

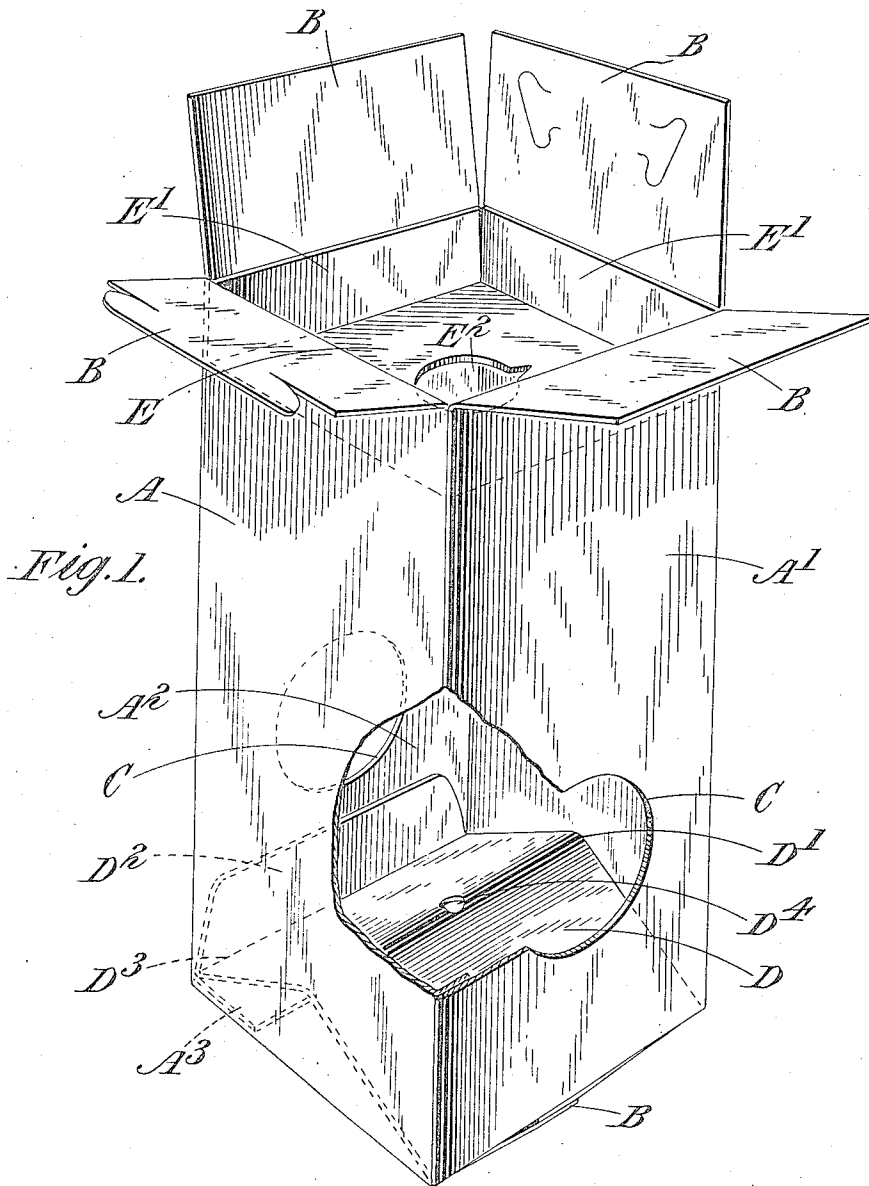
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PACKING CASE.

APPLICATION FILED JAN. 29, 1914.

1,124,122.

Patented Jan. 5, 1915.

2 SHEETS—SHEET 1.



Witnesses

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1,124,122.

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2 SHEETS—SHEET 2.

