July 6, 1926. 1,591,940

B. P. JOYCE

FASTENING DEVICE FOR LIGHTING EQUIPMENT CASES

Filed Sept. 6, 1923

Fig. 1.

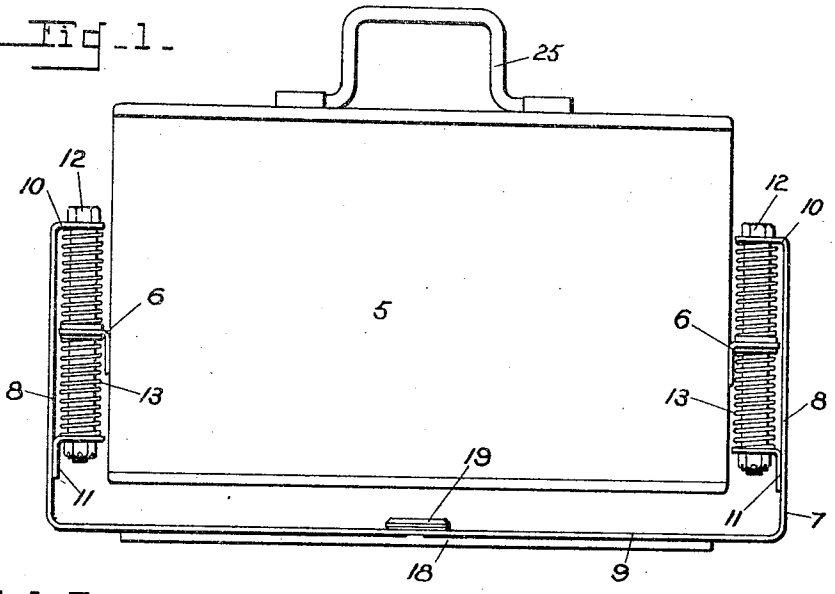


Fig. 2.

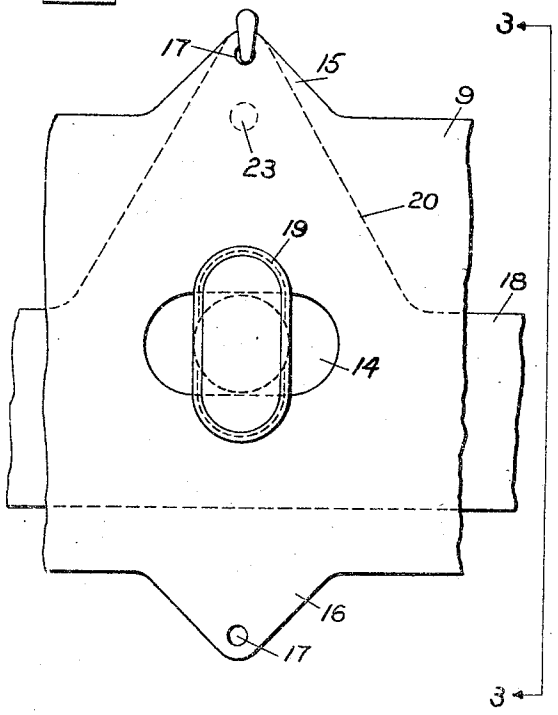
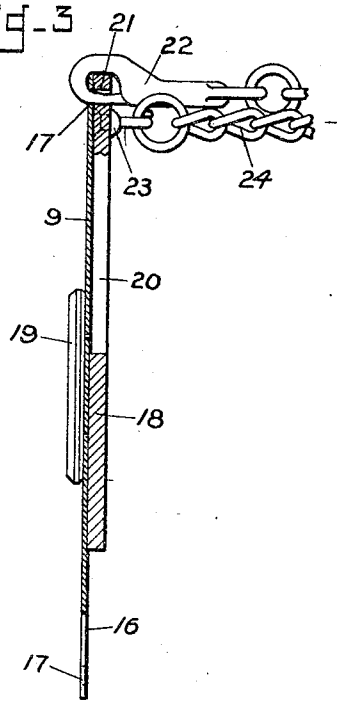


Fig. 3.



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UNITED STATES PATENT OFFICE.

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FASTENING DEVICE FOR LIGHTING-EQUIPMENT CASES.

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(GRANTED UNDER THE ACT OF MARCH 3, 1883; 22 STAT. L. 625.)

The invention described herein may be used by the Government, or any of its officers or employees in prosecution of work for the Government, or by any other person in the United States, without payment to me of any royalty thereon, in accordance with the act of March 3, 1883.

The present invention relates to fastening devices for lighting equipment cases.

In artillery fire at night electric lights are employed for sighting. In non-use these lamps are kept in a case being highly fragile. In practice it is found desirable to carry this case upon a vibration absorbing support.

