

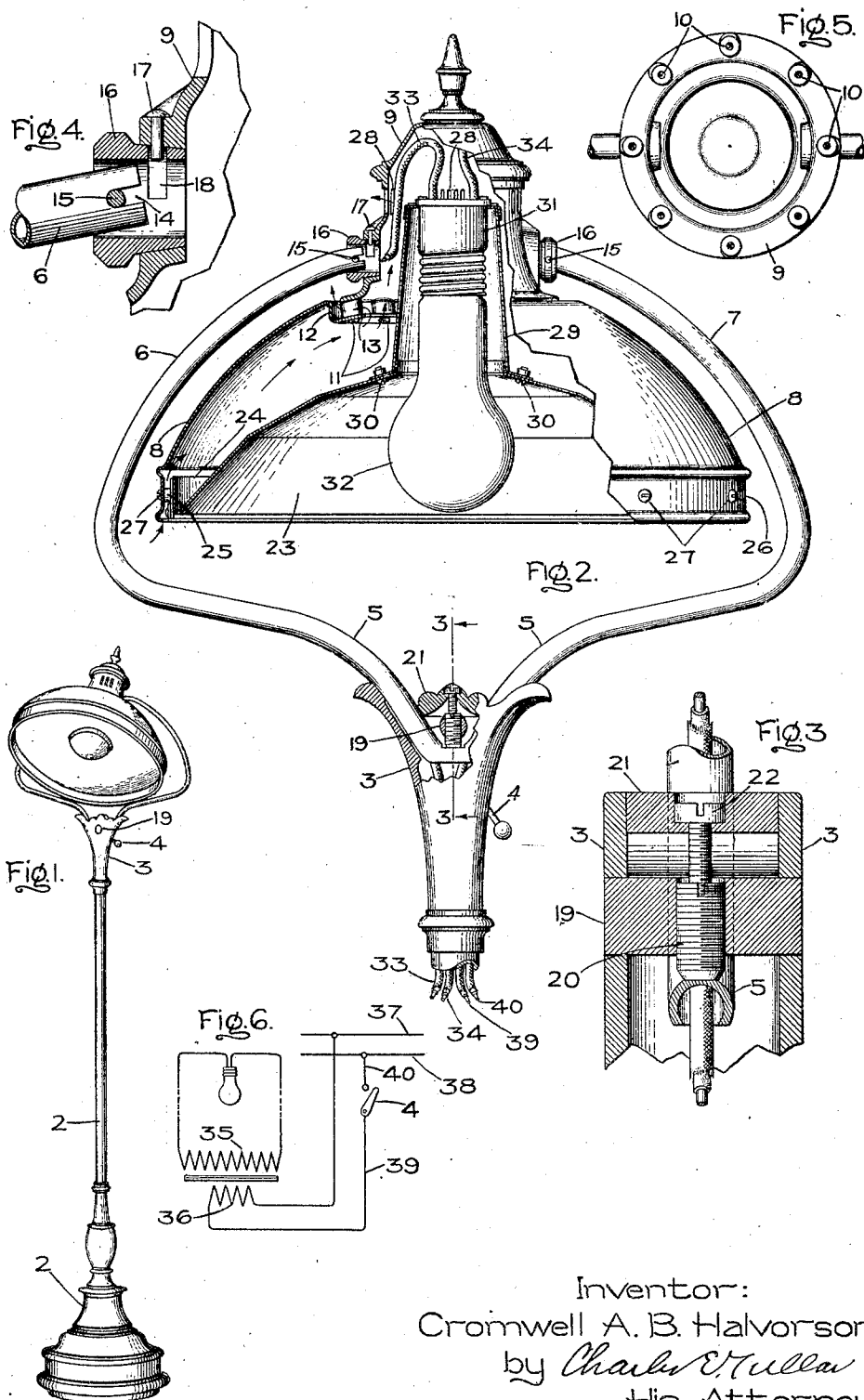
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LAMP FIXTURE

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UNITED STATES PATENT OFFICE

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LAMP FIXTURE

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The invention relates to lamp fixtures. More particularly it relates to that type of fixture which is especially adapted for lamps of the violet or ultra-violet ray producing kind commonly used as a substitute for sunlight. This type of lamp is commonly used by individuals for toning up their systems and for tanning the skin to imitate sunburn, and by physicians in the treatment of certain forms of illness.

It is an object of the invention to provide a fixture with a hood and reflector, the latter forming a part of a projector system for projecting a beam of the rays originating in a suitable lamp secured to the frame of the projector and to provide an improved support for the projector, to provide improved means for securing the projector support to its pedestal, and to provide improved means for cooling the projector.

For the purpose of giving a clear description of the principles of the invention, I have elected to illustrate in the accompanying sheet of drawings certain specific apparatus embodying the features of the invention, but it will be understood that I do not contemplate confining the application of the invention to such specific construction, inasmuch as I contemplate other variations and modifications within the scope of the claim contained herein.

Referring to the accompanying sheet of drawings, Fig. 1 shows a lamp fixture in perspective and more or less diagrammatic embodying the features of the invention. Fig. 2 shows the principal part of the fixture enlarged, in elevation and partly in section. Fig. 3 shows a detail of the fixture taken in section along line 3—3, Fig. 2. Fig. 4 is an enlargement of the upper left-hand trunnion structure between the projector support and the projector, Fig. 2. Fig. 5 shows a bottom view of the canopy portion of the hood of the projector showing the bushings that separate the canopy from the lower portion of the hood and between which passages are provided that permit currents of air to pass as indicated by the arrows, Fig. 2. Fig. 6 is a diagrammatic layout of the electrical connections and apparatus located in the de-

vice, the terminals of the apparatus being shown connected to a source of power represented by the two horizontal lines.

