

(No Model.)

R. J. ARMOUR.
LANTERN.

No. 458,354.

Patented Aug. 25, 1891.

Fig. 1.

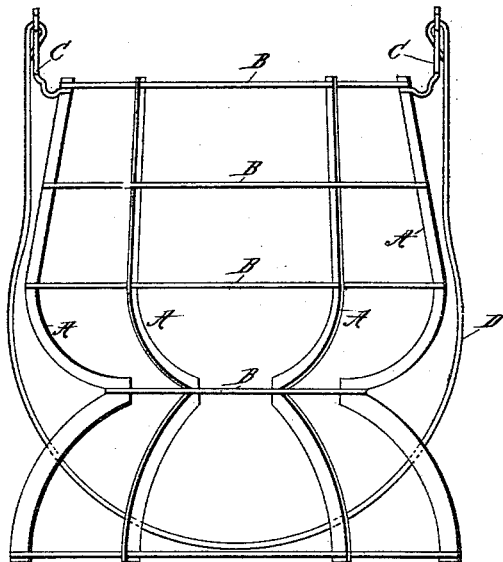


Fig. 2.

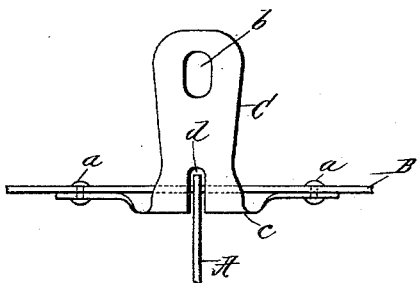


Fig. 3.

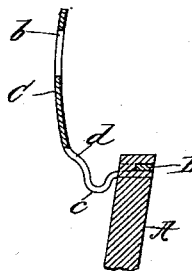
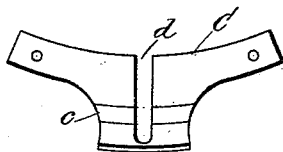


Fig. 4.



Witnesses:
John Buckle,
L. H. Osgood,

Inventor:
Robert J. Armour,
By North Osgood,
Attorney.

UNITED STATES PATENT OFFICE.

ROBERT J. ARMOUR, OF NEWARK, NEW JERSEY.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 458,354, dated August 25, 1891.

Application filed October 3, 1889. Serial No. 325,884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. ARMOUR, of Newark, county of Essex, and State of New Jersey, have invented certain new and useful

- Improvements in Lanterns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.
- My invention relates to means for connecting the bail or handle of a lantern with the guard-frame thereof, which means are specially applicable to that class of guard-frames wherein one or more flat-metal sections are employed.

The objects of my invention are to provide a simple, cheap, and efficient bail-ear which may be conveniently attached to one of the horizontal rings without in any way interfering with the mounting of said ring in the frame or the setting up of the frame, and to secure other and further advantages in the matters of construction, operation, and use, as will hereinafter appear.

- To accomplish the said objects my improvements involve certain new and useful arrangements or combinations of parts and peculiarities of construction of the bail-ear, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a view in elevation of one form of lantern-frame having the improved bail-ears in place thereon, the globe and other parts of the lantern being omitted, since they are not essential to purposes of the present description. Fig. 2 is an elevation of one of the ears, showing also fragments of the vertical and horizontal guard-sections. Fig. 3 is a sectional elevation at right angles to Fig. 2. Fig. 4 is a top or plan view of one of the improved bail-ears detached.

In all these figures like letters of reference, wherever they occur, indicate corresponding parts.

The guard-frame chosen for illustration herein is one in which the vertical ribs represented at A A are all of flat metal set radially with respect to the axis of the frame and interlocked with a series of horizontal flat-metal rings, (represented at B B.)

The particular form of the guard-frame, the

number of parts which are of flat metal, and the manner of assembling or locking the parts together are not essential, and they may be varied.

According to my invention I make separate ears C C, which I rivet or otherwise securely fasten to one of the horizontal rings B, (preferably the top one.) These may be stamped or cut out of small pieces of plate, which would otherwise be wasted, and may therefore be made very cheaply, or they may be cast. They are shown as secured one opposite the other to the under side of a ring B and firmly riveted in place, as by rivets *a* of any number required. The bail D enters perforations *b* and is used for handling the lamp in the ordinary manner. To add stiffness to the ears, so that they will not be likely to be damaged, they may be slightly dished, as indicated. The vertical portion of the ears should be carried clear of the frame to make room for a lantern-top, and the horizontal portion is preferably bent or crimped, as shown at *c*, to make this part amply rigid.

In assembling the frame shown in Fig. 1 the vertical ribs must be sprung out at top before the top horizontal ring can be locked in place, the parts being notched or halved together, as shown. In other methods of fastening the ribs and rings the tops of the vertical ribs must also be adjusted in some way. I preferably mount the ears so that they will straddle one of the vertical ribs, and this gives a bearing on each side of the rib, the better to distribute the strain on the frame. The ears are therefore slitted, as at *d*, the slits being of width equal to or greater than the thickness of the vertical rib and extending in the vertical portion to about the level of the top ring when the parts are attached. It is found most advantageous to secure the ears in place before the ring to which they are applied is mounted in the guard-frame, and when so applied the slits permit the tops of the vertical ribs to be sprung out or otherwise adjusted, not interfering in any way with the process of building up the frame. The ears may be made of any weight of metal desired and may extend up to any required height above the top of the frame.

The improved ears, constructed and applied substantially after the manner above indi-

cated, are found to admirably answer the purposes or objects of the invention previously set forth.

5 Having now fully described my invention, what I claim as new herein, and desire to secure by Letters Patent, is—

1. In a lantern-guard frame, the combination, with flat-metal vertical members set radially with respect to the axis of the frame
10 and a flat-metal horizontal ring, of separate bail-ears made of cast or plate metal, composed of a horizontal and vertical portion and secured upon the top horizontal ring, each ear being slitted to permit it to pass the
15 end of a vertical member and to admit of mounting the frame, substantially as explained.

2. The herein-described bail-ear for lantern-guard frames, the same being made of cast or plate metal, composed of a horizontal and vertical portion slitted and perforated, substantially as and for the purposes set forth. 20

3. The herein-described bail-ear for lantern-guard frames, the same being made of cast or plate metal, composed of a horizontal and vertical portion slitted, perforated, and dished, substantially as shown and described. 25

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

ROBERT J. ARMOUR.

Witnesses:

JOHN BUCKLER,
WORTH OSGOOD.