

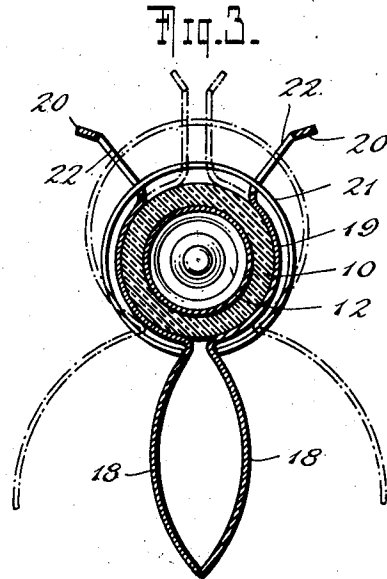
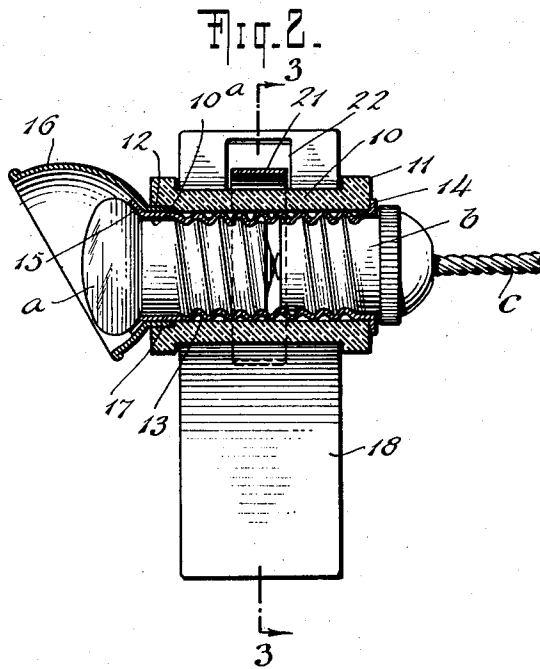
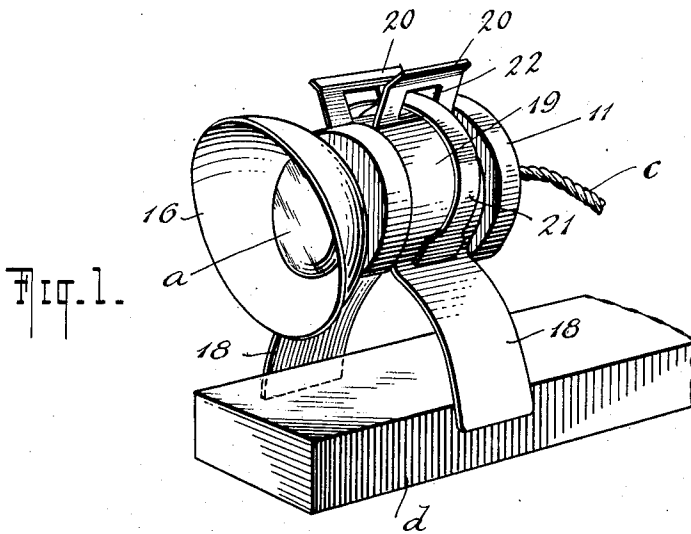
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PORTABLE ELECTRIC LAMP

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PORTABLE ELECTRIC LAMP.

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My invention relates to electric fixtures and has for its object to provide a simple and novel carrier for an electric bulb and a reflector to enable the same to be easily shifted about and whereby the said elements may be clamped in a given position. The particular object of the invention is to provide an arrangement of the indicated type adapted especially for miniature lamps which receive their current from dry batteries and which are used by operators in various connections for illuminating work and the like. Other more specific objects will appear from the description hereinafter and the features of novelty will be pointed out in the claims.

In the accompanying drawings which illustrate an example of the invention without defining its limits, Fig. 1 is a perspective view of the fixture; Fig. 2 is a longitudinal section thereof and Fig. 3 is a cross-section thereof on the line 3-3 of Fig. 1, all of the figures of the drawing being on a greatly enlarged scale.

In its illustrated form the fixture comprises a sleeve 10 of wood or other suitable insulating material which is a poor conductor of electricity, said sleeve being preferably of cylindrical outer form and provided at its opposite ends with external annular shoulders 11. A shell 12 of metal or other material which is a good conductor of electricity is located within the cylindrical interior of the sleeve 10 and extends through the same as shown in Fig. 2. The shell 12 is internally screw threaded as indicated at 13 and at one end is provided with an annular flange 14 which overlaps and lies in surface engagement with the one end face of the sleeve 10. At its other end the shell 12 is provided with an outwardly flaring flange 15 which projects into a reflector 16 and extends in interior surface contact therewith for instance as shown in Fig. 2. The reflector furthermore extends into the sleeve 10 between the latter and the shell 12, as shown in Fig. 2, the shell 12 preferably being provided with an internal annular recess 10^a at the aforesaid end for the reception of the reflector which at that point is

preferably constructed in the form of a tubular neck 17. The reflector 16 may be of any conventional type, and as shown, is inclined across the axis of the fixture so as to project the light rays in outward directions transverse to said axis. If the sleeve 10 is made of suitable material such as bakelite, fibre or the like it may be pressed or molded into the threads 13 or said sleeve may be internally screw-threaded for the accommodation of said threads 13. The arrangement further includes clamping means movably connected with the sleeve 10 between the shoulders 11 thereof. In its illustrated form the clamping means comprises two clamping members 18 located in an opposed relation to each other and arranged to project outwardly in radial directions from the cylindrical member or sleeve 10 as shown in Fig. 3; the clamping members 18 extend from and preferably comprise integral extensions of opposed bearing members 19 curved to fit the surface contour of the sleeve 10 between the annular shoulders 11 thereof, and together constituting a bearing in which the latter and its associated elements, including the bulb *a*, are rotatively mounted, as illustrated in Fig. 3. The portions 19 are continued in the form of finger pieces 20 which preferably extend in directions radially outward from the sleeve 10 and serve to facilitate the manipulation of said clamping members 18, as will appear more fully hereinafter.