Referring more in detail to the drawings, the fixture comprises a pedestal 2 provided with a flaring receptacle or socket 3 within which a switch 4 of any suitable type is located. The socket is adapted to receive the butt section of the projector support 5, the arms 6 and 7 of which curve around the hood 8 of the projector. The hood is provided with a canopy element 9, see Fig. 5, on the under side of which there are provided a series of bushings 10. The canopy is screwed to the hood 8 by means of screws 11. As shown in Fig. 2, the upper portion of the hood is folded to form a collar 12 and a flange 13 to which latter the canopy is secured. As a result of this construction air channels are formed between the canopy and the hood by the bushings 10, through which air currents may pass for cooling the projector as indicated by the arrows. The end of each arm of the support 5 is slotted to engage a corresponding pin 15 in a bushing 16 which constitutes a trunnion element for the arm, see Fig. 4. For example, the arm 6 is provided with a slot 14 for receiving a pin 15, both ends of which pin are anchored in the trunnion element 16, the pin 15 extending across the element 16 at right angles to the axis thereof. The canopy 9 is provided with an opening on each side similar to that shown in Fig. 4 for receiving the corresponding trunnion. Also the canopy is perforated to receive a pin 17 which extends into a transverse slot 18 in the trunnion 16 for holding the trunnion 16 in its place in the canopy 9. Also pin 17 cooperates with slot 18 to limit the movement of the canopy, the slot being shown in the present instance as extending through an arc of 180° whereby the turning movement is limited to this arc. It will be understood that the construction is the same on both sides of the canopy and that both arms 6 and 7 similarly engage each its corresponding trunnion. With the type of construction shown in Fig. 4, the projector may be readily slipped in place or removed by merely springing the arms 6 and 7 sufficiently to allow the bushings 16 to clear the

ends of said arms. In setting the projector in place the arms 6 and 7 are sprung and the pins 15 in the trunnions are allowed to snap into the slots 14 on the ends of the arms 6 and 7.

In order to secure the support 5 to the pedestal the butt of the support is located in the mouth of the element 3 as shown in Fig. 2. After the support is in place a pin 19 is inserted through the element 3, as indicated in Fig. 3. This pin 19 is provided with a threaded perforation, the axis of which falls within the axial plane of the arms 6 and 7 when the pin 19 is in position. In the perforation a screw 20 is inserted, as shown in Fig. 3, by means of which the support 5 is clamped against the sides of the receptacle 3. As indicated in both Figs. 2 and 3, the point at which the screw 20 engages the element 5 is cut away to present a flat surface to the screw 20 for insuring a good substantial locking engagement. After the element 5 is thus locked in place a cap element 21 is secured in place between the arms 6 and 7, as shown in Fig. 2, to close the opening at the mouth of the element 3. For this purpose a screw 22 is used. The axes of both screws 20 and 22 coincide, the screw 20 being provided with a threaded perforation along its axis for receiving the stem of the screw 22. Before the cover element 21 is applied the screw 20 is tightened to any extent desired, the more it is tightened the greater will be the tendency to bring the ends of the arms 6 and 7 together. Therefore, the friction in the trunnions may be increased or decreased by varying the tension between the screw 20 and the butt section of the projector support 5. By means of the construction described, the friction in the trunnion may be regulated so that the projector is retained in any tilted position, such as, for example, that shown in Fig. 1.

Within the hood there is located a reflector 23 of any suitable type. As shown, the margin of the reflector is folded to form a flange 24 which is located within the mouth of the hood 8. The flange 24 is provided with a series of bushings 25 around its outer circumference, which bushings separate flange 24 from the peripheral band 26 of the hood. The reflector is secured in place within the hood by means of screws 27 which engage the bushings 25. Between the bushings and also between the flange 24 and the mouth of the hood passages are formed through which air is allowed to pass and to circulate between the hood 8 and the reflector 23, which then passes out between the hood 8 and the canopy 9 as indicated by the arrows. The air also passes through the draft vents 28 in the top of the canopy 9 as also indicated by the arrows.

To the rear of the reflector 23 about the central axis thereof there is provided a tubular element 29 which is secured to the reflector

in any suitable manner as, for example, by means of the screws 30. To the upper portion of this member 29 the socket 31 for the lamp 32 is secured. With the arrangement shown the arms 6 and 7 are hollow. Through these arms the conductors 33 and 34, through the medium of which current is supplied to the lamp 32, are carried to the socket of the lamp. These conductors extend to the base of the pedestal where they are connected to the secondary winding 35 of a suitable transformer. The primary winding 36 of the transformer is connected with any suitable source of power indicated by the horizontal conductors 37 and 38 through the medium of the switch 4. The connections between one terminal of the primary winding 36 and the switch on the one hand and between the switch and the line 38 on the other, are established by means of the conductors 39 and 40.

What I claim as new and desire to secure by Letters Patent of the United States, is:

In a lamp fixture, a support having a socket at its upper end, a pair of curved arms having their lower ends located in the socket, the upper ends of said arms being curved inwardly to stand in opposed spaced relation to each other, a projector having openings on opposite sides, trunnions in said openings on which the projector may turn, means connecting the upper ends of said arms to said trunnions, and adjustable means engaging the lower ends of such arms for drawing said arms together to bring the upper ends of the arms toward each other for forcing the trunnions into said openings.

In witness whereof, I have hereto set my hand this 12th day of February, 1930.

CROMWELL A. B. HALVORSON.