*Fig. 2.*

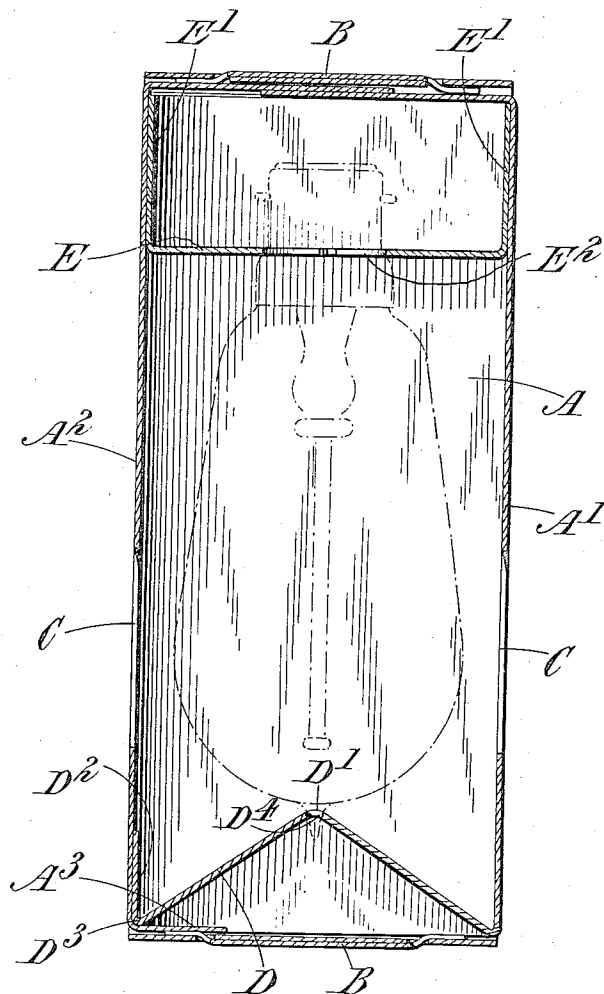
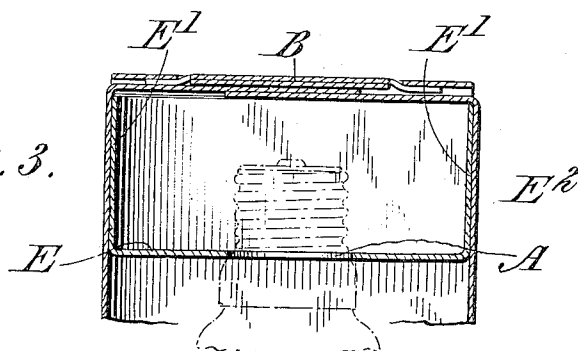


*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

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## PACKING-CASE.

1,124,122.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed January 29, 1914. Serial No. 815,276.

*To all whom it may concern:*

Be it known that I, CHARLES HENRY FOYLE, a subject of the King of England, residing in London, England, have invented certain new and useful Improvements in Packing-Cases, of which the following is a specification.

This invention is for improvements in or relating to packing cases of the kind used for electric lamps and the like fragile articles. These cases are usually made of cardboard, stout linen-paper, or like slightly springy material suitably shaped to form the body of the case and provided with end flaps which interlock to close the case.

According to the present invention there is employed in a packing case of this type, a tray or diaphragm that presents a convexity inward, that is to say, that it is folded to a wedge or like shape and is disposed with the narrow end inward to the interior of the case. It may be constituted by an extension of one of the sides of the case and may be employed in combination with another tray or diaphragm of different shape. The parts of the case may be so dimensioned and disposed that when the end flaps are closed, the various parts are pressed together with the lamp between them, and strained, so as to maintain a secure hold on the lamp and protect it from shock.

In the accompanying drawings: Figure 1 is a perspective view with a part broken away, Fig. 2 is a side elevation in section of a packing case in accordance with the present invention. Fig. 3 is a partial view showing a lamp with a screw cap, instead of a bayonet cap.

A sheet of cardboard or the like is suitably shaped to form the body A of the packing case and the usual interlocking end flaps B at each end thereof. The body of the casing may be provided with sight-holes C, in one or more of the sides in the usual manner.

At one end of the side A<sup>1</sup> of the body of the case, there is provided a flap or extension D, which is of approximately the same width as the side. This flap D is made of such length that it can be bent as at D<sup>1</sup> and inserted into the case forming a wedge-shaped projection toward the interior of the

case. The flap D is also of sufficient length to provide a smaller portion D<sup>2</sup> at its free end, folded at D<sup>3</sup> to lie against the side A<sup>2</sup> which is opposite the side A<sup>1</sup> of the body of the case.

The side A<sup>2</sup> of the case is provided with an extension or flap A<sup>3</sup>, which is folded in beneath the lower closing flaps B, as shown in Fig. 2. Since each of the sides A<sup>1</sup>, A<sup>2</sup> is thus provided with a flap or extension, the lower external closing flaps B are provided on the remaining two sides. When these said flaps B are closed and interlocked the flap D is held projecting inward into the body of the casing, being supported at one end by its junction with the side A<sup>1</sup> and at the other end by abutting at its fold D<sup>3</sup> on the flap A<sup>3</sup>.

At the other end of the packing case the usual interlocking closing flaps B are provided opposite one another and on the other two sides A<sup>1</sup> A<sup>2</sup> of the body of the case, two additional flaps are provided which are folded over inside the upper folding flaps also in the usual manner.

The cushioning means at this end of the case comprises a flat sheet of cardboard E similar to that from which the packing case itself is made but of somewhat larger size than the interior of the case. The edges E<sup>1</sup> of this sheet E are suitably cut and bent up so as to form a flat shallow tray which can be inserted transversely in the casing A and is a close or sliding fit therein. The tray E, is so disposed that its upstanding edge E<sup>1</sup> projects outward from the interior of the case and abuts against the closing flaps at the end of the case.

