H. T. PAISTE.

LAMP SOCKET SHELL.

APPLICATION FILED JUNE 13, 1911.

1,053,743. Patented Feb. 18, 1913.

Fig. 1.

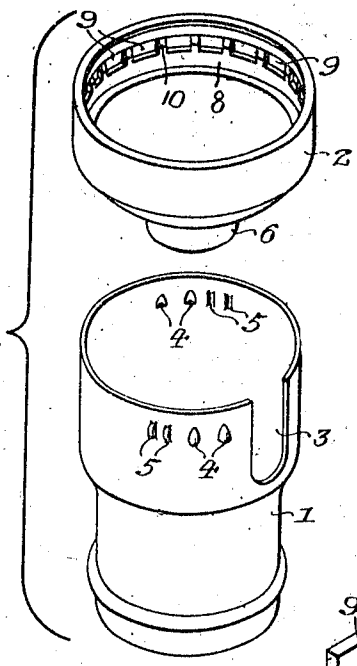


Fig. 5.

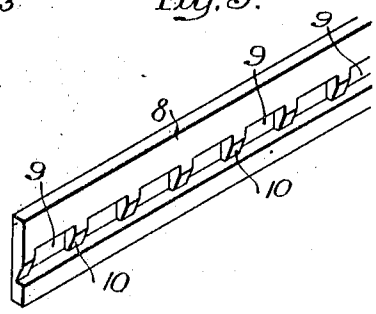


Fig. 3.

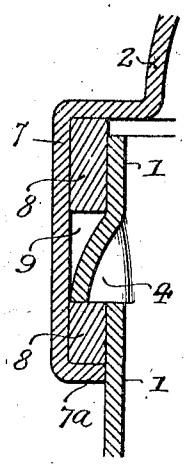


Fig. 2.

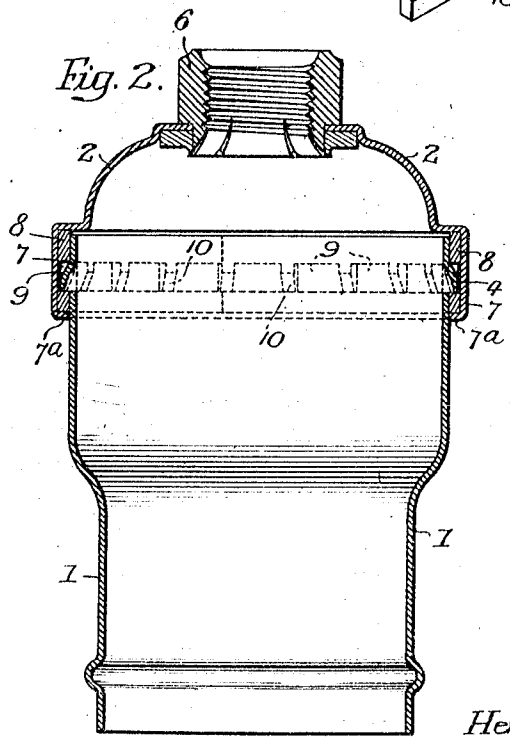
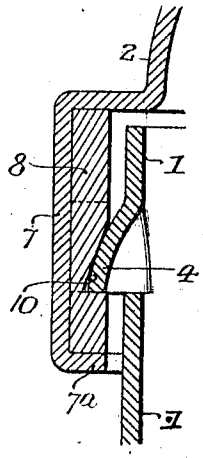


Fig. 4.



Witnesses.—

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UNITED STATES PATENT OFFICE.

HENRY T. PAISTE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO H. T. PAISTE COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LAMP-SOCKET SHELL.

1,053,743. Specification of Letters Patent. **Patented Feb. 18, 1913.**

Application filed June 13, 1911. Serial No. 632,932.

To all whom it may concern:

Be it known that I, HENRY T. PAISTE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Lamp-Socket Shells, of which the following is a specification.

My invention relates to novel means for detachably connecting the cap with the body portion of a lamp socket; one object of the invention being to provide a relatively simple and inexpensive connecting device whereby the two parts of the socket shall be coupled or held together to prevent their accidental separation, without the necessity of turning one of the parts relatively to the other in order that the catches on one of the parts may properly engage a recess in the other part.

It is further desired that after the body of the socket has been inserted in the cap a sufficient distance, it shall not be possible to draw it straight out, nor for it to become accidentally dislodged even though it be not turned; the invention contemplating a novel structure on one of the parts of the socket for engagement with the catches on the other part whereby said two parts will be operatively connected after one of them has been pushed into the other a predetermined distance.

