No. 844,126. PATENTED FEB. 12, 1907.

L. T. HATFIELD.

SOCKET SEAL FOR ELECTRIC LAMPS, &c

APPLICATION FILED OCT. 4, 1905.

Fig. 1.

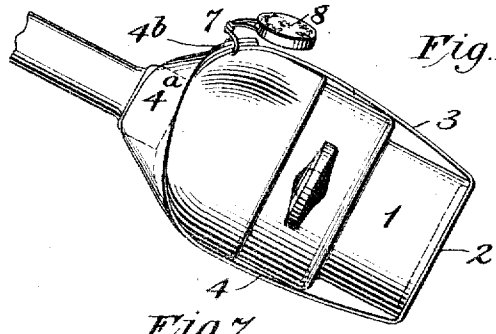


Fig. 2.

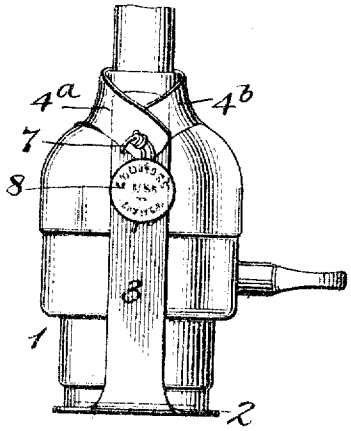


Fig. 7.

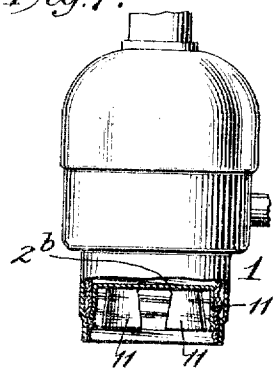


Fig. 8.

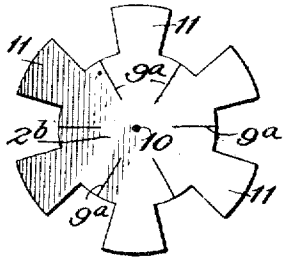


Fig. 3.

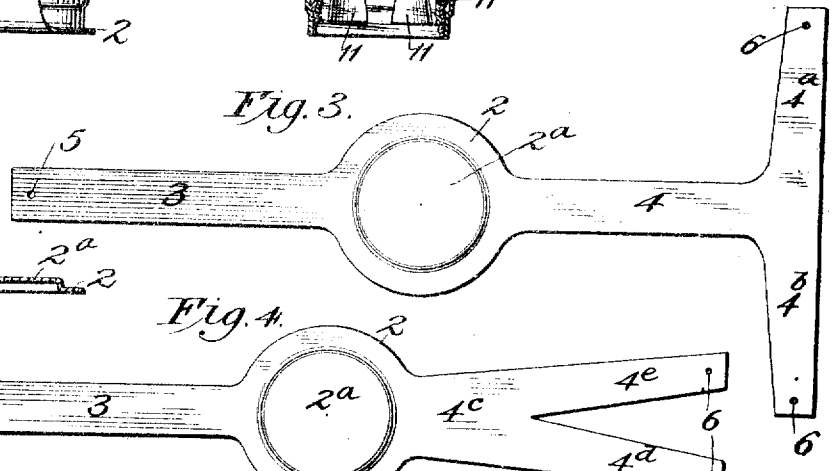


Fig. 6.

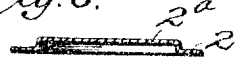
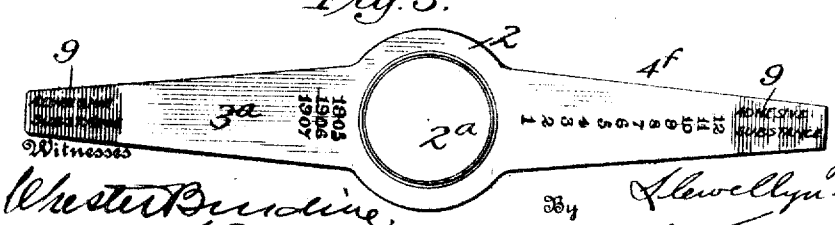


Fig. 4.

Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

LLEWELLYN T. HATFIELD, OF SACRAMENTO, CALIFORNIA.

SOCKET-SEAL FOR ELECTRIC LAMPS, &c.

No. 844,126. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed October 4, 1905. Serial No. 281,290.

To all whom it may concern:

Be it known that I, LLEWELLYN T. HATFIELD, a citizen of the United States, residing in Sacramento, in the county of Sacramento and State of California, have invented certain new and useful Improvements in Socket-Seals for Electric Lamps or the Like, of which the following is a specification.

This invention relates to socket-seals for electric lamps or the like.

It is greatly to the advantage to both the supply company and the consumer of an electric current to have a flat rate per month or per week, and thus avoid the expense and annoyance of meters; but one great difficulty in flat rate is that often consumers have more sockets or places than they need or really use, and then, again, during the summer months in some places and winter months in others, few, if any, sockets are used. For instance, a family will only require hall, porch, and one or two other lights, and in offices, in summer-time, the lights are not used except rarely and then for but a short time; but in self-protection companies supplying electricity must charge for every socket, for there are very many people who will claim to only use a given number, but will not only use all, but will use higher-capacity lamps than the lamp constituting the standard of charge, so this situation heretofore has been met by either removing the fixtures, which is objectionable and expensive, or charging for all the sockets. Further, it is often the case that buildings with a large number of lamps, where meters are used and no flat rate is in existence, that persons are left in charge for considerable periods of time under conditions that render it unnecessary to maintain any considerable number of lights, but through carelessness, inadvertence, or design persons in charge may use a larger number of lights than is necessary, and by use of seals on all lamps not necessary for the persons so occupying the building any unnecessary use can be prevented by the owner. This is so in large hotels, used either for summer or winter, as the case may be, and in many instances it is profitable to cut out all of the electric current rather than take chances on improvident or unnecessary use; but by this method the lighting appliances could be kept in good working order at all times and is perfectly safe.

It is the object of my invention to overcome the objection to both the above methods by providing a means by which the sockets may be sealed against use, so that persons having a flat rate may temporarily cut out any number of lamps during any season of the year without injury to their fixtures.

Other and further objects will appear in the following description and will be more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side view of one embodiment of my invention attached to a socket to close the socket against the insertion of the lamp-bulb. Fig. 2 is a like view at right angles to the position shown in Fig. 1. Fig. 3 is a plan view of the embodiment shown in Figs. 1 and 2. Figs. 4 and 5 are plan views of two other embodiments of my invention, these also preventing the insertion of the lamp-bulb. Fig. 6 is a transverse section through any one of the embodiments shown in Figs. 1 to 5. Fig. 7 is a side view of a socket partially broken away to show an embodiment of my invention permitting the insertion of the plug, and Fig. 8 is a plan view of the embodiment shown in Fig. 7.

Referring more particularly to the drawings, and to Figs. 1 to 6, 1 indicates the usual socket for electric lights or other current-consuming device having the usual contacts within. To prevent access to these contacts, I employ a barrier in the form of a disk 2, having a projection fitting within the socket to prevent lateral movement of the disk and formed by stamping a concavo-convex portion 2^a from the disk itself, the remaining portion of the disk abutting the rim of the socket. The embodiment shown in Figs. 1 to 3 is made of any kind of flexible metal and has a pair of arms 3 and 4 extending from opposite sides of the disk, the arm 3 being provided with a perforation 5 and the arm 4 having a pair of supplemental arms 4^a and 4^b extending at right angles thereto and provided with perforations 6. The main arms are adapted to be bent upon the sides of the socket, and the supplemental arms are bent around the socket at the upper end and are secured to the main arm 3 by

means of a wire 7, held by a seal 8, containing distinctive marks, thus providing a means preventing the removal of the barrier except upon the destruction of the seal. The embodiment shown in Fig. 4 is the same as that shown in Figs. 1 to 3, except that the main arm 4^c is bifurcated to provide two supplemental arms 4^d and 4^e. The embodiment shown in Fig. 5 is to be made of paper, papier-mâché, or any material that will show injury or destruction by removal. The arms 3^a and 4^f will be provided with glue or other cementitious material 9 and are to be pasted on the side of the socket to be removed by moistening, which will expose the work.

