

(No Model.)

C. A. & F. J. MILLER.
CYCLE LAMP SOCKET.

2 Sheets—Sheet 1.

No. 586,507.

Patented July 13, 1897.

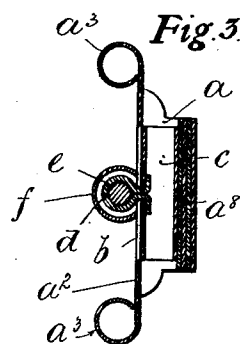
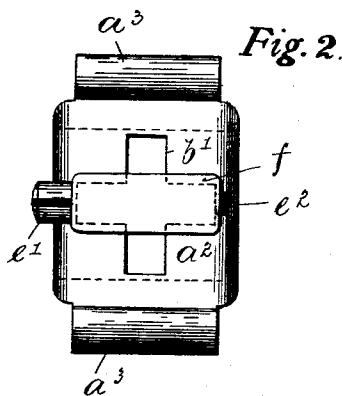
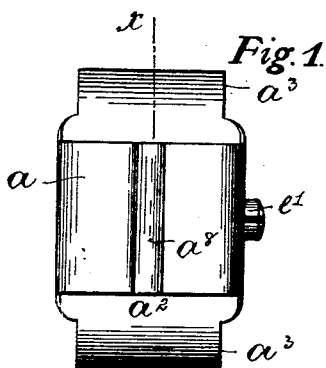


Fig. 4.

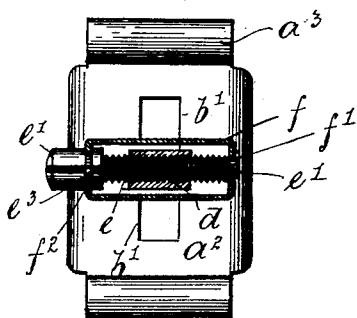


Fig. 5.

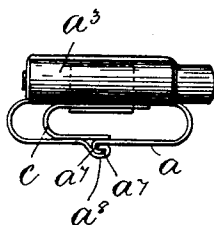


Fig. 6.

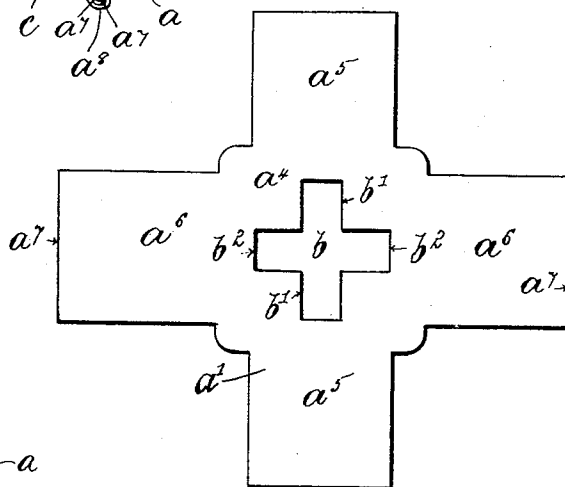
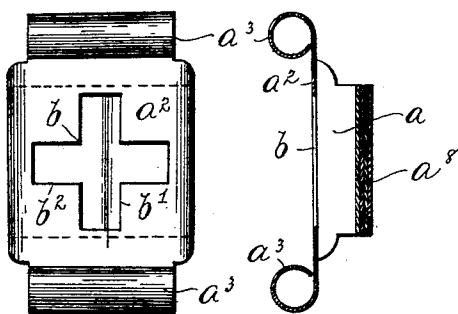


Fig. 7.

Fig. 8.



WITNESSES

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2 Sheets—Sheet 2.

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Fig. 9.



Fig. 10.

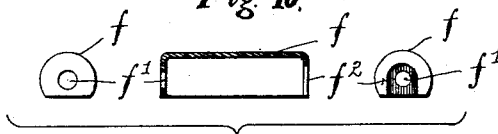


Fig. 11.

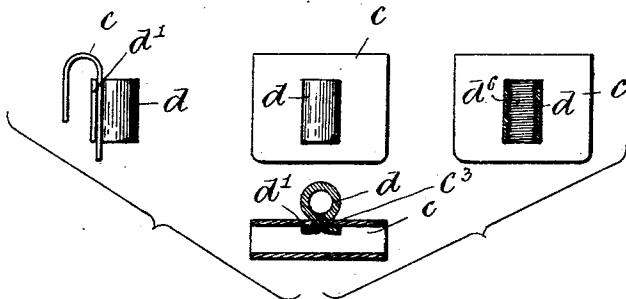


Fig. 13.

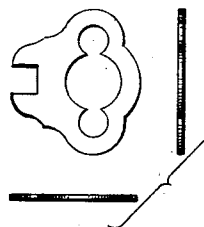


Fig. 14.



Fig. 12.

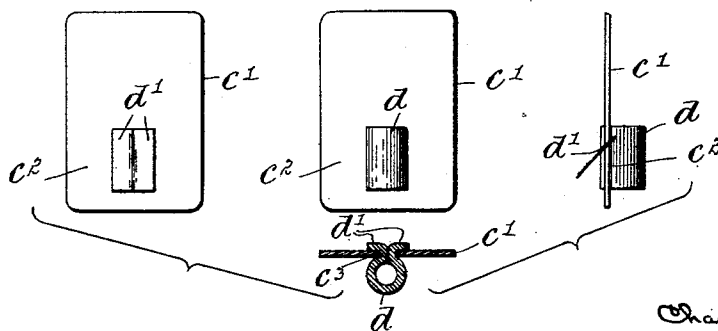
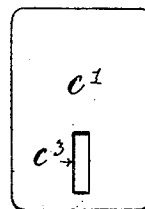


Fig. 15.



