G. WALTON.

Reflector for Gas-Burners.

No. 200,233. Patented Feb. 12, 1878.

Fig. 1.

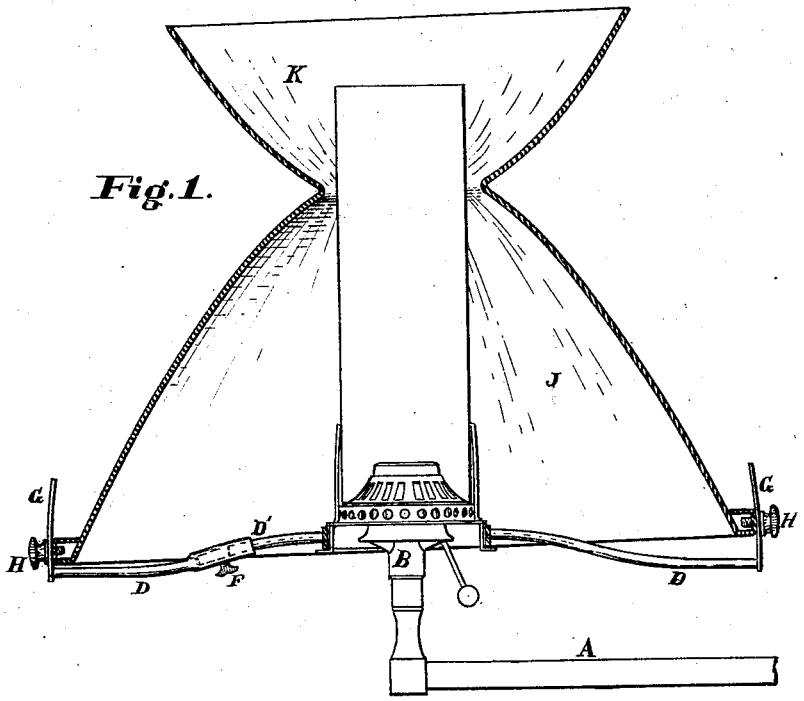
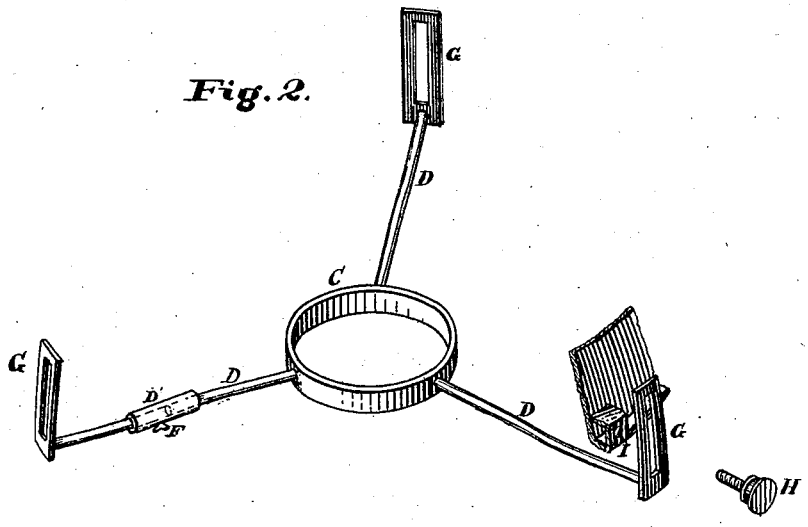


Fig. 2.



Witnesses.
Walter Knight
L Knight.

Inventor
George Walton
By Knight Bros
Attys

UNITED STATES PATENT OFFICE.

GEORGE WALTON, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES GORDON, OF SAME PLACE.

IMPROVEMENT IN REFLECTORS FOR GAS-BURNERS.

Specification forming part of Letters Patent No. **200,233**, dated February 12, 1878; application filed January 21, 1878.

To all whom it may concern:

Be it known that I, GEORGE WALTON, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Reflector for Gas-Burners, of which the following is a specification:

My invention consists in improvements in those reflectors which are employed to concentrate the light chiefly upon objects beneath the lamp or flame, my invention being more particularly designed for use with gas-burners and with reflectors of parabolic form.

My improvements comprise the provision, at the truncated apex of the reflector proper, of a small inner parabolic reflector, for the purpose of so controlling the light which escapes from the top of the reflector proper as to suppress the shadow usually cast by the latter upon the ceiling or other overhead object.

My improvements further comprise a peculiar construction of holder or spider, having adjustable rests and set-screws, in combination with slotted ears on the reflector, whereby the latter can be adjusted to any desired vertical height and angle.

In the accompanying drawings, Figure 1 is an axial section of a reflector and accessories embodying my invention, the reflector being shown slightly canted to one side. Fig. 2 is a perspective view of my holder or spider, and a portion of the reflector, detached.

A may represent a common gas-bracket, and B any suitable tip or burner. C is my holder or spider, usually of three arms, D, which radiate, at equal distances, from the customary central ring.

A part of one or more of the holder-arms consists, preferably, of a member, D′, which may be sleeved upon the arm D, as shown, or be otherwise adapted to slide upon it. This extensible arm may be capable of being retained to any desired length by means of a set-screw, F. Each arm terminates in a slotted ear, G, for a set or clamp screw, H, which occupies a screw-threaded socket, I, that projects from the external lower margin of my reflector.

My reflector consists of two unequal parabolic frusta, J K, joined apex to apex, as shown in Fig. 1. Of these frusta, the lower and larger one, J, is the reflector proper, and serves to direct the main body of light down onto the table, show-case, or counter, while the upper frustum, K, concentrates onto that portion of the ceiling usually in the shadow of the reflector a sufficient portion of light to completely neutralize such shadow.

In order to enable the reflector to be adjusted at any moment to its most effective height and angle relatively to the flame, it is merely necessary to temporarily relax the screws F and H, and then, either elevating or depressing the reflector, and at the same time either preserving or changing its angle, to secure it in the new position by tightening said screws.

An inferior modification of my holder may lack the sliding sleeve D′ and screw F.

I claim as new and of my invention—

1. The reflector composed of the two unequal parabolic frusta, J K, joined at their apices, substantially as and for the purpose set forth.

2. The holder C, whose arms D terminate in slotted ears G, traversed by screws H, occupying screw-sockets I on the reflector, substantially as set forth.

3. The combination of the extension-arm D D′, screws F and H, slotted ears G upon the ends of the arms, and screw-sockets I upon the reflector, substantially as and for the purposes set forth.

In testimony of which invention I hereunto set my hand.

GEO. WALTON.

Attest:

GEO. H. KNIGHT,

L. H. BOND.