June 2, 1925. 1,540,174

C. S. MALLETT

CLUSTER PLUG

Filed Nov. 26, 1921

Fig. 2.

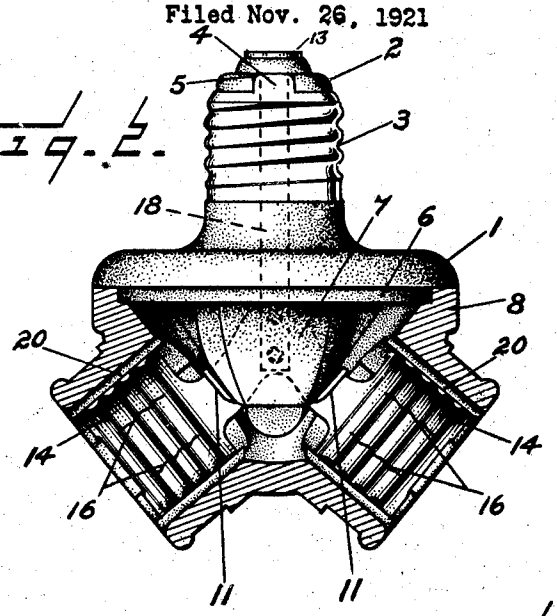



Fig. 3.

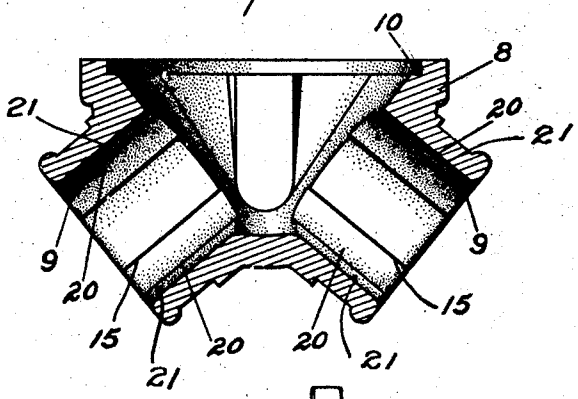
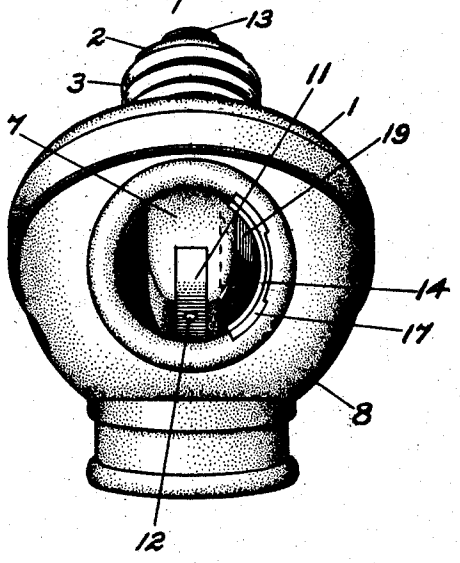



Fig. 1.



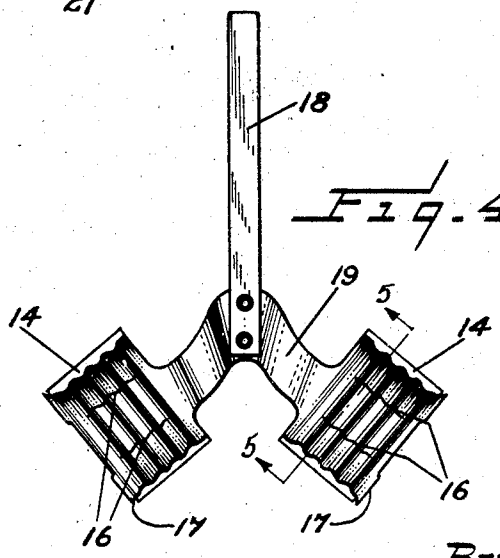




Fig. 4.

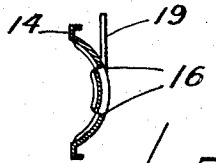



Fig. 5.

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# UNITED STATES PATENT OFFICE.

CHARLES STANLEY MALLETT, OF TORONTO, ONTARIO, CANADA.

## CLUSTER PLUG.

Application filed November 26, 1921. Serial No. 517,971.

*To all whom it may concern:*

Be it known that I, CHARLES STANLEY MALLETT, a subject of the King of Great Britain, and a resident of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Cluster Plugs, of which the following is the specification.