The primary object of this invention is the provision of means for fastening this support to a limber, caisson or other vehicle.

Another object is the provision of a vibration absorbing support which may be permanently attached to the lighting equipment case and which with the case forms a portable unit preventing breakage.

With the foregoing and other objects in view, my invention resides in the novel arrangement and combination of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

A practical embodiment of the invention is illustrated in the accompanying drawing in which—

Fig. 1 is a side elevation of the case and its mounting;

Fig. 2 is a fragmentary plan view of the fastening means with the case removed; and

Fig. 3 is a section taken in direction indicated by the line 3—3 of Fig. 2.

Referring to the drawings by numerals of reference:

I have shown at 5 a lighting equipment case provided on opposite sides with angle clips 6. This case is mounted on a U-shaped support 7 formed with upright parallel arms 8 and a base 9. At their upper ends the arms 8 are bent inwardly as at 10 and intermediate their length the arms are provided with angle clips 11 similar to the angle clips 6. The respective angle clips may be spot welded, riveted or otherwise secured in position on the case and support. The ends 10 of the arms 8 and the clips 6 and 11 are formed with alined openings. A bolt 12 is passed through these openings and secured in place by nuts contacting at either end with the portions 10 of the arms 8 and the angle clips 11. Surrounding the bolt 12 and interposed between the respective clips 6 and 11 and the respective clips 6 and the ends 10 on either side of the case are pairs of springs 13. The case 5 mounted in the manner described is substantially free from vibration, the springs 13 acting to absorb the shocks from the limber or vehicle on which the case is mounted.

The base 9 at a point intermediate its length is formed with an elongated slot 14 and with side extensions 15 and 16 provided with openings 17. In order to fasten the case in position an attaching member 18 is provided which may be secured to any flat surface. An elongated head 19 is formed on this attaching member at a point intermediate its length and the attaching member 18 is provided with one or more extensions 20 formed with an opening or openings 21 arranged to aline with the openings 17 in the extensions on the case support.

When it is desired to fasten the case support to the limber or other vehicle the opening 14 in the base 9 of the support is brought into alinement with the head 19 and the head 19 passed through this opening. The support is then rotated through an angle of 90° in which position the head will lie cross wise of the opening thus fastening the support upon the attaching member and securing the lighting case in position upon the limber or other vehicle.

To prevent the movement of the support due to jolting in travel I provide an auxiliary fastening means for securing the support in its locked position on the member 18. This fastening means may be of any suitable form; as illustrated a snap fastener 22 is provided secured by a rivet and a chain 24 to the attaching member. This snap fastener passes through the alined apertures 17 and 21 in the support and attaching member to prevent movement of the support with respect to the attaching member.

As shown, the support is provided with a pair of extensions 15 which are formed with

apertures. With such a structure the supporting member may be readily secured to the attaching member from either side.

As described the supporting member is permanently attached to the case. The case then may be removed from the limber or other vehicle by means of its handle 25 with the vibration absorbing support attached thereto and may be set down in any location without fear of breakage of the articles secured in the case.

While I have described my support and attaching means as useful with a lighting equipment case it is apparent that the same support and attaching means are readily adapted for use with any case in which fragile articles are stored.

I claim:

1. In a fastening device for a lighting equipment case, a supporting member for said case, said supporting member provided with upright arms and a base, means resiliently suspending said case from said arms, an attaching member, one of said members provided with an opening, a head on the other of said members adapted to pass through said opening and by rotation of one of said members with respect to the other to lock the same together, extensions on said base and attaching member formed with alined apertures and auxiliary fastening means engaging with said apertures.

2. In a fastening device for a lighting equipment case, a supporting member for said case, a member, one of said members provided with an elongated opening, an elongated head on the other of said members adapted to be passed through said opening and acting by rotation of one of said members with respect to the other to secure the same together, and resilient means carried by the supporting member and cooperating with means on the case to support the case therefrom.

3. In a fastening device for a lighting equipment case, a supporting member for said case, a member to which said supporting member is adapted to be secured, one of said members being provided with a slot and the other of said members with a head adapted to enter said slot and by movement of one of said members with respect to the other to secure said members together, and a resilient element carried by a supporting member and supporting the case.

4. In a fastening device for a lighting equipment case, a supporting member for said case, a member, one of said members provided with an opening, means on the other member adapted to enter said opening and by movement of said members relative to each other to secure the same together, and means for resiliently supporting the case from the supporting member.

5. In a fastening device for a lighting equipment case, a supporting member for said case, a member, cooperating means on said members acting by movement of one of said members with respect to the other to secure said members together, and resilient means connecting the case to the supporting member.

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