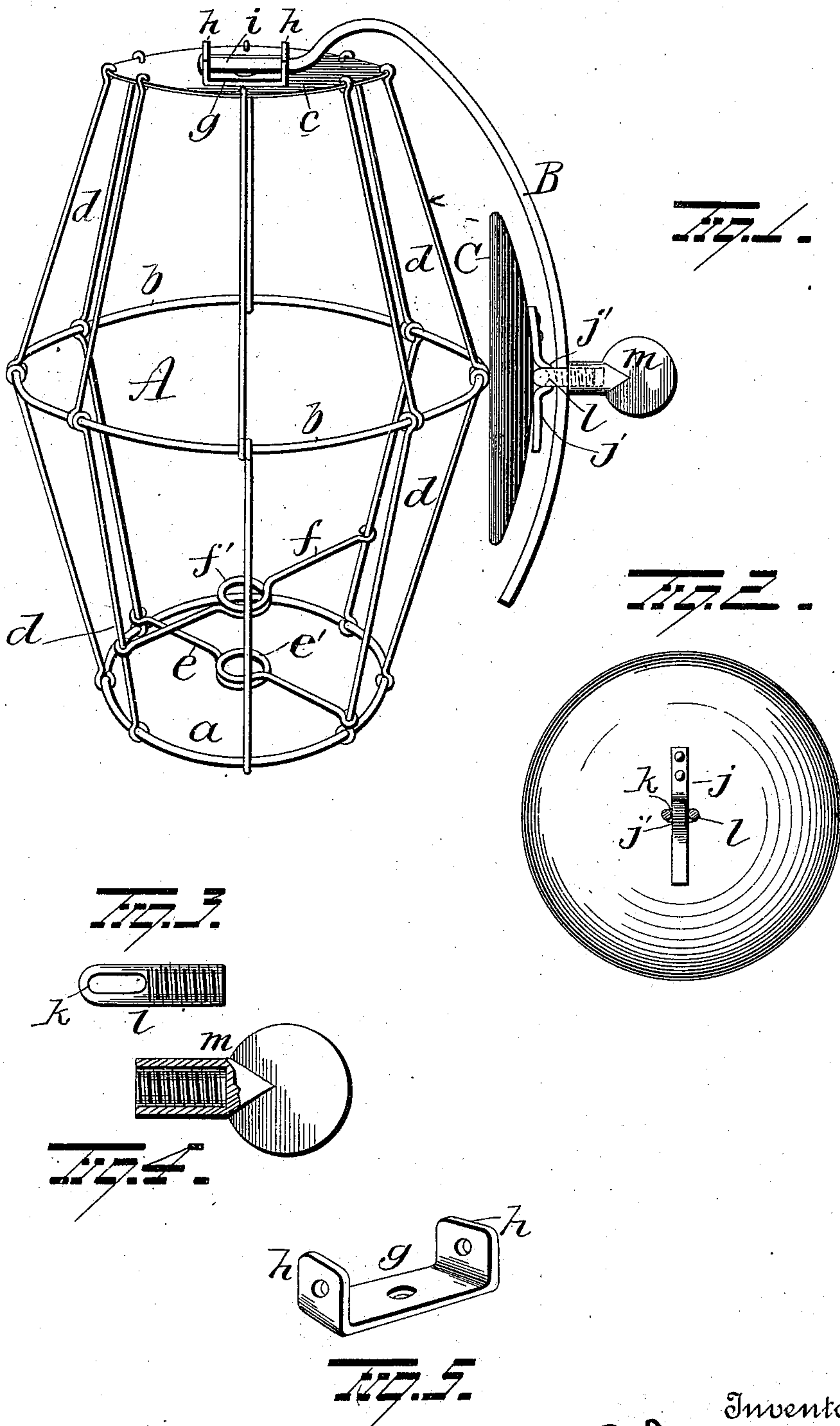


(No Model.)

C. J. & G. W. GIDDINGS.
GUARD AND REFLECTOR.

No. 503,955.

Patented Aug. 29, 1893.



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UNITED STATES PATENT OFFICE.

CARL JOHN GIDDINGS AND GEORGE W. GIDDINGS, OF RUTLAND, VERMONT.

GUARD AND REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 503,955, dated August 29, 1893.

Application filed May 6, 1893. Serial No. 473,260. (No model.)

To all whom it may concern:

Be it known that we, CARL JOHN GIDDINGS and GEORGE W. GIDDINGS, of Rutland, in the county of Rutland and State of Vermont, have
5 invented certain new and useful Improvements in Guards and Reflectors; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which
10 it appertains to make and use the same.

Our invention relates to an improvement in guards and reflectors,—the object of the invention being to provide a simple and efficient device for preventing the contact of objects
15 with a gas flame, and preventing said flame from injuring walls or other objects with which it may accidentally come into contact.

A further object is to produce a guard for the purpose stated and to provide means for
20 supporting a reflector, whereby the light from the flame can be directed to any part of a room it may be desired to concentrate it.

