

(No Model.)

A. HAID.
ELECTRIC LAMP HOLDER.

No. 321,493.

Patented July 7, 1885.

Fig.1.



Fig.2.

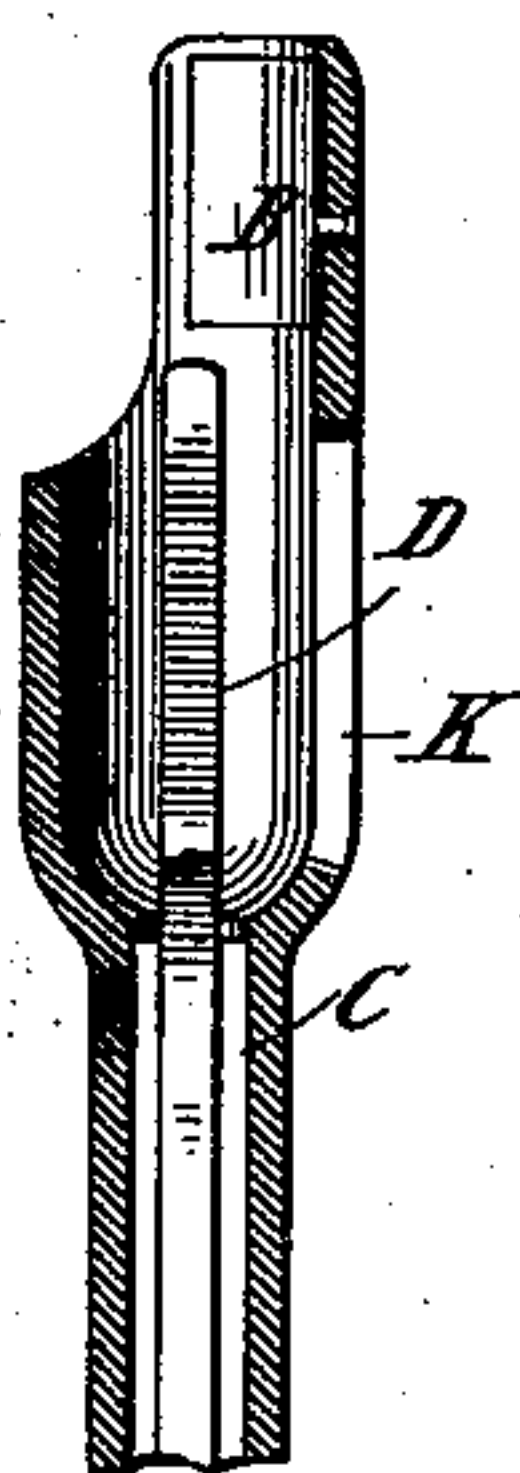
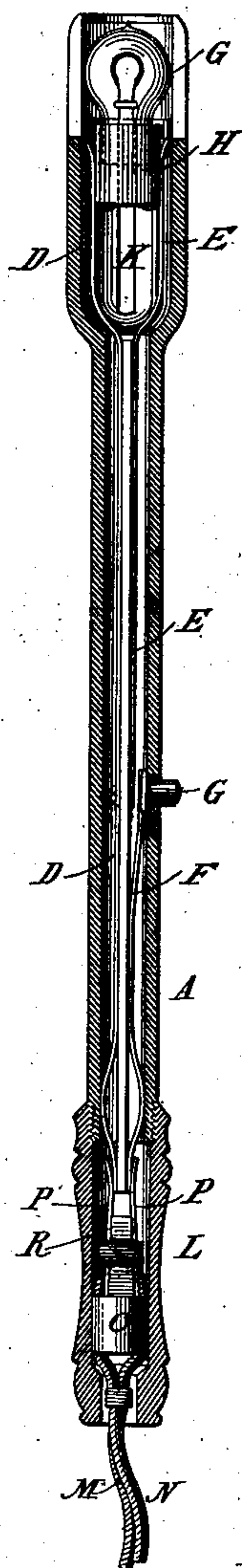


Fig.3.



Attest:

Raymond A. Barnes
W. Frisby

Inventor:

Alfred Haid
By Parker W. Page
att'y.

UNITED STATES PATENT OFFICE.

ALFRED HAID, OF RAHWAY, NEW JERSEY, ASSIGNOR TO THE EXCELSIOR
ELECTRIC APPARATUS COMPANY, OF NEW YORK, N. Y.

ELECTRIC-LAMP HOLDER.

SPECIFICATION forming part of Letters Patent No. 321,493, dated July 7, 1885.

Application filed February 24, 1885. (No model.)

