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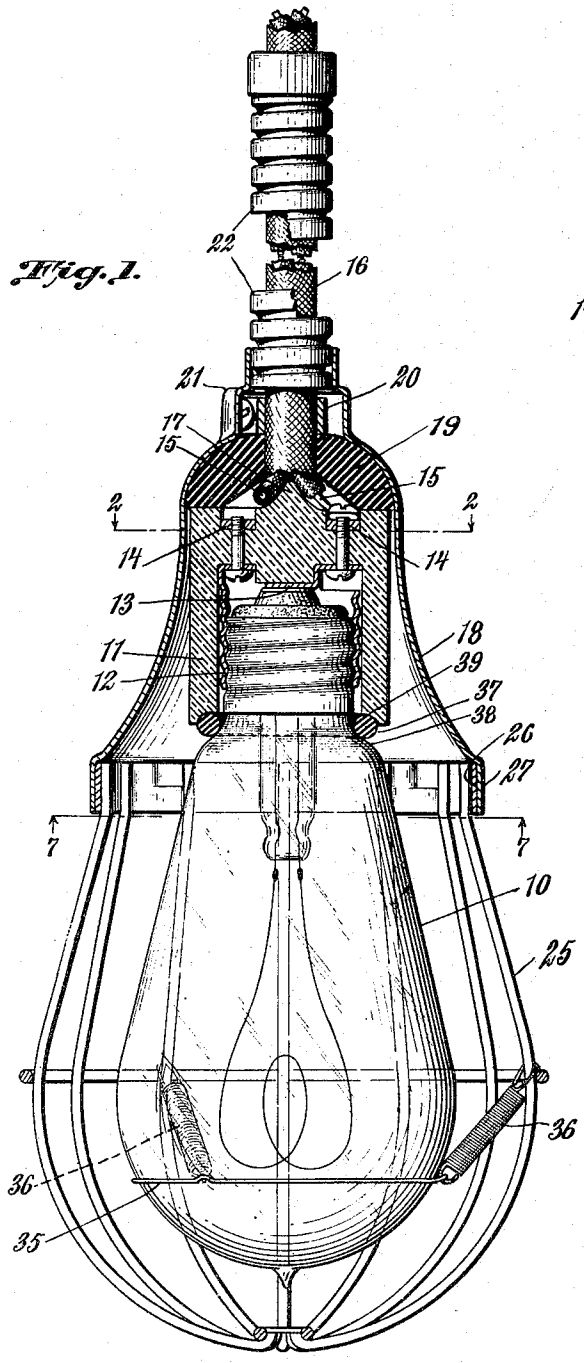
HAND PORTABLE ELECTRICAL RECEPTACLE.

APPLICATION FILED JUNE 4, 1919.

1,402,735. Patented Jan. 10, 1922.

2 SHEETS—SHEET 1.

Fig. 1.



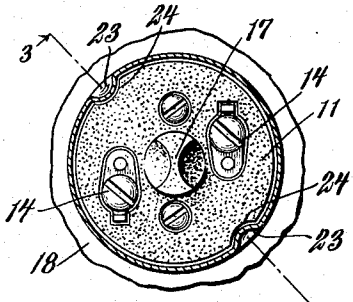


Fig. 2.

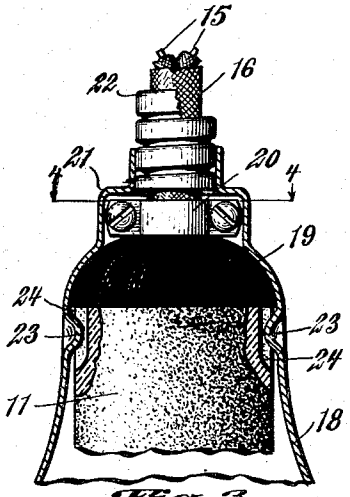


Fig. 3.