In order to place the clamping members 18 under a resilient tension, or in other words to develop a clamping action therein, a spring bow 21 is provided which surrounds the sleeve 10 and bears with its opposite ends against the clamping members 18 respectively from opposite directions as shown in Fig. 3; in the preferred arrangement the spring bow 21 extends through apertures 22 provided in the finger pieces 20 for this purpose. The spring 21 serves also to clamp the bearing portions 19 upon the sleeve 10 without interfering with the ability of the latter to rotate about its axis relatively to the clamping members 18, the annular shoulders 11 serving to maintain

the device against any material movement on the sleeve 10 in axial directions.

In the operative condition of the fixture, a miniature electric bulb *a* of conventional form is screwed into that end of the shell 12 at which the reflector 16 is located so that said lamp is finally located within the latter as shown in Fig. 2. A miniature plug *b* which also may be of any usual type and connected with one end of suitable wires *c* of any predetermined length and connected at their opposite ends in any well known way with a source of electricity, such as a dry battery or the like. The electric current passing from the dry battery or other source of electricity will energize the lamp *a*, the light rays of which will be reflected by the reflector 16 in the well known way. The fixture and its associated parts may be clamped in any predetermined position upon any type of a support, as for instance indicated at *d* by simply first pressing the finger pieces 20 toward each other to separate the clamping members 18 against the tension of the spring bow 21 and then releasing said finger pieces to permit said spring bow to force the clamping members into engagement with the particular support upon which the lamp *a* is to be temporarily mounted. The electric light may thus be clamped in any desired position and in any desired relation to a given piece of work so as to illuminate the same. The fixture is particularly adapted for use with miniature electric lamps which are generally supplied with current from dry batteries and which are used by professional and other operators in their work. In such case it may be clamped upon the finger of an operator or upon a pencil, pen or other writing implement, or upon any kind of hand or other tool or upon the clothing for examining documents in places where ordinary lighting facilities are not present; for instance, the device may be used in military operations to read maps and the like. Because of the fact that the plug *b* and wires *c* may be easily disconnected from the fixture, it is possible to easily carry the parts of the assemblage about. The novel fixture is of such construction as to provide a mechanism efficient as a support for an electric lamp and a clamp therefore, and may be completely assembled and disassembled with a minimum of manual effort.

Various changes in the specific form shown and described may be made within the scope of the claims without departing from the spirit of my invention.

I claim:

1. A portable electric lamp comprising in combination, a cylindrical sleeve of insulating material having an internal annular recess at one end, annular external shoulders on said sleeve at opposite ends thereof, a

screwthreaded shell within said sleeve and extending lengthwise through the same, a flange at one end of said shell overlapping the contiguous end face of said sleeve, an outwardly flaring flange at the other end of said shell adjacent to said annular recess, a reflector extending into the latter and surrounding the shell, clamping members connected with said sleeve between said shoulders and a spring bow extending about said sleeve and engaging said clamping members whereby the latter are placed under a resilient tension.

2. A portable electric lamp comprising in combination, a member arranged for detachable connection, at one end, with a source of electricity and, at its other end, to removably receive an electric lamp, a pair of opposed bearing members engaging said member and together constituting a bearing in which the latter is frictionally mounted, opposed clamping members extending from said bearing members and arranged to project outwardly from said first mentioned member, and a spring for developing a resilient clamping action in said clamping members and said bearing members.

3. A portable electric lamp comprising in combination, a cylindrical member arranged for detachable connection, at one end, with a source of electricity and, at its other end, to removably receive an electric lamp, a pair of opposed bearing members curved to fit the surface contour of said cylindrical member and together constituting a bearing in which the latter and its associated elements are frictionally mounted, means whereby said bearing members are maintained against shifting in axial directions on said cylindrical member, opposed clamping members comprising continuations of said bearing members and arranged to project outwardly from said cylindrical member, a spring extending about said bearing members for developing a resilient clamping action in said clamping members and said bearing members, and finger pieces comprising continuations of said bearing members for shifting the latter circumferentially about said cylindrical member to force said clamping members apart against the tension of said spring.

4. A portable electric lamp comprising in combination a cylindrical member arranged for detachable connection, at one end, with a source of electricity and, at its other end, to removably receive an electric lamp, annular shoulders located externally on said cylindrical member in spaced axial relation, a pair of opposed bearing members curved to fit the surface contour of said cylindrical member between said annular shoulders, and together constituting a bearing in which said sleeve and its associated elements are frictionally mounted, opposed clamping

members comprising continuations of said bearing members and arranged to project outwardly from said cylindrical member, finger pieces projecting from said bearing members and provided with apertures, and a spring bow extending through said apertures and about said bearing members into engagement with said clamping members for developing a resilient clamping action in the latter and said bearing members. 10

In testimony whereof I have hereunto set my hand.

ULRICH F. L. STEINDORFF.