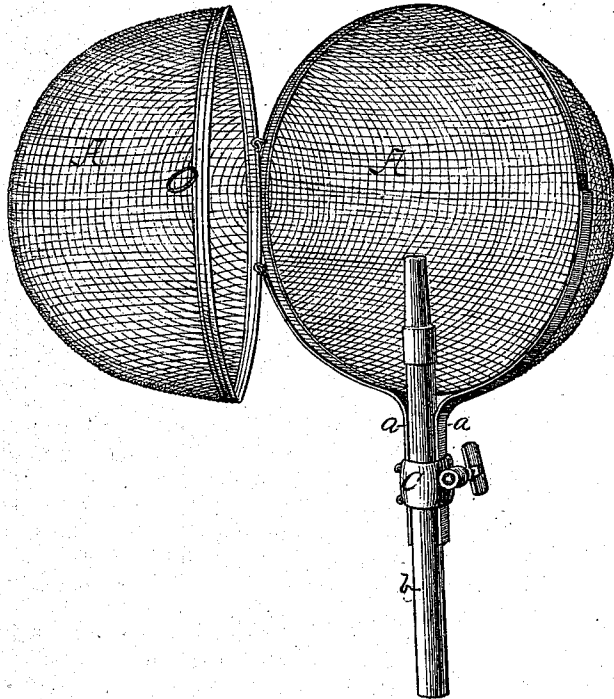


H. J. WATTLES.
SHIELD FOR GAS BURNERS.

No. 104,516.

Patented June 21, 1870.



Witnesses:

S. J. Hayes
A. H. Pearson

Inventor

H. J. Wattles by
H. M. Beadle, atty

UNITED STATES PATENT OFFICE.

HIRAM J. WATTLES, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN SHIELDS FOR GAS-BURNERS.

Specification forming part of Letters Patent No. 104,516, dated June 21, 1870.

To all whom it may concern:

Be it known that I, HIRAM J. WATTLES, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and Improved Shield for Gas-Burners; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

This invention has for its object the production of a shield for protecting gas-burners and other similar lighting devices from insects, &c.; and it consists, mainly, in the employment of a device constructed of such non-combustible material as will not obstruct the light, so arranged as to completely inclose the burner upon all sides.

The details of construction will be fully described hereinafter.

In the drawing a perspective view of my improved shield is shown.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents the shield proper, which is constructed, preferably, of wire-gauze or other similar material, and is made of any suitable form, but is, however, preferably constructed in semispherical sections, which are hinged upon one side, and provided with any proper fastening device upon the other. One of these sections is provided with suitable stays or standards *a a*, the lower ends of which extend below it and partially inclose the gas-tube *b*, as shown in the drawing.

C represents a clasp, which is preferably

hinged upon one side and provided with a thumb-screw upon the other. By means of this clasp the standards *a a* are firmly clamped to the gas-tube. Any other suitable fastening may be employed, if desired.

This shield is attached to the tube by simply slipping the standards over the burner and drawing them down until they rest upon the tube below. The clasp is then placed about the standards and screwed sufficiently tight to maintain a secure attachment between them and the tube.

This improved shield is especially designed for gas-burners in billiard-rooms, where it is essential that the light should be directly over the table. Insects attracted by it, when scorched, necessarily fall upon the table below, and consequently seriously interfere with the progress of the game.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A shield for gas-burners, when constructed of non-combustible material which will not materially interfere with the diffusion of the light, and so arranged as to completely inclose the burner on every side, as described.

2. The specific device described, consisting of the shield *A*, standards *a a*, and clamp *C*, when constructed as described.

This specification signed and witnessed this 9th day of May, 1870.

HIRAM J. WATTLES.

Witnesses:

G. W. FORD,
J. D. SANDERS.