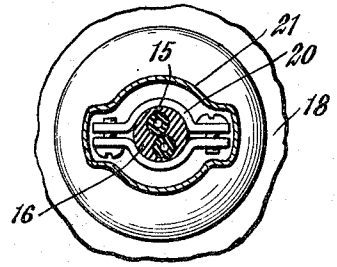


Fig. 4.

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2 SHEETS—SHEET 2.

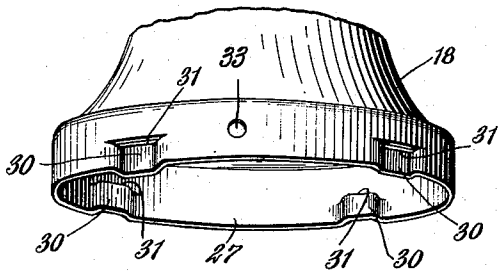


Fig. 5.

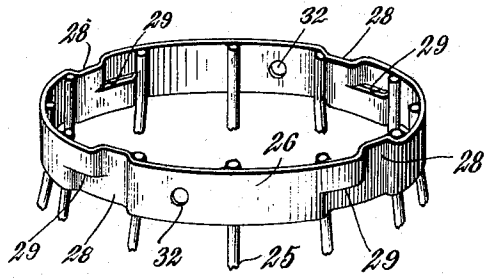


Fig. 6.

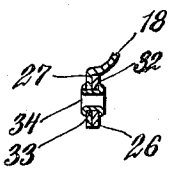


Fig. 8.

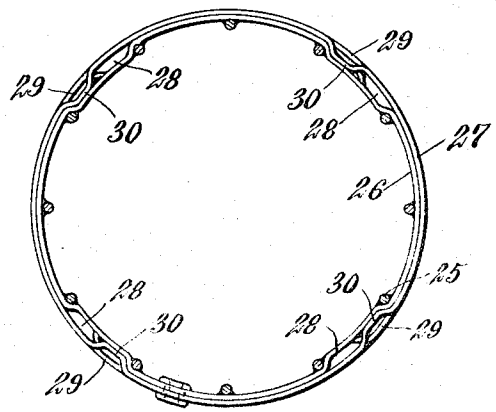


Fig. 7.

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UNITED STATES PATENT OFFICE.

REUBEN B. BENJAMIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO BENJAMIN ELECTRIC MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

HAND PORTABLE ELECTRICAL RECEPTACLE.

1,402,735. Specification of Letters Patent. Patented Jan. 10, 1922.

Application filed June 4, 1919. Serial No. 301,674.

To all whom it may concern:

Be it known that I, REUBEN B. BENJAMIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Hand Portable Electrical Receptacles, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to a hand portable electrical receptacle, and more specifically to a device designed for use in connection with a hand movable electric light to house and guard the same during usage. Electrical devices of this character, because of the portability thereof, are necessarily subjected to bumps, shocks and jars, which frequently result in breakage of the lamp globe or the filament thereof.

It is the object of this invention, therefore, to provide a receptacle or housing for an electric lamp in which the lamp will be yieldingly mounted in such a manner as to adapt the same to readily absorb shocks and jars to which the fixture may be subjected in usage, and thus prevent the breakage above referred to.

A further object is the production of a fixture of the character mentioned in which the terminal or current conducting parts will be positively sealed against contact with outside gases or the outside atmosphere.

A still further object is the provision of a device of the class referred to in which the receptacle or housing will be formed of a plurality of detachably connected sections which will be locked together in such a manner as to effectively guard against theft of the lamp.

A still further object is the provision of a fixture as mentioned which will be of durable and economical construction, of pleasing design, and highly efficient in use.

Other objects will appear hereinafter.

