(No Model.)

E. C. RUSSELL.

DISK CARBON HOLDER FOR ELECTRIC LAMPS.

No. 446,549. Patented Feb. 17, 1891.

Fig. 1.

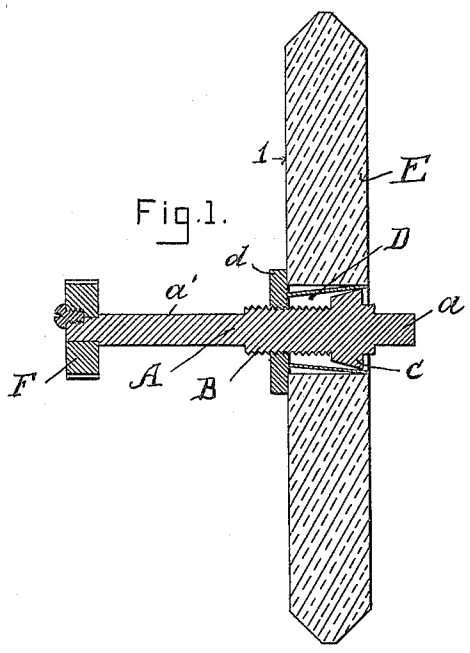


Fig. 2.

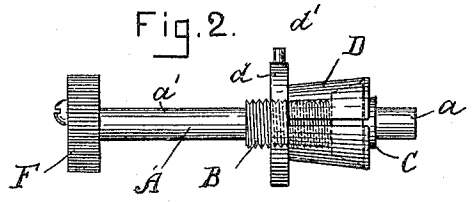


Fig. 3.

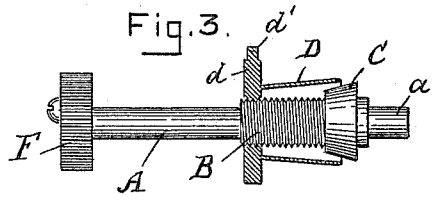


Fig. 4.

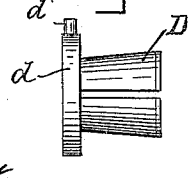
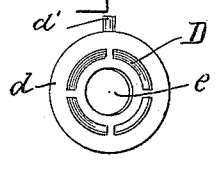


Fig. 5.



Witnesses.
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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DISK-CARBON HOLDER FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 446,549, dated February 17, 1891.

Application filed May 14, 1890. Serial No. 351,805. (No model.)

To all whom it may concern:

Be it known that I, EDWIN CHARLES RUSSELL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Disk-Carbon Holders for Arc Lamps, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a holder for disk carbons for electric lamps upon which the carbon can be readily placed and removed therefrom, and which will adjust itself centrally in the hole of the carbon and hold said carbon at right angles to the axis of the holder; and the invention consists of a spindle having a screw-threaded enlargement and a conical projection and a split thimble, the inner end of which is threaded to fit the screw on the spindle, as hereinafter fully described, and pointed out in the claims.

Figure 1 represents a longitudinal section of a disk-carbon holder embodying my invention, showing a carbon thereon. Fig. 2 is a side view of the holder, showing the thimble in the expanded position. Fig. 3 is a similar view showing the thimble in section and in the contracted position. Figs. 4 and 5 are respectively side and front views of the thimble detached.

A represents the spindle, formed with an enlargement B, that is screw-threaded, and also a conical enlargement C.

D is the split thimble, having a flange *d*, that is formed with a screw-threaded hole *e*, which fits onto the screw B. The thimble is divided into sections, preferably four, as shown, each section acting as a spring, so that if they be expanded and then released they will return to their former position.

To secure a disk carbon, as E, upon the holder, the split thimble is drawn back, as shown in Fig. 3. The carbon is then placed upon the same and the flange *d* is turned until the thimble D is in the position shown in Figs. 1 and 2—that is, until the outer ends of the split thimble have been expanded by the conical projection C, so that its outer ends are in contact with the side of the hole in the carbon disk E, and the inner surface *l* of the disk pressed against the side of the flange *d*, so that the disk is forced to assume a position at right angles to the spindle A, and is thus securely held.

d' is a small projection or thumb-piece, so that in case the thimble should stick a great leverage may be obtained by placing the thumb against it when removing the carbon.

In practice the holder is supported by a forked frame, the outer end *a* of the spindle forming one journal and the portion *a'* at the rear of the screw B forming the other journal, and on the inner end of the spindle is mounted a pinion F, to which a rotary motion is imparted by a rack or other suitable means.

What I claim is—

1. A disk-carbon holder consisting of a spindle having a screw-thread and a conical enlargement at the inner end and a pinion at the outer end, in combination with a split thimble connected to a screw-threaded collar, substantially as set forth.

2. A disk-carbon holder consisting of a spindle A, having a screw-threaded enlargement B and a conical enlargement C at its inner end and a pinion F at its outer end, in combination with a split thimble D, the flange *d* of which is provided with a screw-threaded hole *e*, that fits onto the screw B, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 2d day of May, A. D. 1890.

EDWIN C. RUSSELL.

Witnesses:
CHAS. STEERE,
EDWIN PLANTA.