

# UNITED STATES PATENT OFFICE

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## FOOTLIGHTS

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This invention pertains to footlights for theatres. Such lights are usually arranged in banks across the front of the stage. In the arrangement herein illustrated each lamp has an individual reflector. The principal object of the invention is to provide improved devices for supporting those individual reflectors.

The lamps are supported in sockets mounted in rows at the rear of a long box-like metallic trough. It has been customary to support the individual reflectors at their rear ends, thereby rendering the reflector supports difficult of access and filling the rear of the trough with devices which seriously interfered with the circulation of cooling air through the trough.

In the present design the reflectors are supported entirely from the front plate of the trough by devices which are simple, accessible, easily operable, cheap to manufacture, and which do not interfere with circulation of air lengthwise of the trough.

Further and other objects and advantages will be hereinafter set forth in the accompanying specification and claims, and shown in the drawings which by way of illustration show what is now considered to be the preferred embodiment of the invention.

Fig. 1 is a cross-section on line 1—1 of Fig. 2.

Fig. 2 is a view, from the stage, of a portion of a bank of lights showing their staggered arrangement.

The level of the stage floor is at 10. The footlight structure is set into an inclined outer trough 12 set below the level of the floor. The footlight trough proper, comprises a front wall 14 which supports the lenses and reflectors, a rear wall 16, an upper cover 18, and a lower wall 20 which is preferably in one piece with front wall 14.

Extending parallel to wall 16 is an offset partition 22 to which are fast the lamp sockets 24. Partition 22 has upper and lower rearwardly extending portions 26 and 28. Extension 26 is secured to the upper edge of plate 16 by bolt 30, the lower edge of plate 16 being secured to plate 20 by bolt 32. The space between plate 16 and partition 22 accommo-

dates the electric wiring to the sockets 24.

Lamps 34 are screwed into sockets 24 and occupy the space between partition 22 and front plate 14. Top plate 18 is fastened by bolts 36 to the upper edge of plate 14. It frequently happens that top plate 18 is stepped upon and therefore plate 14 is called upon to serve as a brace or support to prevent collapse of the top plate.

Each lamp 34 is surrounded by a reflector 40, and in the open end of each reflector is supported a lens or roundel 42. Each roundel is held in place against a shoulder 44, by a spring wire ring 46 of well known design, which engages a recess 48 in the reflector. Recess 48 and shoulder 44 are formed in the metal of the reflector by a spinning operation. Each retaining ring 46 is provided with a pair of finger pieces 50 for use of the operator in collapsing the ring to remove it from recess 48 when it is desired to remove the roundel for any purpose, as for instance to change a lamp.

Slightly toward the rear of shoulder 44 the reflector is provided with a second shoulder 52 of somewhat smaller outside diameter than shoulder 44. Shoulder 52 is of small enough diameter to pass through an opening in plate 14 whereas shoulder 44 will not pass through the opening. The reflector is assembled in plate 14 by passing the reflector through the opening as far as shoulder 44 will permit, and then snapping a spring ring 54 between shoulder 52 and plate 14. This holds the reflector in operative position yet may readily be removed if required by simply removing ring 54.

It is to be understood that the invention is not limited to the construction herein specifically illustrated but can be embodied in other forms without departure from its spirit as defined by the following claims.

I claim—

1. In apparatus of the class described, in combination, a plate having an opening, a reflector, two circumferential shoulders on said reflector, one of said shoulders being of less diameter than the opening in said plate, the other of said shoulders being of greater diameter than the opening in said plate; and