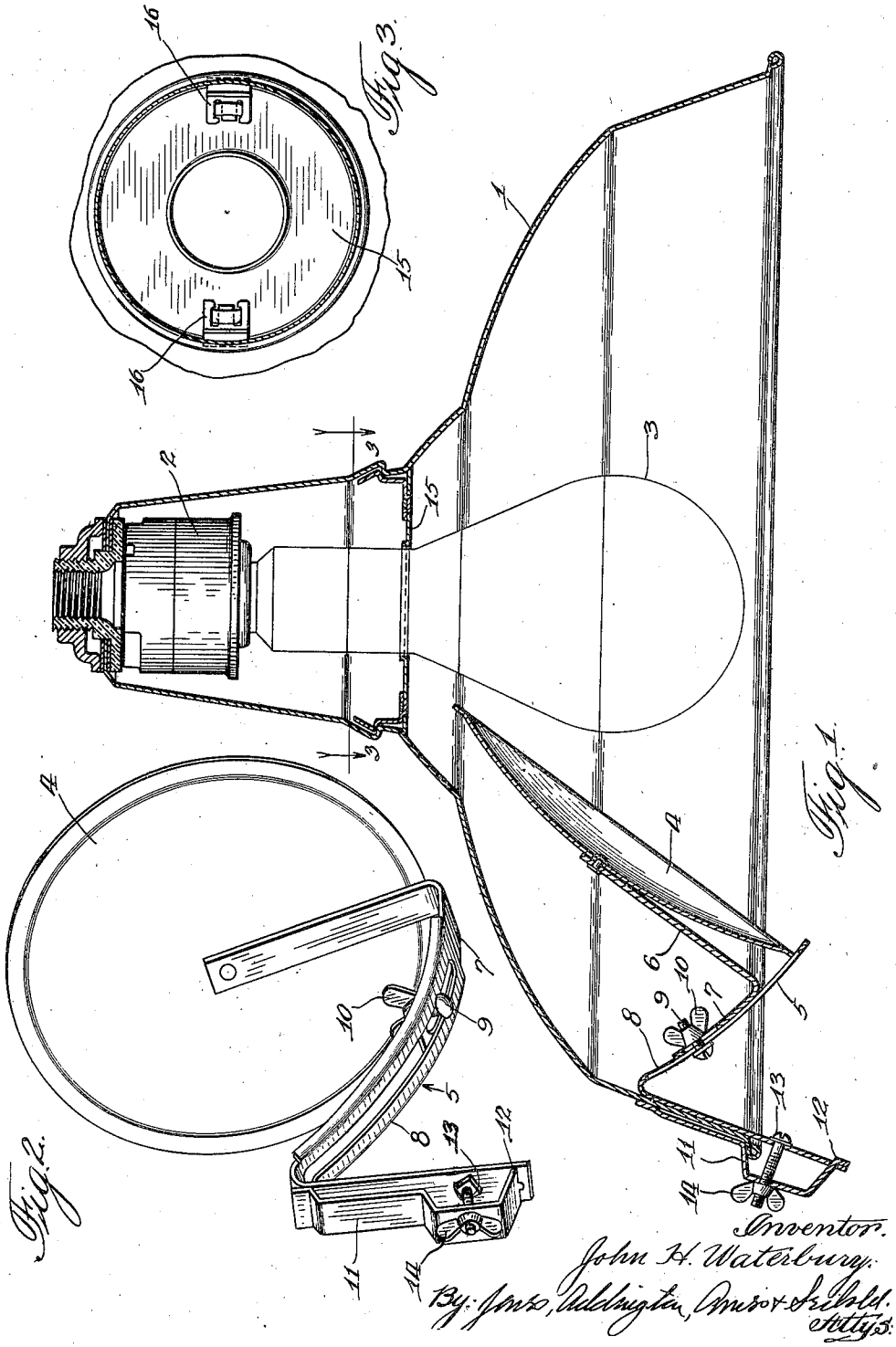
April 12, 1938. J. H. WATERBURY 2,113,777

