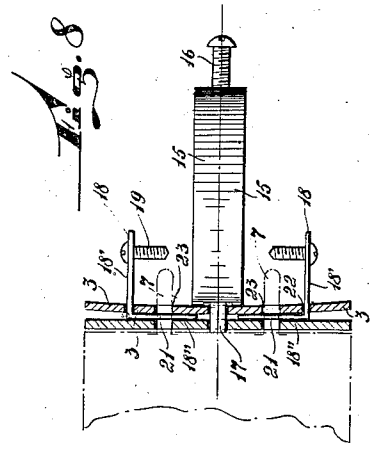


Fig. 5

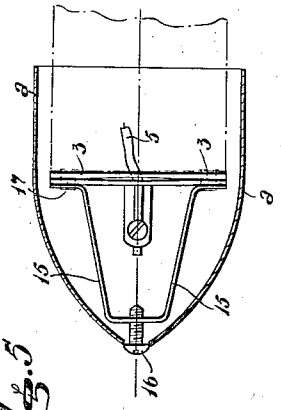
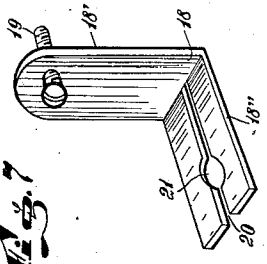


Fig. 7



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SOCKET FOR FLUORESCENT LAMPS

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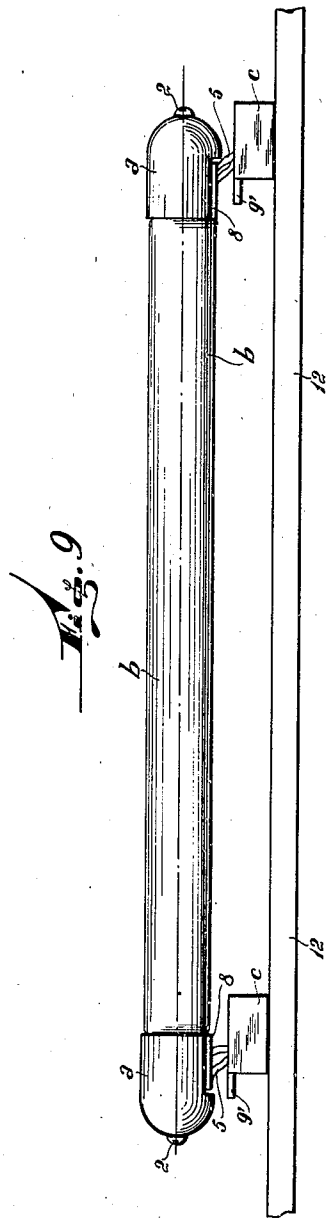


Fig. 9

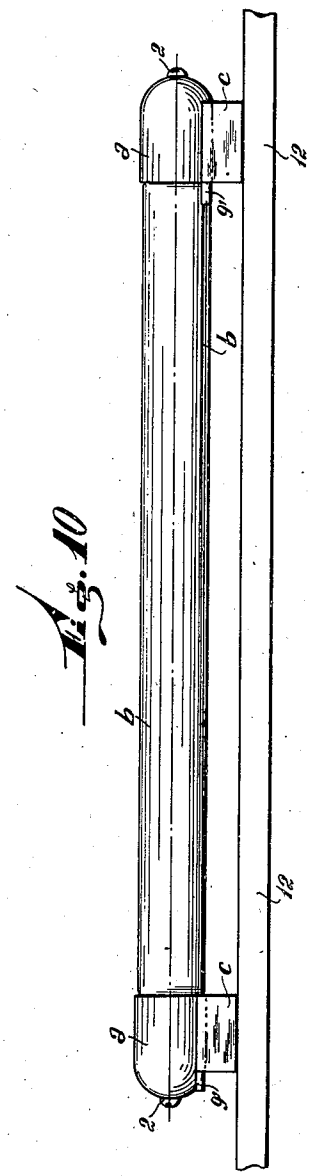


Fig. 10

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UNITED STATES PATENT OFFICE

2,410,997

SOCKET FOR FLUORESCENT LAMPS

Daniel Pesin, Wilde, Argentina

Application February 25, 1944, Serial No. 523,797
In Brazil August 25, 1943

1 Claim. (Cl. 173—328)

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This invention relates to improvements in sockets for fluorescent lamps and substantially has for object to provide a mounting base of this kind which owing to its convenient features will constitute by its general adoption, a valuable contribution to the respective industry.

