No. 849,089. PATENTED APR. 2, 1907.

P. L. SYLVESTER.

SOCKET KEY FOR ELECTRIC LAMP SOCKETS.

APPLICATION FILED JULY 5, 1906.

Fig. 1.

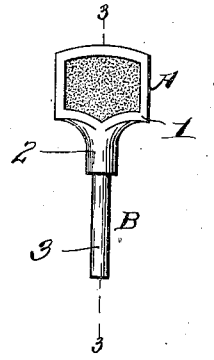


Fig. 2.

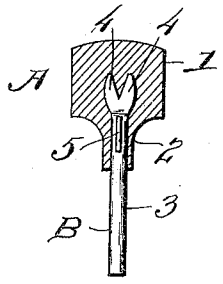


Fig. 3.

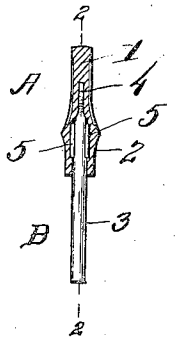
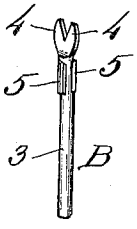


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

PHILIP L. SYLVESTER, OF SCRANTON, PENNSYLVANIA, ASSIGNOR TO THE SCRANTON BUTTON COMPANY, OF SCRANTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

SOCKET-KEY FOR ELECTRIC-LAMP SOCKETS.

No. 849,089. Specification of Letters Patent. Patented April 2, 1907.

Application filed July 5, 1906. Serial No. 324,785.

To all whom it may concern:

Be it known that I, PHILIP L. SYLVESTER, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Socket-Keys for Electric-Lamp Sockets, of which the following is a specification.

My invention relates to improvements in keys for use in connection with incandescent electric-lamp sockets whereby the breakage, splitting, or cleavage of the molded insulating-material pieces of such keys is prevented.

In the accompanying drawings, Figure 1 is a side elevation of a socket-key. Fig. 2 is a central section through the same on the line 2 2 of Fig. 3. Fig. 3 is a similar view on the line 3 3 of Fig. 1, and Fig. 4 is a perspective view of the metal stem of the key.

Referring to the drawings, A indicates a finger-piece of molded insulating material for socket-keys of the usual form, having a flattened head 1 and a shank or boss 2 thicker than the head. The stem B of the key consists of a metal rod or mandrel 3, having one end flattened, and by preference, though not necessarily, slotted, forming diverging tongues 4 4 and having ribs or lugs 5 5 projecting from the body of the rod adjacent to said flattened portion but in planes at right angles to said portions. When the finger-piece is molded around the shank of the key, the flattened end 4 4 lies in the central plane of the head 1, while the ribs or lugs 4 extend in a plane at right angles to the central plane of the head. The ribs or lugs 5 5 are preferably formed by swaging or pressing up the metal of the rod 3. Keys of this character are usually made by molding the finger-piece around a plain cylindrical metal rod having a flattened end; but with this construction it is found that the heads of the keys frequently split in the plane of the flattened end of the rod and separate from the rod when subjected to the torsional strains incidental to turning on and off incandescent lights. The plastic material has a tendency to become laminated in the plane of the flattened end of the mandrel during the process of molding the head of the key. In the molding process a piece of plastic material is first placed on the lower die or mold, the flattened end is then placed on this piece of plastic material, then another piece of plastic material is placed on the flattened end of the mandrel, and the upper die is then brought to bear upon the plastic material, which is subjected to heavy pressure between the dies. As the dies or molds come together the surplus plastic material is forced out between the dies, and the lamination of the material is caused by the lateral flowing of the material under pressure toward the edges of the dies, during which the particles of material arrange themselves flatwise. This lamination makes the keys susceptible to easy cleavage in the plane of the head, and consequently when the key is subjected to any undue torsional strain the finger-piece frequently splits in the plane of the flattened end of the metal rod or mandrel.

By providing one or more lugs or ribs 5 upon the rod, each projecting at an angle to the plane of the head of the finger-piece, and therefore at angle to the laminations of said finger-piece, splitting of the finger-piece is prevented. These ribs are preferably in the stem and thicker portion of the head and preferably at right angles to the flattened portion of the head, as shown, and the torsional strain of the head is transmitted to the mandrel largely through these ribs, which are at angles to the line of cleavage, instead of being transmitted entirely through the flattened end of the mandrel, as in the ordinary construction. Preferably two ribs, one on each side of the stem, are provided; but one or several ribs may be provided on the stem for this purpose. The mandrel may be provided with ribs at right or other angles to the ribs 5, and the flattened ends may be omitted in some forms of keys.

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

1. A key for incandescent-lamp sockets comprising a finger-piece of molded insulating material having a flattened head and a shank or thickened portion at one end of said head, and a metal stem or spindle embedded in said shank and having one or more ribs or projections embedded in the shank and extending at an angle to the central plane of said head.

2. A key for incandescent-lamp sockets comprising a finger-piece of molded insulating material having a flattened head and a shank or thickened portion at one end of said head, and a metal stem or spindle having a flattened end embedded in said flattened head and having one or more ribs or projections extending at an angle to the plane of said end and embedded in said shank or thickened portion.

3. A key for incandescent-lamp sockets comprising a finger-piece of molded insulating material having a flattened head and a shank or thickened portion at one end of said head, and a metal stem or spindle having a flattened end embedded in said flattened head and having ribs projecting from opposite sides of the shank at right angles to the plane of said end and embedded in said shank or thickened portion of the finger-piece.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP L. SYLVESTER.

Witnesses:

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