April 14, 1942. A. S. HOWELL 2,279,920

VENTILATING LIGHT TRAP

Filed May 26, 1939

Fig. 1

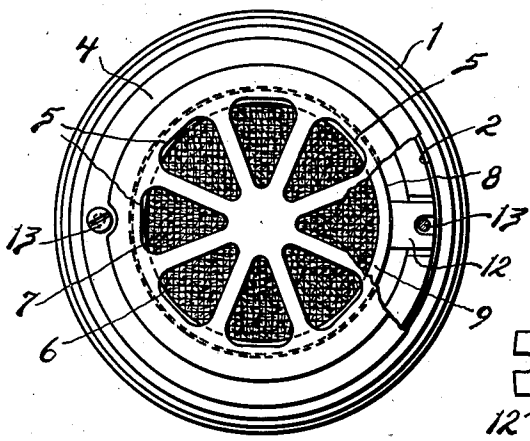



Fig. 3

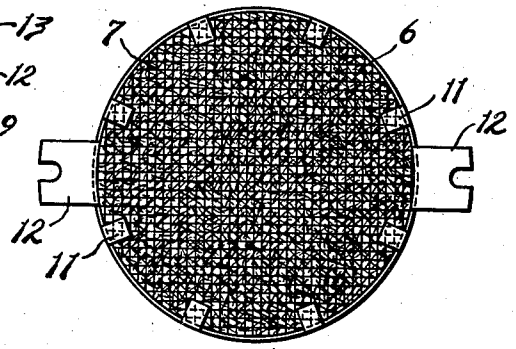



Fig. 2

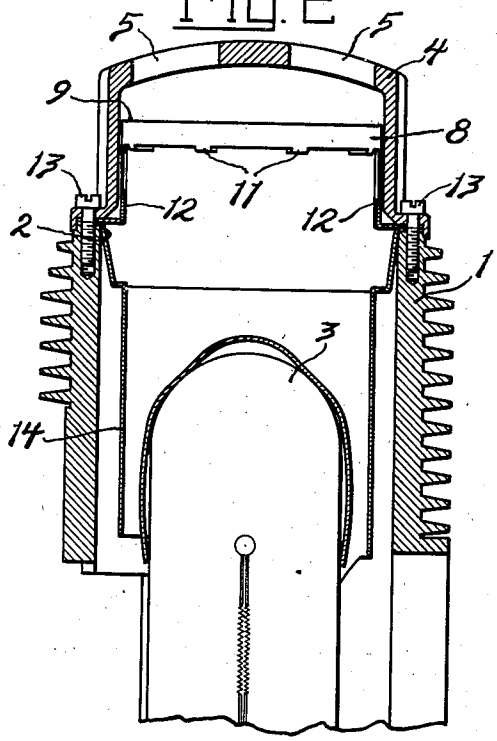
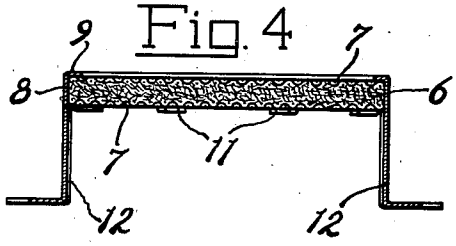



Fig. 4




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# UNITED STATES PATENT OFFICE

2,279,920

## VENTILATING LIGHT TRAP

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Application May 26, 1939, Serial No. 275,886

1 Claim. (Cl. 240—47)

My invention relates particularly to ventilating light traps for lamp houses of picture projecting machines, although not limited to this use alone.

The general object of the invention resides in the provision of a novel, effective and commercially desirable ventilating light trap which is particularly adapted to the lamp houses of picture projecting machines for the purpose of light trapping the ventilating openings thereof.

With this object in view my invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which the said object and certain other objects, hereinafter appearing, are effected all as fully described with reference to the accompanying drawing, and more particularly pointed out in the appended claim.

In the said drawing—

Figure 1 is a top plan view of a picture projecting machine lamp house with a part broken away and embodying my invention;

Figure 2 is a partial central vertical section of the same;

Figure 3 is a bottom plan view of the ventilating light trap of my invention; and

Figure 4 is a central vertical section of the aforesaid ventilating light trap.

Referring to the drawing, 1 designates a lamp house body having a top opening 2 and in which is disposed a source of light in the form of an incandescent electric lamp 3. A cap 4, provided with ventilating openings 5, is detachably positionable over the body opening 2 to complete the upper end of the lamp house. The ventilating light trap of my invention is disposed within the lamp house between the lamp 3 and the ventilating openings 5 and will now be described.

The essential element of the light trap consists of a mass 6, preferably flat as shown, of opaque strands irregularly commingled in all directions and preferably bronze strands, such as is commonly known as metal wool. This mass extends across the ventilating openings 5 and forms an effective light trap therefor and yet permits ventilation therethrough to dissipate heat from the lamp 3.

Retaining members 7 in the form of metal screening overlie opposite faces of the mass 6, and a sheet metal securing member 8 in the form of a cylindrical ring circumscribes the mass 6 and is provided at one edge with an internal flange 9 and at the other edge with lugs 11. The flange 9 engages the outer face of one of the retaining members 7 and the lugs 11 are bent to engage the outer face of the other retaining member, thus desirably securing the assembly of the light trap unit.

The securing member 8 is provided with diametrically opposite slotted mounting legs 12, and headed screws 13, passing through the cap 4 and the slotted legs 12, are screwthreaded into the lamp house body, thus forming a common means for detachably securing the cap and light trapping unit on the lamp house body with resulting advantage in assembly. A heat shield 14 within the lamp house is also desirably secured with the assembly by means of the screws.

While I have thus described my invention, I do not wish to be limited to the precise details described as changes may be readily made without departing from the spirit of my invention, but having thus described my invention I claim as new and desire to secure by Letters Patent the following:

In a device of the character described, the combination with a lamp house comprising a body provided with an opening and a cap provided with a ventilating opening detachably positionably over said body opening, of a light trap disposed within the enclosure of said lamp house and cap and comprising a flat mass of opaque strands irregularly commingled in all directions, reticulated retaining members overlying opposite sides of said mass, and a securing structure circumscribing said mass and provided with securing portions overlying the outer faces of said retaining members to confine said mass and retaining members in their aforesaid assembly, and common means detachably securing said cap securing structure on said lamp house body with said mass extending across said ventilating opening.

ALBERT S. HOWELL.