LIGHTING CONSTRUCTION

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LIGHTING CONSTRUCTION

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Fig. 4

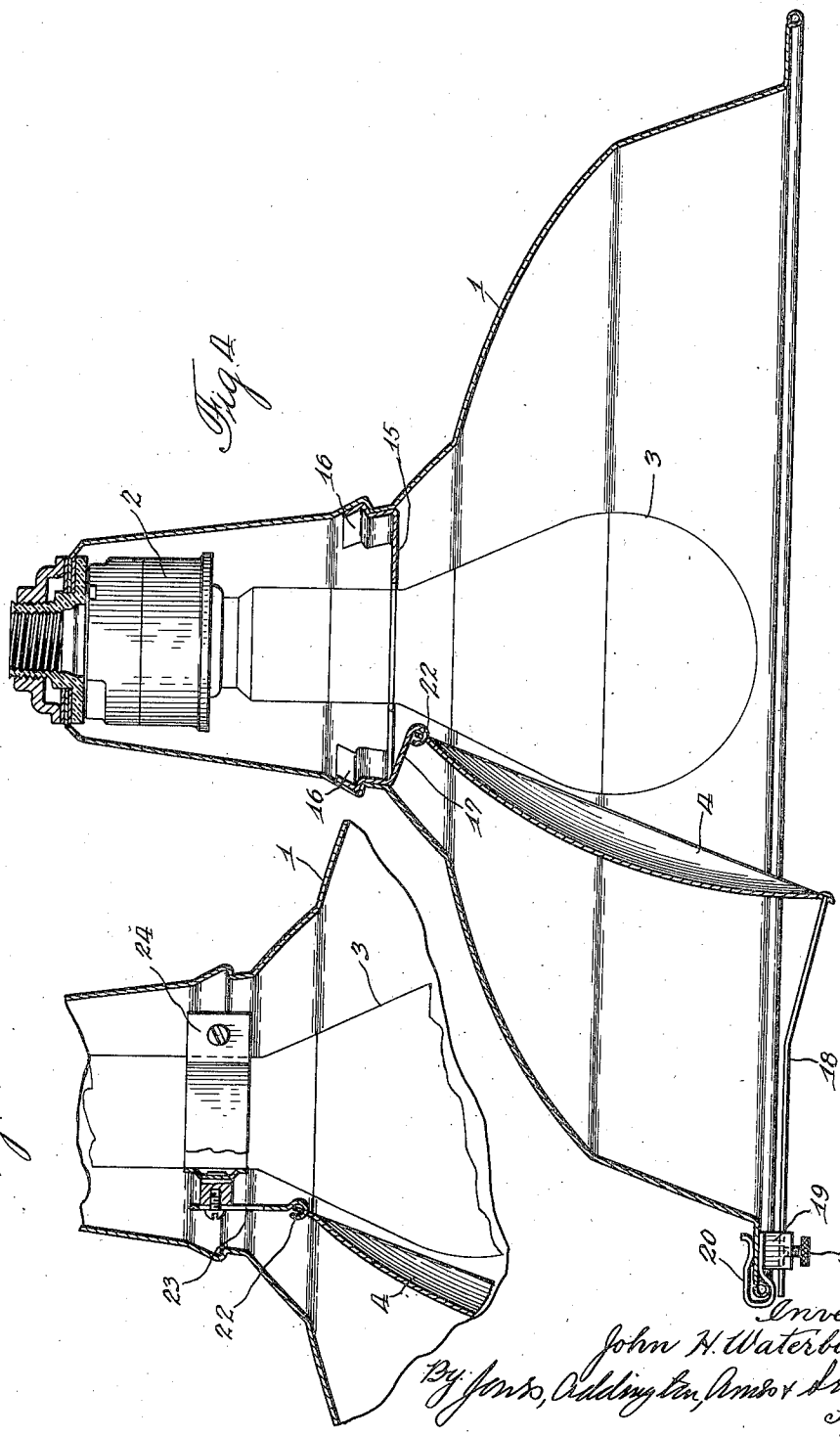


Fig. 5

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LIGHTING CONSTRUCTION

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2 Claims. (Cl. 240—78)

My invention relates to lighting fixtures.

One of the objects of my invention is to provide an improved lighting fixture in which a part of the light output of the lamp in a lighting unit is directed to some desired point or upon some desired object within range for the purpose of increasing the intensity of light on such point or object.

Further objects and advantages of the invention will be apparent from the description and claims.