When arranged for use with electric lamps the wedge shaped portion D is provided with a small hole D<sup>4</sup> centrally situated with respect to the casing to receive the pip of the lamp and the tray E is provided with a hole E<sup>2</sup> to receive the cap end of the lamp; this hole E<sup>2</sup> may be large enough to allow the cap to project through so that it can be engaged with a plug for testing the lamp without removing it from the box, the sight-holes C in the side of the box allowing inspection of the lamp during this process. The hole E<sup>2</sup> may also be provided on diametrically opposite sides

with notches E<sup>3</sup> to permit the packing of lamps of the bayonet cap type, as shown in Fig. 2.

The dimensions of the case and the cushioning means D, E, are such in relation to those of the lamp, that when the lamp is inserted in the case the edges E<sup>1</sup> of the tray project slightly beyond the ends of the body of the case. The aperture in the tray is so dimensioned that it fits the cap of the lamp snugly, both in the case of the screw-threaded cap and the bayonet cap. The tray rests on the shoulder of the cap, thus giving positive endwise clamping of the lamp when the case is closed. When the upper flaps B are bent over to close the case they engage these edges before being closed and force the tray inward thereby pressing the lamp against the wedge-shaped cushioning means D, so that both cushioning means D and E are strained and are jointly operative to hold the lamp firmly in position. It will be appreciated that when the cushioning means are strained the strain is partly taken up on the end flaps of the case where the cushioning means are secured to the edge of the casing or abut the end flaps. It will be understood that instead of the two holes E<sup>2</sup>, D<sup>4</sup> above mentioned for receiving the cap and body of the lamp respectively other provision may be made to accommodate these.

It will be appreciated that in a casing of this construction the lamp is supported on cushioning means at each end which protect it from shock and the cap of the lamp is protected from external blows by the ordinary flaps of the casing; the cap can be exposed by merely opening these flaps so that the lamp can be tested without removing it from the case.

What I claim as my invention and desire to secure by Letters Patent is:—

1. In a tubular packing case for electric lamps, the combination of a case, closing flaps in the ends of said case, a continuous transverse diaphragm in one end of said case of a greater width than said case, having its end bent upward to form an abutting flap against the opposite side of said case, and bent inward substantially in the center to form a wedge-shaped projection provided with an aperture situated centrally in said case to receive the pip of the lamp and prevent lateral displacement thereof, and a disconnected tray fitting within the top of said case, provided with an aperture, for supporting in said case that end of the lamp not supported by the diaphragm, substantially as described.

2. In a tubular packing case for electric lamps, the combination of a case, closing flaps in the ends of said case, a transverse diaphragm in one end of said case convex

to the interior thereof, formed integral with one side of said case, and abutting in the corner formed by the opposite side of said case and one of said closing flaps, and provided with an aperture for receiving the pip of the lamp and supporting same against lateral displacement, and a disconnected tray provided with upturned perpendicular sides, fitting within the top end of said case, provided with an aperture for snugly fitting and supporting the end of the lamp not supported by the diaphragm, the upturned sides of said tray being so dimensioned with relation to the lamp and casing that the edges project slightly outside of the casing when open and the tray is strained by contact of the said closing flaps with the edges of said upturned edges when said casing is closed, substantially as described.

3. In a tubular packing case for electric lamps, the combination of a case, closing flaps in the ends of said case, a transverse diaphragm in one end of said case convex to the interior thereof, formed integral with one side of said case, and abutting in the corner formed by the opposite side of said case, and one of said closing flaps, and provided with an aperture for receiving the pip of the lamp and supporting the same against lateral displacement, and a disconnected tray provided with upturned perpendicular sides fitting within the top end of said case, provided with an aperture for snugly fitting and supporting the end of the lamp not supported by the diaphragm and with cut out portions on the periphery of said aperture for receiving lamps of the bayonet cap type, the upturned sides of said tray being so dimensioned with relation to the lamp and casing, that the edges project slightly outside of the casing when open and the tray is strained by contact of the said closing flaps with the edges of said upturned edges when said casing is closed, substantially as described.

4. In a tubular packing case for electric lamps, the combination of a case, closing flaps in the ends of said case, a continuous transverse diaphragm in one end of said case, of a greater width than said case, having its end bent upward to form an abutting flap against the opposite side of said case, and bent inward substantially in the center to form a wedge-shaped projection provided with an aperture situated centrally in said case to receive the pip of the lamp and prevent lateral displacement thereof, and a disconnected tray provided with upturned perpendicular sides fitting within the top end of said case, provided with a central aperture for snugly fitting and supporting the end of the lamp not supported by the diaphragm, the upturned

sides of said tray being so dimensioned with relation to the lamp and casing that the edges project slightly outside of the casing when open and the tray is strained by contact of the said closing flaps with the edges  
5 of said upturned sides when said casing is closed, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES HENRY FOYLE.

Witnesses:

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