

Fig. 1.

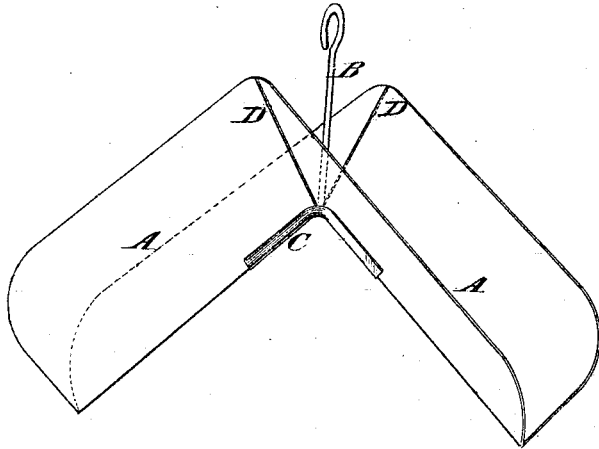
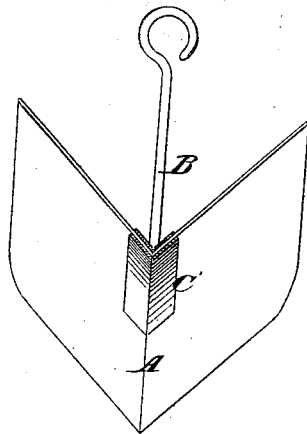


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK J. SYMMES, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN PROTECTORS FOR CHANDELIERS.

Specification forming part of Letters Patent No. 181,877, dated September 5, 1876; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, FRANK J. SYMMES, of San Francisco, San Francisco county, California, have invented a new and Improved Cooler and Protector for Chandeliers, of which the following is a specification:

My invention consists of a cooler or protector for chandeliers, constructed of mica plates and a metal contrivance for suspending it, so contrived as to deflect the heat and protect the gasalier from it, and from the deposit which collects upon the metal deflectors.

Figure 1 is a perspective side elevation of my improved cooler and protector, and Fig. 2 is a section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents a couple of mica sheets bent along the middle in V shape, and connected together at one end, making a Λ -shaped figure, which has a metal suspending-rod, B, attached to the apex by a couple of angle clamping-pieces, C, fastened by the rod, making a cooler mainly of mica, which will throw off the heat and prevent the deposit common to glass and metal coolers when exposed to a strong heat.

The form of the cooler may be modified to a considerable extent without departing from the spirit of my invention, which does not consist merely of the arrangement of the mica plates in the construction, but may conform to the different shapes to be protected. Besides the fastening-plates C the plates A are fastened by wires or rivets at D.

The point of suspension is also reduced to a minimum by making it like a knife edge, so as to prevent the fixture from becoming heated at this point.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cooler and protector for chandeliers, consisting of mica plates A, placed at an angle to each other, and provided with suspension-rod B, as and for the purpose described.

2. The mica plates A A, connected by angular clamps C, substantially as shown and described, for the purpose specified.

FRANK J. SYMMES.

Witnesses:

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