In the drawings, in which several embodiments of my invention are shown,

Figure 1 is an axial sectional view of a lighting fixture;

Fig. 2 is a perspective view of the auxiliary reflector and mounting;

Fig. 3 is a section on the line 3—3 of Fig. 2;

Fig. 4 is an axial sectional view showing another form embodying my invention; and

Fig. 5 is a fragmentary view showing still another form.

Referring to the drawings in detail, the lighting construction shown comprises a concave main reflector 1, a socket 2 for supporting a lamp 3 so that the light source lies substantially within this reflector, an auxiliary reflector 4 lying substantially between the light source and the inner surface of the concave reflector, and means for mounting the auxiliary reflector for adjustment about the light source and circumferentially with respect to the concave reflector and for adjustment to vary the angle of light beam projected from the auxiliary reflector with respect to the axis of the concave reflector. The mounting means shown comprises a bracket 5 having means whereby it may be clamped in various adjusted positions along the periphery of the concave reflector. The auxiliary reflector is mounted on the bracket by means of a support 6 secured to the auxiliary reflector and having an arcuate foot portion 7 adjustably secured to a correspondingly shaped arcuate portion 8 of the bracket by means of a clamping screw 9 and nut 10 extending through slots in the arcuate portions. The bracket 5 is secured to the rim of the reflector by means of a clamping jaw 11, one end of which has a hinge connection at 12 with the bracket and the other end of which bears against the outside of the reflector. Any suitable clamping screw 13 and nut 14 may be provided for effecting the clamping operation. By means of the two adjustments, the auxiliary reflector 4 may be adjusted to direct the light in any direction laterally and in any direction vertically from the point of cut-off of the main reflector 1 to the axis of the lamp. If desired, a combination reflector and baffle may be provided in the form of a plate 15 having an aperture through which the neck of the bulb extends and secured to the neck of the reflector by means of spring clips 16 secured to the plate and snapping into an annular channel formed in the neck of the reflector.

The construction shown in Fig. 4 is similar to that just described except that here the auxiliary reflector 4 is hinged at 22 to a finger 17 struck downwardly from the plate 15 and that the vertical adjustment of light from the auxiliary reflector is effected by means of a rod 18 secured at one end to the lower edge of the auxiliary reflector and slidable in a sleeve or lug 19 secured to a spring clamp 20 adjustably mounted on the rim of the main reflector. This rod may be held in any desired adjustable position in the sleeve by means of a set screw 21. The plate 15 to which the auxiliary reflector is hinged is adjustable circumferentially inside the neck of the reflector, thus permitting the required circumferential adjustment. The construction shown in Fig. 5 is similar to that just described, except that here the auxiliary reflector is hinged at 22 to a strap 23 secured to a clamping band 24 which may be clamped about the neck of the bulb. Here also it will be seen that the light from the auxiliary reflector may be adjusted, both circumferentially and vertically.

Further modifications will be apparent to those skilled in the art and it is desired, therefore, that the invention be limited only by the prior art and the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A lighting construction comprising a hood, an annular downwardly opening bowl-like reflector secured to and depending from said hood, a lamp socket in said hood for supporting an electric lamp so that it extends downwardly from the hood and into the reflector, and an auxiliary reflector mounted so that a substantial portion of it lies between the inner surface of the annular reflector and the light source for directing a beam of light laterally toward the axis of the lamp and underneath the lower annular edge of the annular reflector, said auxiliary reflector being mounted for swivel adjustment about the axis of the lamp whereby the lateral light may be intensified in the desired radial direction, the means for mounting the auxiliary reflector comprising a pair of clamping jaws engaging the in-

ner and outer surfaces respectively of the annular reflector.

2. A lighting construction comprising a hood, an annular downwardly opening bowl-like reflector secured to and depending from said hood, a lamp socket in said hood for supporting an electric lamp so that it extends downwardly from the hood and into the reflector, and an auxiliary reflector mounted so that a substantial portion of it lies between the inner surface of the annular reflector and the light source for directing a beam of light laterally toward the axis of the lamp, said auxiliary reflector being mounted for swivel adjustment about the axis of the lamp whereby the lateral light may be intensified in the desired radial direction, and means for adjusting said auxiliary reflector to vary the vertical angle of inclination of the beam therefrom, the means for mounting the auxiliary reflector comprising a pair of clamping jaws engaging the inner and outer surfaces respectively of the annular reflector.

JOHN H. WATERBURY.