To all whom it may concern:

Be it known that I, ALFRED HAID, a subject of the Emperor of Germany, residing at Rahway, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Electric-Lamp Holders, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

My invention consists in a holder for electric incandescent lamps, more particularly designed for use in dental and surgical operations for examining the mouth, throat, or teeth, which is an improvement on devices of this kind heretofore used, in respect to certain details of construction which render it much more serviceable and convenient for the purposes named.

I make the holder of any material—such as metal, porcelain, wood, or hard rubber, preferring to use the latter, for the reason that instruments of this kind are usually made of this material, viz: that it is more easily kept clean, and is softer to the touch and does not produce the unpleasant sensation which metal does when coming in contact with the teeth. The holder is tubular in form and from six to eight inches in length. It may be made of the same diameter throughout, or it may be enlarged at the part in which is inserted the lamp, this being purely a matter of choice.

The tube is made in two parts, which are joined together by screw-threads or otherwise. In the part that carries the lamp I insert a strip of insulating material, on one side of which is a single metal strip, and on the other two shorter strips with overlapping ends, which are normally held out of contact by the resilience of one which is bent slightly. A push-button extending through the holder is used to bring the two ends together when it is necessary to close the circuit. The metal strips are secured to the insulating strip by cement or otherwise, and are connected with the wires from a battery by a clamp contained in the other section of the holder.

The lamp is provided with an insulating base having terminals that are brought into contact with the metal strips extending into the socket when the lamp is inserted therein. A slot is formed in the socket for forc-

ing the lamp out when it has been injured or exhausted. These and other features of my invention are illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my improved holder; Fig. 2, a vertical section of the upper part of the same; and Fig. 3 a central vertical section of the entire holder, showing the construction and arrangement of the parts contained therein.

A is the main or front portion of the holder. It is composed of a tube with any convenient form of socket for an incandescent lamp, which in this case, since I prefer to use a lamp somewhat larger than the bore of the tube admits of, is widened at the end and cut away so as not to cut off too much of the light. A strip, B, of silver or other bright metal, is secured within the socket, to serve as a reflector when the holder is made of a material that does not reflect light.

C is a strip of insulating material, to which are attached the strip D of brass or copper on one side and the strips E F of the same material on the other. The ends of strips E F overlap, and one is bent so as to remain normally out of contact with the other. A push-button, G, passes through the side of the tube over the bent end of strip F. The strips D E, at the upper end of the strip C, are spread so as to form contacts for the lamp within the socket.

The lamp G' is an ordinary incandescent lamp of comparatively small size, to which is secured an insulating base, H, provided with metal contact-plates to which the lamp-wires are joined. The lamp is inserted in its socket in such manner as to bring these plates in contact with the strips D E.

A slot, K, is formed in the side of the socket, so that when it becomes necessary to remove the lamp, a tool may be inserted under the lamp for forcing it out.

L is the end or butt of the holder. This also consists of a tube which is adapted to be secured to the other section by a screw-thread or other means. The conductors M N from a battery are carried up through a hole in the end of this section, and are secured in grooves in opposite sides of a block, O, of insulating material. The naked ends of the wires are

then bound to metal spring-strips P P, secured on opposite sides of a tapering plug, R, secured to or forming part of the block O.

The end of the strip C is enlarged and tapered, or the strips D F are simply bent as shown in Fig. 3, and extend slightly beyond the end of the section A. To connect the two sections, the insulating-block O and plug R, with the wires attached thereto, are drawn up out of the section L, and the springs P P slipped over the ends of strips D F. The springs form a species of clamp that preserves contact. Section L is then screwed to section A, which is done without turning or twisting the conductors.

When the section L is screwed up in place, it holds the conductors together so that the circuit cannot be broken by pulling the wires outside the holder.

It is important in instruments of this kind that this should be so, and the means by which I secure this are very simple and efficient, and avoid the use of binding-screws and other forms of exterior connections commonly used, while they provide for the ready separation of the cord from the holder.

Being aware that the instruments constructed on this principle for the same and similar purposes have been in use for a number of years, I claim only such parts as I have herein described as improvements invented by me.

What I claim is—

1. A tubular holder for a portable or hand incandescent electric lamp, formed in sections adapted to be united in the manner described, in combination with fixed terminals in the lamp-containing section and loose removable terminals in the other, connected with the battery-wires, and arranged to be joined with the fixed terminals, and held in contact therewith by uniting the two sections together, substantially as set forth.

2. A tubular holder for an incandescent lamp, formed in two sections, adapted to be united in the manner described, in combination with metal strips D F, secured in one section, and springs P P, secured to an insulating-plug and connected with the battery-wires, and fitting loosely within the other section, these parts being so constructed that the springs P P when joined to the strips D F are held in contact therewith by uniting the two sections of the holder, as and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 21st day of February, 1885.

ALFRED HAID.

Witnesses:

W. FRISBY,
F. E. HARTLEY.