In the accompanying drawings forming a part of this specification, and in which one embodiment of the invention is shown—

Fig. 1 is a sectional view of a hand portable electrical fixture embodying the invention, the same being shown arranged in operative relation with an electrical lamp and its base;

Fig. 2 is a section taken on substantially line 2—2 of Fig. 1;

Fig. 3 is a section taken on substantially line 3—3 of Fig. 2;

Fig. 4 is a section taken on substantially line 4—4 of Fig 3;

Fig 5 is a perspective view of the lower portion of the upper section of the body of the device;

Fig 6 is a perspective view of the upper portion of the lower section thereof;

Fig 7 is a section taken on substantially line 7—7 of Fig 1, the electric lamp being omitted; and

Fig 8 is a fragmentary section through the locking element employed to lock together the two sections of the body of the device.

The preferred form of construction, as illustrated in the drawings, is designed for use in connection with an electric lamp 10 of conventional design, said lamp being mounted in a porcelain insulating base 11 in which is provided the usual side or shell contact 12 and the center contact 13, which contacts are held in place, for cooperation with the lamp, by means of the wiring terminals 14. Said wiring terminals serve as connections for the electric conductors 15, which are enclosed in a conventional insulation 16. To insure against contact between the ends of conductors 15 connected with terminals 14, a baffle 17 is provided which is formed centrally upon the rearward or upper side of base 11, as clearly seen in Figs. 1 and 2, and which effectively separates said conductor ends.

Enclosing said lamp and its base is a receptacle or housing of sectional formation, the same comprising an upper sheet metal cup or bell shaped section 18 in the upper or inner end of which is seated a cushion 19 of rubber or other resilient material against which the adjacent end of the base 11 is adapted to seat. Said cushion is of substantially hemispherical form and is provided with a central opening to allow for the passage of the conductors, said opening being, however, of such size that said cushion snugly embraces the conductor insulation 16 so as to form a positive seal around the same and prevent the passage of any gases through the joint.

To assist in preventing accidental disconnection of the conductors from the wiring terminals, a clip 20 is applied to the conductor insulation 16, and the upper end of section 18 is enlarged as at 21 to accommo-

date and embrace said clip. Applied to the conductor insulation is also a conventional guard or armor 22, one end of which is securely fastened in the rearward end of the receptacle section 18.

In order to prevent relative rotation of the lamp base in section 18, during application or removal of the lamp, said section is provided with diametric internal beads 23, which engage with correspondingly positioned recesses or notches 24 provided in said base, as clearly seen in Figs. 2 and 3. Said recesses extend from the inner end of said base so as to permit of engagement of said beads therewith when the base is slipped to position in the section 18, as will be readily understood.

Cooperating with section 18 is a lower receptacle section 25 of reticulate formation, the same being made up of a plurality of spaced crossed wires resulting in the production of a guard of substantially the same shape as the lamp globe in connection with which it is to be employed. Said guard 25 is provided at its upper or rearward end with a circular band 26 which is adapted to snugly fit within a circular flange 27 formed at the mouth or lower end of section 18. Said band 26 is formed through a stamping and punching process with a plurality of spaced angular exterior recesses 28 and circumferentially extending, downwardly facing shoulders 29. The flange 27 of section 18 is correspondingly formed with a plurality of spaced inwardly projecting portions 30, producing circumferentially extending upwardly facing shoulders 31. The arrangement is such that a bayonet joint is formed between the sections 18 and 25, the portions 30, in the connection of said sections, being adapted to enter the recesses 28 and the shoulders 29, upon clockwise rotation of said section 25, being adapted to engage with shoulders 31 to lock the parts together, as will be readily understood. In disconnecting said sections, the reverse movement of the parts is, of course, resorted to.

In order to positively lock said sections together so as to prevent surreptitious removal of the lamp, the band 26 of section 25 is formed with diametric openings 32, either one of which will be adapted to register with an opening 33 in section 18, when said sections are in interlocked relation. When said opening 33 is in registration with one of the openings 32, a metallic eyelet 34 is inserted therethrough and upset by a suitable instrument, as seen in Fig. 8, thereby locking the sections against relative rotation and thus preventing disconnection thereof. With this arrangement, in order to disconnect the sections so as to gain access to the lamp, it will be necessary to first destroy and remove the eyelet 34. This being the case, said eyelet will have a decided deterrent effect upon contemplated theft and will be far more effective as a positive lock than a bolt, nut, screw or other device which could be removed without destruction or mutilation of any part in order to effect the desired unlocking.