The invention refers to the combination of two caps which by means of insulating blocks with plug holes, receive the pins of the plug bases of the lamps or tubes, and owing to each cap being provided with its own sliding members for adaption to the respective holder, a disconnectable mounting is provided, adapted to be readily placed in position and operated.

The invention also views other objects, among which is to be noted the means for readily and conveniently replacing the tubes, owing to the detachable arrangement of the caps which beside their own holder and without interrupting the connection, allow of the necessary separation for disconnecting the socket bases and readily applying a substituting lamp.

A further object consists in providing means for the adaption of tubes or lamps with certain differences in size, because the slidable arrangement of the caps on the mounting or holder allows of varying the adjustment, after the manner of a damper, without impairing the stability of the holder itself.

Another object of the invention consists in providing an unexpensive mounting by using a device of simple construction.

Another object still is to arrange the mounting sockets and plugs in such a way that a set of terminals will be obtained adapted to serve as a supplementary ornament for the tube, as in the case of fancy fittings.

Other objects of the invention will become apparent from the course of this specification, accompanied, in order to facilitate a clear understanding of the same, by several sheets of drawings illustrating, by way of example, a preferred embodiment of the invention and wherein:

Fig. 1 is a side view of the socket cap removed from its holder mounting the cap being shown in section to illustrate the simplicity of its construction.

Fig. 2 is an end view of the same socket cap, also in its position removed from the holder or fitting.

Fig. 3 is a graphical illustration of the manner of applying the socket cap to the respective holder.

Fig. 4 shows an end view of the same cap, applied to its holder.

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Fig. 5 is a modification of the socket shown in the preceding figures, the cap being shown in section so as to illustrate the alterations introduced.

Fig. 6 is a profile of the cap shown in Fig. 5.

Fig. 7 shows a detail of the plug holes for the plug pins of the lamp cap which, as will be noted, differ from the arrangement shown in Fig. 1.

Fig. 8 illustrates a detail of the manner of arranging the plug holes of Fig. 7 in the socket block, showing also a modified holder structure, similar to that of Figure 5.

Fig. 9 illustrates the manner of performing the mounting and dismounting of the tube, the bases of which are adapted to corresponding caps which besides being connected to the distribution line, register for fitting the respective holders, and finally,

Fig. 10 is a graphic illustration of the general mounting of a lamp or tube which by means of end caps is applied to the holders which serve as a joint support for the same.

The same numbers and letters of reference have been used to indicate like or corresponding parts.

With reference to Figs. 1 to 4 and 9 to 10 of the drawings, the improved lamp socket comprises the caps *a*, formed, as may be seen, by a shell of suitable depth, provided with an axial pin **1** which extends from the centre of the bottom of the shell, where it is secured in position by a screw **2** extending axially through a hole formed in the bottom of said shell.

The pin **1** serves as a support for the block **3** of dielectric material and provided with a pair of sheath shaped plug holes **4** to which are connected the leads **5** supplied with current for feeding the lamp *b*.

The lamp *b* is provided in the usual manner, at both ends with caps **6**, provided with plugs or pins **7** registering with the sheaths or lining of the plug holes **4**, so that when inserting the plugs in these latter, the lamp will be connected to the sockets conjointly.

The cap *a* of each socket is provided with a pair of channels **8** for the reception of the wings **9** of each holder *c* for supporting its corresponding socket. Each holder *c* is provided on each of its wings **9** with an extension **9'**, which operates to guide the channel into position, and at its opposite end, said wing is formed with a bent over portion **9''** which serves as a stop for limiting the motion of the cap by its channel **8**, as indicated in the position of Fig. 6; the extension **9'** of the wing being such that after mounting

the cap with its channel, a gripping means is provided by the end fold of the portion 9' in cooperation with the bent over portion 9''.

