

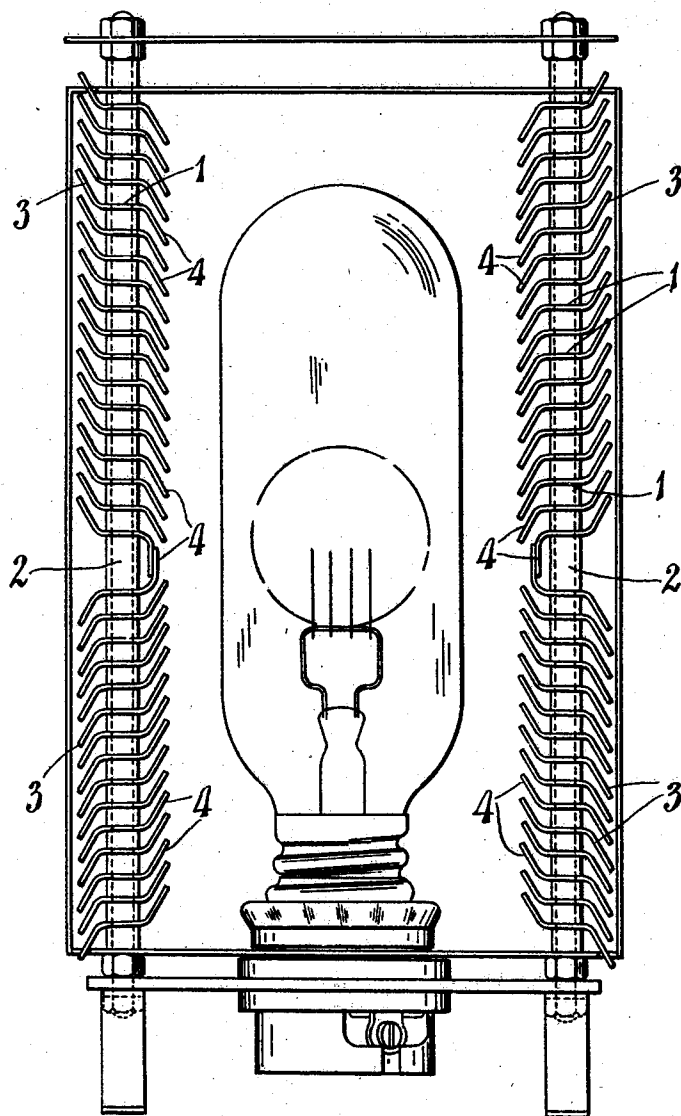
May 13, 1930.

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1,758,290

LANTERN BODY FOR CINEMATOGRAPH AND OTHER PROJECTION APPARATUS

Filed June 14, 1929



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UNITED STATES PATENT OFFICE

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LANTERN BODY FOR CINEMATOGRAPH AND OTHER PROJECTION APPARATUS

Application filed June 14, 1929, Serial No. 370,978, and in Great Britain June 29, 1928.

This invention relates to lantern bodies for cinematograph and other projection apparatus, of the kind provided with means whereby a current of air is caused automatically to circulate therethrough when in use.

My invention is designed to provide an improved form of lantern body in which the current of air circulating therethrough will follow a smooth, even course, free from eddies or whirls.

According to this invention the sides and/or back and front of the lantern body are made of thin slats or louvres the ends of which are bent longitudinally in opposite directions, one end upwards, and the other downwards, the two bent ends being connected by a middle horizontal part. Below the optical centre of the lamp the outer parts of the louvres are bent downwards, and the inner parts are bent upwards. Above the optical centre this arrangement is reversed, the outer parts being bent upwards whilst the inner parts are bent downwards. By this arrangement a circulation of cold air through the lantern body is automatically caused as soon as the lamp is switched on. The louvre slats are so spaced apart that the bent parts overlap so as to prevent escape of the light from the inside of the lantern body to the outside.