These objects and other advantageous ends I secure as hereinafter set forth, reference being had to the accompanying drawings, in which;—

Figure 1, is a perspective view of the cap and body of a lamp socket constructed according to my invention; Fig. 2, is a vertical section on an enlarged scale illustrating the detail construction of the socket; Figs. 3 and 4 are fragmentary sections illustrating the catches of the body in two of their possible positions relatively to the cap, and Fig. 5, is a perspective view of a part of the cap-engaging ring prior to its mounting in the cap of the socket.

In the above drawings 1 represents the body of a lamp socket and 2 the cap, the former being provided with the well known key slot 3 and having sets of outwardly projecting catches or barbs 4; these being in the present instance arranged in two pairs diametrically opposite each other. In addition the upper edge of the body is provided with two pairs of outwardly projecting tongues 5 for the purpose of limiting its possible revolution relatively to the cap 2. The latter is provided with the customary bushing 6 for the reception of the current conductors and at its part of widest diameter is made substantially cylindrical in form, as indicated at 7 for the reception of a piece of strip metal 8 curved into annular form so as to tightly fit within said part of the cap. The outer edge of the cap is turned over as indicated at 7^a to retain the strip permanently in position, and this latter consists of a length of sheet metal formed with a series of somewhat elongated apertures 9; the partitions separating said openings being partially cut away as shown at 10 so that on one face of the strip there is provided a continuous ledge for the reception of the barbs or catches 4. In assembling the strip in the cap, the former is bent to circular form and after being introduced in the cylindrical portion of said cap, is permanently retained in place by turning over the edge 9 thereof; it being noted that the strip is so placed that the cut or beveled faces of the partitions between the apertures 9, face inwardly. With this arrangement of parts, if it happens that when the body 1 is introduced into the cap, all of the catches 4 enter apertures 9 in the strip 8, then the parts of the socket are held together in the desired manner so that they can be separated only by a strong inward pressure on the body at a point adjacent the key slot 3, followed by a tilting movement of the body away from the cap. Heretofore, however, it has been possible for one or more of the barbs or catches 4 to strike one or more of the partitions between the apertures 9 in the strip 8 with the result that it was a comparatively easy matter for the body to be pulled or jarred out of the cap. These parts, therefore, frequently became separated with the consequent objectionable results. By my invention, however, if one or more of the catches or barbs 4 is opposite a partition between the apertures 9 when the body is pushed into the cap, the parts are none the less permanently connected together so that they can only be removed by the exertion of considerable force on the body 1 as above indicated. This desirable result is due to the fact that, as shown in Fig. 4, the catch or barb 4 will engage and hold to the continuous shelf provided on the strip 8 by reason of the cutting away or

beveling of the partitions between the apertures 9; it being obvious that this action occurs regardless of whether the catch or barb enters one of the recesses 9 or springs into the space formed by the cut away portion of one of the partitions between the openings.

By employing an elongated strip 8 in place of an endless metal band or ring, the cost of manufacture of a lamp socket is materially reduced, since it is possible to form said strip by stamping and insert it in the cap merely by bending it into annular form.

At any suitable point in the manufacture of a socket the partitions between the openings 9 may be cut away as heretofore described and the outer edge of the cylindrical part 7 of the cap turned over as shown at 7^a. This cutting away of portions of the partitions between the openings 9 may be accomplished by the use of a suitable cutter and the continuous supporting shoulder so formed provides a well defined relatively sharp edge for the reception and holding of the barbs or catches 4 on the body 1.

I claim:—

1. The combination in a lamp socket of a cap including a structure presenting a continuous annular shoulder and a series of recesses; with a body having a retaining catch placed to engage said shoulder and in position to enter any of the recesses.

2. The combination in a lamp socket of a cap; a strip fixed therein and having an annular series of alternate openings and partitions, said strip having flat portions adjacent the partitions forming with one side of all of said openings a continuous shoulder; and a body having a catch or catches placed to detachably engage the shoulder and enter the recesses.

3. The combination in a lamp socket of a cap and a body, said body having a catch or catches; with a piece of sheet material fixed in the cap and having a series of openings therein for the reception of the catches on the body; the partitions between the openings being partially cut away to provide supporting surfaces for the catches in addition to those provided by the said openings.

4. The combination in a lamp socket of a cap and a body; a catch or catches on the body; and an elongated strip bent into annular form and fixed within the cap; said strip having a series of openings and having the partitions between the openings partially cut away on their inner faces to provide supporting surfaces for the catch or catches of the body in addition to those provided by the openings in the strip.

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

HENRY T. PAISTE.

Witnesses:
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