

Dec. 24, 1935.

H. D. BLAKE

2,025,564

ELECTRICAL SOCKET

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FIG. 1

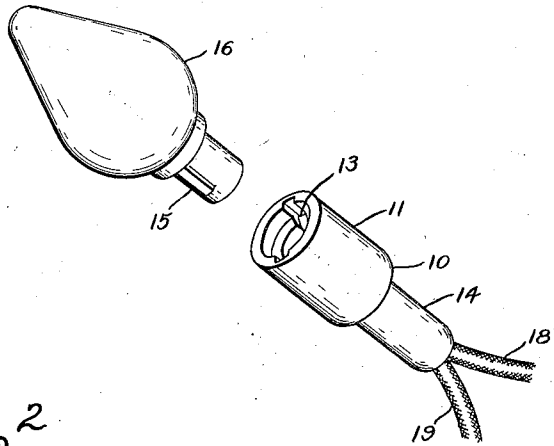


FIG. 2

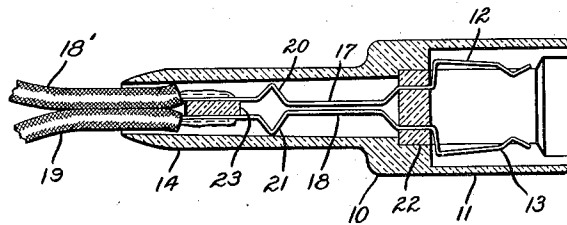
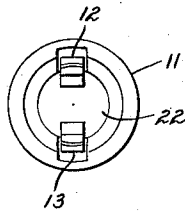


FIG. 3



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# UNITED STATES PATENT OFFICE

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## ELECTRICAL SOCKET

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Application December 24, 1932, Serial No. 648,790

3 Claims. (Cl. 173-346)

My invention relates to lamp sockets and more particularly to sockets for connection in series such as are used in lamp strings for Christmas tree decoration. In such installations the failure of one lamp in the series causes the entire string to become inoperative until that particular lamp which has failed has been replaced. No means are usually provided for indicating the defective lamp so that one is put to the inconvenience of trying a new lamp in each socket until the defective lamp is located. One means which has been proposed to eliminate this inconvenience is to provide each of the lamp sockets in the series with switching means whereby the lamp therein may be temporarily shunted out of the circuit. Each of the switches may then in turn be closed until the defective lamp is reached which is indicated by the fact that the remaining lamps of the series light up. My invention provides such temporary switching means and one feature thereof is that a simple squeezing of resilient members produces the desired short circuit and a release of the applied pressure allows the device to return to its original condition. The object of my invention is to provide a conveniently operated device which will be durable, and one which at the same time will be of simple construction and consequent low cost of manufacture. Other features and advantages of my invention will appear from the drawing and description which follows of a species thereof.

In the drawing Fig. 1 is a perspective view of the lamp socket of my invention and a lamp designed to fit thereinto; Fig. 2 is a longitudinal section through said socket; and Fig. 3 is an end view thereof.

As shown in the drawing, the socket is provided with a casing 10 of rubber or other insulating material and comprises the hollow body portion 11 supporting therein the conductive spring fingers 12 and 13 and a tubular extension 14. The latter is of pliable material such as soft rubber. The fingers 12 and 13 engage terminal contacts 15 at the sides of the base of lamp 16 which is received in the socket. Preferably integral with the fingers 12 and 13 are spring strips 17, 18 which extend longitudinally within the tubular extension 14 and are connected to the external circuit conductors 18' and 19. The said strips are normally spaced apart and are brought temporarily into contact by a squeezing of the pliable casing extension 14. Humps 20, 21 may be provided on the said strips to serve as indicators to the operator of the proper direction in which to squeeze. A plug 22 at the inner end of the tubular extension 14 serves to support the strips 17, 18 and with the

spacer block 23 near the outer end serves to hold the strips normally spaced apart.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A socket for electric lamps and similar articles comprising a pair of lamp terminal engaging members, supporting means, a pair of flexible conductive strips mounted in spaced relation on said supporting means and each electrically connected at one end to one of said members and at its opposite end to a current supply conductor, said strips extending parallel to one another for a substantial distance from said supporting means, a spacer block at the end of said strips whereby said strips are normally maintained in parallel spaced relation, and a casing of pliable material circumjacent said strips whereby said strips may be squeezed together between said supporting means and said spacer blocks through the medium of said casing.

2. A socket for electric lamps and similar articles comprising a pair of lamp terminal engaging members, supporting means, a pair of flexible conductive strips mounted in spaced relation on said supporting means and each electrically connected at one end to one of said members and at its opposite end to a current supply conductor, said strips extending parallel to one another for a substantial distance from said supporting means, a spacer block at the ends of said strips whereby said strips are normally maintained in parallel spaced relation, and a casing of pliable material circumjacent said strips whereby said strips may be squeezed together between said supporting means and said spacer block through the medium of said casing, said strips having oppositely disposed outwardly protruding hump portions to serve as indicators of the proper direction in which to squeeze.

3. A socket for electric lamps and similar articles comprising a pair of flexible conductive strips, supporting means for holding said strips in spaced relation, one pair of ends of said strips consisting of oppositely disposed spring fingers adapted to engage the base of the lamp or similar article, the other pair of ends of said strips extending parallel to one another for a substantial distance from said supporting means, a spacer block at the ends of said strips whereby said strips are normally maintained in parallel spaced relation, and a casing of pliable material circumjacent said strips whereby said strips may be squeezed together between said supporting means and said spacer block through the medium of said casing.

HAROLD D. BLAKE.