For those who prefer to leave the lamps in the sockets to retain the appearance of the lamp the embodiment shown in Figs. 7 and 8 is devised. In this embodiment the disk 2^b is of a size to fit within the socket and is provided with radial slits 9^a and a central perforation 10. Extending radially from the disk, each between a pair of slits, are extensions 11. This form may be made of metal stiff enough to permit the extensions 11 when bent at an angle to the disk to expand against the inner wall of the socket and prevent the removal of the disk. To remove this device, a hooked or pointed tool is introduced into the perforation 10, and the device is then pulled out. In being pulled out it is, owing to the radial slots, destroyed to such an extent that further use is impossible. The extensions do not interfere with the insertion of the plug of the lamp or other device; but current cannot be obtained, as the disk is either covered with insulating material on the face exposed to the inner contact of the socket or the disk is spaced from the said inner contact. This form may also be made of paper, papier-mâché, or similar material, and in this case the edges of the extensions 11 may be gummed to the inner wall.

The device when the metallic seal is not used should contain matter indicating the months of the year, as shown in Fig. 5, also matter indicating a number of years, and the date of sealing could be punched by a distinctive punch, so that the device could not be removed and another inserted in its place.

In all embodiments it will be seen that the only way to secure current from the socket to which my invention has been applied is to destroy a part or the whole of it. In this way should they be tampered with in any manner the supply company upon inspection would find out. The penalty for destruction of the device would form part of the contract between the consumer and the company.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sealing device for electric sockets for preventing electrical connection with the contacts in said sockets, comprising a closure constructed to close the open end of the socket against admission of the contacting device sought to be introduced within the socket, and means for securing the said closure in closing relation to the socket and preventing the removal of said closure except upon destroying a portion of the device.

2. A sealing device for electrical sockets comprising a barrier formed to be attached to a socket, to prevent electrical connection with the socket-contacts, and a seal securing said barrier to the socket.

3. A sealing device for electrical sockets comprising a barrier formed to be attached to a socket, to prevent electrical connection with the socket-contacts, and destructible means for securing said barrier to the socket.

4. A sealing device for electrical sockets comprising a barrier constructed to form a closure for the socket and to engage therewith in position to prevent introduction of means for establishing electrical connection with the socket-contacts, and destructible means for securing said barrier to the socket.

5. A sealing device for electrical sockets comprising means constructed to fit within the socket and prevent bringing the conductors of a current-consuming device into electrical connection with the socket-contacts, and sealing means for securing said first-named means in position and preventing the removal of the same except upon the destruction of the sealing means.

6. A sealing device for electrical sockets comprising means to fit within the socket to prevent electrical connection of a current-consuming device with the socket-contacts, and a seal securing the first-named means in place.

7. A sealing device for electrical sockets comprising means to fit within the socket to prevent electrical connection with the socket-contacts, and flexible members extending from said first-named means to hold the said first-named means to the socket.

8. In combination with an electrical socket, means barring said socket against the introduction of current-consuming means, securing means for the barring means, and a seal for the securing means.

9. A sealing device for electrical sockets comprising means preventing the insertion of a current-consuming device in a socket, and a seal for holding said means.

10. A sealing device for electric sockets comprising a disk formed to fit the socket, and prevent electrical connection with the contacts thereof, and a seal for holding the disk to the socket.

11. A device of the class described, com-

prising a disk having a projection adapted to fit within a socket, and arms extending from said disk.

12. A device of the class described, comprising a disk having a projection adapted to fit within a socket, arms extending from said disk, and a seal secured to the arms.

13. The combination of means for preventing a contact of an electrical lamp-plug or the like engaging a contact in a socket, and a seal preventing the removal of said means except upon destruction.

The foregoing specification signed at Sacramento, California, this 25th day of September, 1905.

LLEWELLYN T. HATFIELD.

In presence of—
MAURICE E. FINN,
DORIS M. KRUEGER.