The holder *c* is U shaped, with its two edges bent in an acute angle, so as to form said wings 9, as indicated in Figs. 2 and 4. At the bottom of the profile, the holder is provided with two holes, one of them, indicated at 10, for the reception of a screw 11 for securing the holder to a suitable base 12; the other hole, indicated at 13, allows the passage of the ends of the leads 5, so as to bring these latter in front of the slot 14, formed at the lower part of the cap *a*, the leads being caused to pass through said slot for their respective connection to the sheaths 4 of the block 3. Said leads pass quite loosely and with some excess of length, so that besides allowing the sliding of the caps on the holder *c*, they enable the caps to be withdrawn a sufficient extent for the connection or disconnection of the lamp or tube *b*.

The socket thus far described and shown in Figs. 1 to 4 may vary in construction, according to the features illustrated in Figs. 5 to 8; with reference to the same it will be seen that the cap *a* is practically the same, being in this case of hexagonal shape. The block 3, formed by two dielectric discs, is attached to the bottom of the cap by means of a yoke 15, in replacement of the pin or spindle 1 in the former construction. The yoke 15 is affixed to the cap by means of a screw 16, the ends of its legs being retained against the block 3 by rivets 17 which also pass through the discs forming said block.

In this construction, the plug holes for the pins or plugs of the lamp bases have also been modified. As more particularly shown in Figures 5, 7 and 8, each of said means for receiving the plugs consists of a small metallic plate 18, preferably bent to a right angle so as to form two wings 18' and 18''. In the former of the same, a screw 19 is provided for securing the corresponding lead end 5, while in the other wing is formed with a longitudinal slot 20 which divides the same into two parts for imparting a certain resiliency to the same and conveniently assure the adjustment of the plugs 7 of the lamp. For improving the said adjustment, curved notches 21 are formed at an intermediate point of said slot, which owing to their shape facilitate the adaption of the plugs or pins 7.

With reference to Figs. 5 and 8, the manner of securing the plate 18 with the plug holes to the block 3; the disc of this latter which faces the

interior of the cap *a*, is provided with two slots 22, through which the wing 18' of the plate is caused to pass, so that the other wing 18'' will be firmly gripped between the two discs of the block 3, which will of course have been provided, for the passage of the plugs 7 of the lamp base, with suitable holes 23 registering with the notches 21.

For mounting and connecting a lamp or tube *b*, the caps *a* are withdrawn from the holders *c*, as shown in Fig. 1, so as to enable the plugs 7 of the end bases 6 to insert in the holes 4 of the respective blocks of the caps *a* of either end.

After plugging the bases 6 into the caps *a* in the manner shown in Fig. 9, it will suffice to slide the channels 8 on the wings 9 of the respective holders *c* until abutting against the stops 9'', to secure a perfect mounting and connection as clearly illustrated in Figure 6, wherein the holders *c* operate as supports for the sockets constituted by the caps *a* which, in turn, support and connect the lamp or tube *b* for supplying the same with current.

As the base 6 enters to a greater part into the cavity of the shell forming the cap *a*, when the conjoint is mounted as indicated in Figure 6, the caps will form a sort of ornamental terminals of the tube.

It will be evident that when carrying this invention into practice, several modifications may be introduced in the construction and shape of the improved sockets as above described, without departing from the main features of the same, to be particularly set forth in the final claiming clauses hereunto annexed.

I claim:

In a mounting for fluorescent lamps, a capsular cap enclosing an insulating block consisting of two superposed discs of insulating material provided with aligned plug holes for the plugs of a lamp base, means for supporting said insulating block in said capsular cap, and two contact elements, each comprising an angle plate having two wings at substantially right angles to each other, one of said wings being provided with an axial slit and with two intermediate opposite notches to form a plug receiving opening, said slitted wing being inserted between the two discs constituting said block with its plug receiving opening in register with the corresponding plug holes in said discs, the other wing of each angle plate passing through a slot in one of said discs and carrying means for attaching a lead terminal thereto.

DANIEL PESIN.