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UNITED STATES PATENT OFFICE.

CHARLES ALBERT MILLER AND FREDERICK JOHN MILLER, OF BIRMINGHAM,
ENGLAND.

CYCLE-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 586,507, dated July 13, 1897.

Application filed February 13, 1897. Serial No. 623,263. (No model.) Patented in England December 2, 1896, No. 27,380.

To all whom it may concern:

Be it known that we, CHARLES ALBERT MILLER and FREDERICK JOHN MILLER, managing directors of H. Miller & Company, Limited, subjects of the Queen of Great Britain, residing at Miller Street, in the city of Birmingham, England, have invented certain new and useful Improvements in Cycle-Lamp Sockets, (for which we have obtained Letters Patent in Great Britain, dated December 2, 1896, No. 27,380,) of which the following is a specification.

This invention relates to the manufacture of attachment-sockets for cycle-lamps of the traversing-clip type described in the specification of Letters Patent granted to Phillips and bearing date the 24th day of October, 1884, and numbered 14,079, and has for its object the reduction of the cost of manufacture of such sockets and the making of the same both light and strong by employing principally sheet metal in their construction.

Figure 1 of the accompanying drawings represents a back elevation of a lamp-socket constructed according to our improvements, and Fig. 2 is a front elevation of the same. Fig. 3 is a vertical section of Fig. 1 upon the dotted line a . Fig. 4 is a like view as Fig. 2, but with the cap inclosing the clip-traversing screw and the screw-box of the said clip shown in section as upon the dotted line x^2 , Fig. 3, the traversing screw itself being left in elevation. Fig. 5 is a top side plan of Fig. 2. Fig. 6 is the cruciform-shaped blank from which the socket is made; and Fig. 7 shows a back elevation, and Fig. 8 a vertical section, of the skeleton socket into which the said blank Fig. 6 is fashioned. Fig. 9 is an elevation of the traversing screw separately. Fig. 10 shows a section and separate end views of the cap wherein the traversing screw works. Fig. 11 shows an edge view, an elevation, and two sectional views of the traversing clip. Fig. 12 shows a back and a front elevation, an edge view, and a plan of the said clip before the clipping-plate is bent over into a U or hook figure. Fig. 13 represents an elevation and edge views of the detachable key by which the said traversing screw is rotated. Fig. 14 shows the blank from which the screw-box is made, and Fig. 15 the

blank or plate out of which the traversing clip is fashioned.

In carrying out our improvements we take a cruciform-shaped blank a^1 , which forms both the socket a and its strap a^2 , whose ends are formed into sleeves or barrels a^3 for the connection to them of the arms of the compensating spring or other back. The body part a^4 and vertical arms a^5 of the blank form the strap and its sleeves, while the horizontal arms or branches a^6 are turned forward and inward at a distance from the strap, and their meeting ends or edges a^7 are infibulated together or creased together at a^8 , thereby forming the open-ended socket a . The back part of the socket has a cruciform-shaped piercing b made in its walls, through the vertical arms or parts b^1 of which the gripping-slide c , consisting of a U-shaped piece of metal c^1 of the breadth of the inside of the socket, is capable of being introduced into the inside of the said socket, while the other branches b^2 form a race for the screw-box of the clip, as hereinafter described, to work within. The back c^2 of this slide has attached to it a screw-box d , turned up and made from a blank of sheet metal and with ears d^1 , formed at the edges, taking through a hole c^3 in the back of the slide and being there riveted or clenched from the inside. The screw-box is inside wormed at d^2 , and a traversing screw e , having a turning-head e^1 , is fitted therein.

In introducing the slide, which contracts the rubber lining of the socket around the lamp-bracket tongue, first hook the same through the vertical part of the cruciform piercing and thread it forward when the slide passes into the interior of the socket, with the screw-box lying coincident with the longitudinal part of the gap. A semitubular carrier or cap f is then dropped over the screw-box, with the outer end e^2 of the screw passing into a bearing-hole f^1 in the same, while the forward and gapped end f^2 of the said cap takes over a neck e^3 behind the head of the screw and is soldered in place. This cap confines and forms a carrier for the screw and allows the same to freely swivel and also conceals the said screw from view.

By the rotation of the screw the clip is propelled or repelled, and the whole of the parts

of the socket are put together without the employment of solder other than in securing the cap or cover of the screw-box in place.

It is understood that the screw is passed
5 into the screw-box *d* prior to the cap *f* being placed in position and soldered or otherwise made fast and that the traversing clip is made from a flat piece of metal *c'*, (see Fig. 12,) fashioned into the figure of a hooked clip sub-
10 sequent to the attachment of the screw-box thereto.

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

15 1. The combination with a socket formed from a cruciform-shaped blank of sheet metal and having a cruciform-shaped aperture in one of its sides, of a traversing clip adapted to be introduced through said aperture into
20 the socket, a sheet-metal screw-box attached to said traversing clip, and a traversing screw fitted in said screw-box and rotated in a fixed bearing on the socket, substantially as described.

25 2. The combination with a socket, of a trav-

ersing clip arranged therein, a screw-box attached to said traversing clip and extending through an aperture formed in the socket, a traversing screw fitted in said screw-box, and a cap or carrier attached to the socket, said
30 cap or carrier forming a cover for the screw-box and screw and having a bearing in which one end of the screw is journaled, substantially as described.

3. The combination with a socket, of a trav-
35 ersing clip arranged therein, a screw-box bent up into tubular form from a sheet-metal blank and its ends inserted through a slot in the traversing clip and clenched thereunder, and a traversing screw fitted in said screw-box
40 and journaled in a bearing on the socket, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

CHARLES ALBERT MILLER.
FREDERICK JOHN MILLER.

Witnesses:

ARTHUR T. SADLER,
ALBERT NEWHEY.