The two louvre slats adjacent the horizontal plane of the optical centre where the reversal of the louvres occurs, have their inner parts bent at right angles to said plane.

My invention is illustrated in the accompanying drawing which shows a rear view of a lantern body constructed in accordance with my invention with the lamp in position and the back removed.

As shown the sides of the lantern body are constructed of thin slats 1 mounted on corner posts 2. Below the optical centre of the lamp, the slats 1 have their outer longitudinal parts 3 bent downwards and their inner longitudinal parts 4 bent upwards. Above the optical centre the slats have their inner longitudinal parts 4 bent downwards and the outer longitudinal parts 3 bent upwards. The two slats which are adjacent each other where the reversal of the slats takes place

have their inner parts 4 bent vertically towards and overlapping each other to prevent light passing to the outside of the lantern body.

This arrangement ensures that a current of cool outside air automatically circulates through the lantern body as soon as the air in the lantern body is heated by the lamp.

The drawing illustrates my invention as applied to the side of a lantern body only, but if desired back and front may also be constructed on the same principle, suitable provision being made for holding the reflector and lens respectively in their proper positions.

I claim:—

1. A lantern body for cinematograph and other projection apparatus comprising sides formed of spaced apart slats or louvres, the respective ends of which are bent longitudinally in opposite directions, one upwards and one downwards.

2. A lantern body for cinematograph and other projection apparatus comprising sides formed of spaced apart slats or louvres, the ends of which are bent longitudinally in opposite directions, one upwards and one downwards, the direction of the bent parts of the slats or louvres below the optical centre of the lamp being reversed to that of the bent parts of the slats or louvres above the said optical centre.

3. A lantern body for cinematograph and other projection apparatus comprising sides formed of spaced apart slats or louvres, the ends of which are bent longitudinally in opposite directions, one upwards and one downwards, the direction of the bent parts of the slats or louvres below the optical centre of the lamp being reversed to that of the bent parts of the slats or louvres above the said optical centre, the bent parts of each slat or louvre overlapping the bent parts of the next adjacent slats or louvres.

4. A lantern body for cinematograph and other projection apparatus comprising sides formed of spaced apart slats or louvres, the ends of which are bent longitudinally in opposite directions, one upwards and one downwards, the direction of the bent parts of the

slats or louvres below the optical centre of the lamp being reversed to that of the bent parts of the slats or louvres above the said optical centre, the bent parts of each slat or louvre overlapping the bent parts of the next adjacent slats or louvres, the two slats or louvres adjacent the horizontal plane of the optical centre of the lamp having their inner bent parts turned at right angles to the said plane and overlapping each other.

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20 5. A lantern body for projection apparatus having opposing walls formed of spaced slats, the slats of the upper portions of the walls having their inner ends bent downwardly and their outer ends bent upwardly, the slats forming the lower portions of the walls having their inner ends bent upwardly and their outer ends bent downwardly, the intermediate portions of all slats being substantially parallel and horizontal.

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30 6. A lantern body having a wall made up of upper and lower series of slats, the upper series of slats presenting intermediate horizontal spaced portions with their inner ends deflected downwardly and their outer ends deflected upwardly, the lower series of slats presenting intermediate horizontal spaced portions with their outer ends deflected downwardly and their inner ends deflected upwardly, the adjacent slats of the upper and lower series being interfitted to prevent light passage therebetween.

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45 7. A lantern body having a wall made up of upper and lower series of slats, the upper series of slats presenting intermediate horizontal spaced portions with their inner ends deflected downwardly and their outer ends deflected upwardly, the lower series of slats presenting intermediate horizontal spaced portions with their outer ends deflected downwardly and their inner ends deflected upwardly, the adjacent slats of the upper and lower series being lapped to prevent light passage therebetween.

45 In testimony whereof I have hereunto set my hand this thirtieth day of May, 1929.
WILLIAM EUGENE McCORMACK.

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