Engaging against the outer end of the lamp 10 is a wire loop 35 of a diameter less than the maximum diameter of the lamp, and cooperating with said loop is a plurality of radially extending angularly disposed helical tension springs 36, the inner ends of which are connected with said loop, and the outer ends of which are connected with the receptacle section 25, as clearly seen in Fig. 1. The arrangement is such that said springs will exert a pressure upon the lamp which will force the base thereof against the cushion 19, said springs and cushion thus exerting upon said lamp and base opposing pressures which serve to yieldingly hold the said lamp and its base in central or operative position. With this yieldable mounting of the lamp, the same will be effectively guarded against breakage through jolts and jars to which the fixture is subjected in use, since these jolts and jars instead of being communicated to the lamp will be absorbed by said cushion and springs. The life of the lamp will thus be materially extended.

At the mouth or outer end of the base 11 is provided an annular resilient member 37, of rubber or other suitable material, which is positioned for engagement with the usual annular shoulder 38 provided at the rearward end of the lamp globe, said base being recessed or beveled as at 39 to accommodate said member. The arrangement is such that said member 37 serves to additionally yieldingly support the lamp, and to frictionally hold the same against accidental unscrewing or detachment from its base. At the same time, said member 37 also serves as a seal, the same cooperating with the cushion 19 in forming a positive seal for the parts within the lamp base against contact with the outside atmosphere or other gases in which the fixture might be used. This is of special advantage in that it guards against ignition of explosive gases where the fixture is used in such places as garages, where explosive gases are often being generated and discharged. This sealing feature is of further advantage in that it also prevents fumes and acids, such as would be found in chemical works or like places, from attacking and destroying the metallic parts within the lamp base.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a portable electric fixture, the combination of an electric lamp and a base

therefor, of a housing enclosing said lamp and base; a resilient cushion arranged to engage said base; and resilient means engaging said lamp to yieldingly press said base against said cushion.

2. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a cup-shaped shell loosely enclosing said base; a guard connected with said shell and loosely enclosing said lamp; a cushion in the bottom of said shell for engagement with the adjacent end of said base; and resilient means interposed between said lamp and guard serving to press said base against said cushion, there being an opening in said cushion for the passage of electric conductors cooperating with said base.

3. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a housing enclosing said lamp and base, a resilient member cushioned between said base and housing, and leads extending into said housing and attached to said base, said cushioning member sealing the point of attachment of said leads to the base from the atmosphere.

4. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a housing enclosing said lamp and base, a resilient member cushioned between said base and housing, leads extending into said housing and attached to said base, said cushioning member sealing the point of attachment of said leads to the base from the atmosphere, and means for urging said base against said cushioning member.

5. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a housing enclosing said lamp and base, a resilient member conforming to, and substantially filling, the space between the ends of said housing and base and thereby forming a cushion therebetween, and means for urging said base against said cushion.

6. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a housing enclosing said lamp and base, a resilient member conforming to, and substantially filling, the space between the ends of said housing and base and thereby forming a cushion therebetween, leads extending into said housing and attached to said base, said cushion forming a seal over the attachment point of said leads and means for urging said base against said cushion.

7. In a portable electric fixture, the combination with an electric lamp and a base therefor, of a housing enclosing said lamp and base, a resilient member conforming to, and substantially filling, the space between the ends of said housing and base and thereby forming a cushion therebetween, leads extending into said housing and attached to said base, said cushion forming a seal over the attachment point of said leads, resilient sealing means at the other end of said base, and means for urging said base against said cushion.

In witness whereof, I have hereunto subscribed my same.

REUBEN B. BENJAMIN.