My invention relates to improvements in cluster plugs and the object of the invention is to devise a cluster plug which in addition to permitting both the base and cover to be constructed of insulating material, will do away with the necessity of using the annular lamp screw shells by substituting sectional threaded metal contact pieces. A further object is to construct a cluster plug in which the sectional threaded metal contact pieces replacing the lamp screw shells will form a perfect contact with the lamp and which moreover, may be constructed very cheaply.

My invention consists of a cluster plug constructed and arranged substantially as hereinafter more particularly described and illustrated in the accompanying drawing in which:

Fig. 1 represents a perspective view of a cluster plug constructed according to my invention.

Fig. 2 is a cross sectional view through the cover thereof, showing the base in elevation and showing the disposition of the sectional contact pieces in said cover.

Fig. 3 is a similar section of the cover to that shown in Figure 2, with the sectional contact pieces removed, and

Fig. 4 is an elevational detail of the contact pieces used in a double cluster plug, showing the means of connecting them to the main screw plug shell.

Fig. 5 is a cross sectional view on the line 5—5, Figure 4.

Like characters of reference indicate corresponding parts in the different views.

1 is the base of the plug constructed of suitable material such as porcelain and provided with an upwardly extending shank 2 carrying the main screw plug shell 3. 4 are inwardly extending teats formed on the top of the main screw plug shell 3 and adapted to be inserted into indentures 5 in the shank 2. 6 is an annular depending portion formed on the lower face of the base 1 and provided with the depending wedge-shaped boss 7 having its two side walls inclined oppositely at suitable angles.

8 is a hollow cover constructed of insulating material such as porcelain and provided with oppositely inclined annular orifices 9. 10 is an annular shoulder formed in the open top of the cover 8 to receive the depending portion 6 of the base. 11 is a strip of metal, the ends of which are oppositely inclined, said strip of metal being attached centrally of the bottom of the boss 7 by means of the vertical screw 12 which extends up through the boss 7, depending portion 6, base 1 and shank 2 to the top of the latter and also holds in place the contact washer 13.

14 are the opposed sectional threaded contact pieces preferably stamped of a single piece of metal, said contact pieces inserted into channels 15 in the orifices 9. 16 are suitably spaced longitudinal slots through the contact pieces in order that the portion of the material therebetween may be raised to constitute a spring and make a more perfect contact with the lamp base. The outer ends 17 of the contact pieces are flared to facilitate the entry of the screw base of the lamp into the fitting. 18 is a metal strip suitably secured to the yoke-piece 19 connecting the two contact pieces together, said metal strip extending up through the base 1, shank 2 and suitably secured to one of the teats 4 of the main screw shell.

In inserting the contact pieces 14 into the grooves 15 it will be understood that the side edges of such contact pieces are turned to constitute flanges, the outer surfaces of which engage the side shoulders or walls 20 of the channel 15 and their free edges engage the base of the channel in proximity to the shoulders 20. Consequently such contact pieces are adapted to be sprung into such channel.

From the above description it will be seen that I have devised a simple and effective fitting that will replace the ordinary lamp screw shells and which can be manufactured at an exceedingly low cost. Owing to the spring of the contact pieces and in addition the central portion thereof being raised to constitute a spring, the contact with the screw lamp base will be exceedingly good.

Although I have described and illustrated the contact pieces as applied to cluster plugs

it is to be understood that a single contact piece could be used with any suitable lamp screw base receiving socket provided the same be constructed of insulating material or has an insert of insulating material in which the contact piece is mounted.

What I claim as my invention is:

1. In cluster plugs, the combination with a cover having lamp base receiving orifices, of segmental conducting contact pieces of resilient material sprung into slots in the orifices and constituting resilient contacts with the bases of the lamps inserted into such orifices.

2. In cluster plugs, the combination with a cover having lamp base receiving orifices, of segmental conducting contact pieces of resilient material sprung into slots in the orifices and constituting resilient contacts with the bases of the lamps inserted into such orifices, said contact pieces ribbed transversely, such ribs pitched at the same pitch as the threads of the lamp bases.

3. In cluster plugs, the combination with a cover having lamp base receiving orifices, of segmental conducting contact pieces of resilient material sprung into slots in the orifices and constituting resilient contacts with the bases of the lamps inserted into such orifices, said contact pieces ribbed transversely, such ribs pitched at the same pitch as the threads of the lamp bases, and resilient raised portions on said contact pieces constituted by double slotting the same longitudinally and embossing the portions lying between said slots.

CHARLES STANLEY MALLETT.