A further object is to produce a device for the purpose stated which shall be simple in
25 construction, cheap to manufacture and effectual in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of
30 parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a view illustrating all our improvements, assembled. Fig. 2 is a view of a reflector. Figs.
35 3, 4 and 5 are detail views of the devices for attaching the reflector to its supporting bracket.

A represents an improved guard which is made oval in general form and comprises, a
40 lower ring *a* of wire, a larger central ring *b*, also of wire, a top plate *c* of sheet metal (preferably iron) and wires *d* secured to the top plate *c*, central ring *b* and bottom ring *a*, as shown in Fig. 1. Secured at its ends to the
45 lower ring *a* is a short cross bar *e*, which may be made of wire, and its center is provided with an eye or loop *e'*. Immediately above the cross bar *e*, a cross bar *f* is disposed at right angles thereto and at its ends is secured
50 to two of the wires *d* of the guard or cage. The cross bar *f* may also be made of wire and

is provided at its center, immediately over and in alignment with the eye or loop, with a similar eye or loop *f'*. The eyes or loops *e'*, *f'*, are intended for the reception of the gas burner
55 which passes through them, so that the flame on the burner will be within the guard or cage A. By thus locating a guard or cage on the burner, it will be seen that it will be impossible for the clothing of persons in proximity to the
60 burner, or for other objects to come into contact with the flame on the burner. And again, where the device is used on a burner carried by a movable bracket, it will be impossible for the flame to come into contact with the wall of
65 a room should the bracket be turned toward the wall. In fact, the guard or cage A will prevent anything whatever from coming into contact with the flame on the burner and thus it will effectually protect all objects
70 which, by any possibility, might otherwise come into contact with the flame and be injured thereby.

Pivoted to the top plate *c*, is a small plate *g* provided at its ends with perforated ears *h*.
75 An arm *i* of a bracket B passes through the perforations of the lugs or ears *h* and is supported by said lugs or ears, said bracket being preferably composed of wire and adapted to extend downwardly substantially parallel
80 with the cage or guard A, and is intended to support a reflector C. The reflector C is provided on its back with an arm or bracket *j*, which is secured at one end thereto, and provided at a point between its ends with a de-
85 pression *j'*. The arm or bracket *j* is adapted to enter an elongated slot *k* in a short bar or rod *l* and the end of said bar or rod is adapted to rest in the depression *j'*. The bracket B also passes through the slot *k*. The rear end
90 of the rod or bar *k* is screwthreaded and adapted to enter an internally screwthreaded thumb piece *m*. By screwing the thumb piece on the rod or bar *l* until it comes into contact with the bracket B, it will be seen that the
95 reflector C will be securely clamped in place on the bracket B. By thus supporting the reflector, it will be seen that it may be moved up and down or removed entirely, and by pivoting the plate *g* to the top plate of the guard
100 or cage, the reflector can be moved so as to reflect the light in any desired direction.

Our improvements are very simple, cheap to manufacture and effectual in the performance of their functions.

Slight changes might be made in the details of construction of our invention without departing from the spirit thereof or limiting its scope, and hence we do not wish to limit ourselves to the precise details of construction herein set forth, but,

10 Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a guard adapted to be placed on a gas burner, a bracket
15 pivoted to said guard and a reflector carried by said bracket, substantially as set forth.

2. A guard for a gas burner, comprising a lower ring, a central ring, a top plate, wires connecting said rings and top plate, and de-
20 vices for supporting said guard on a gas burner, substantially as set forth.

3. The combination with a guard or cage for a gas burner, of a cross bar having an eye at a point between its ends, and another cross
25 bar having an eye located above the first mentioned cross bar, said eyes being adapted for the reception of a gas burner, substantially as set forth.

4. The combination with a guard or cage
30 for a gas burner, of a plate pivoted thereto, a bracket connected with said plate and a reflector supported by said bracket, substantially as set forth.

5. The combination with a guard or cage,
35 of a plate pivoted thereto and provided with perforated ears, a bracket passing through

said perforated ears and a reflector supported by said bracket, substantially as set forth.

6. The combination with a bracket and a reflector, of an arm secured at one end to said
40 reflector, a bar or short rod having an elongated slot to receive the arm on the reflector, and provided with a screwthreaded portion, said bracket being also adapted to pass
45 through said elongated slot, and an internally screwthreaded thumb piece adapted to screw on said bar or short rod, whereby to clamp the reflector to its supporting bracket, sub-
stantially as set forth.

7. The combination with a guard or cage
50 adapted to be fitted to and supported upon a burner, of a reflector, and an arm swiveled to the cage or guard and to which the reflector is connected, substantially as set forth.

8. The combination with a guard or cage
55 adapted to be fitted to and supported upon a burner, of a reflector, and an arm swiveled to the cage or guard and to which the reflector is adjustably connected, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

CARL JOHN GIDDINGS.
GEORGE W. GIDDINGS.

Witnesses to signature of C. J. Giddings:
CHAS. A. DANIELS,
ALBERT MATHEWS.

Witnesses to signature of G. W. Giddings:
HARRY W. ASHER,
MAX STRAUS.