J. BROWN.
Drop-Light.

No. 210,912. Patented Dec. 17, 1878.

FIG. 1

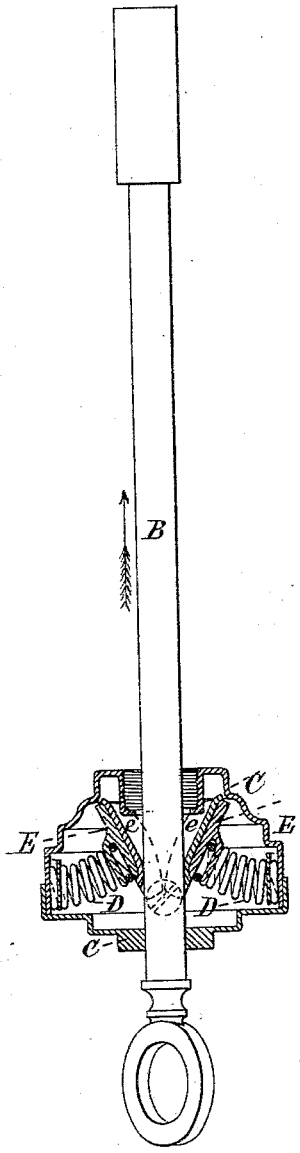


FIG. 2.

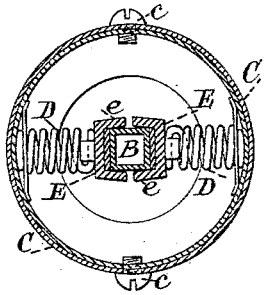
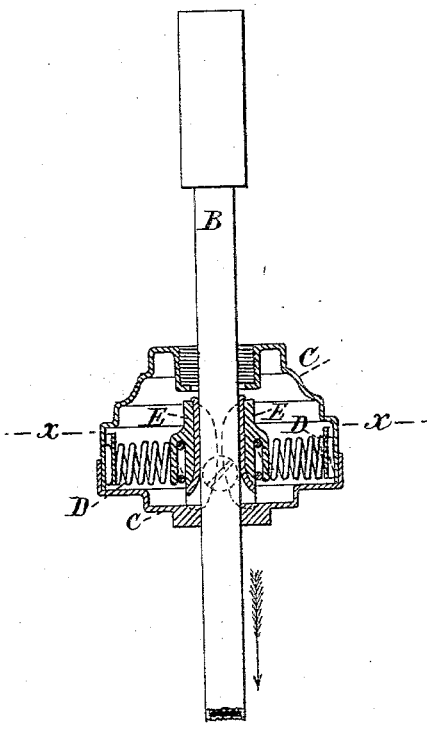


FIG. 3.



WITNESSES.
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P. J. Keating

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UNITED STATES PATENT OFFICE.

JAMES BROWN, OF BROOKLYN, NEW YORK, ASSIGNOR TO W. C. VOSBURGH & CO., OF SAME PLACE.

IMPROVEMENT IN DROP-LIGHTS.

Specification forming part of Letters Patent No. **210,912**, dated December 17, 1878; application filed December 4, 1878.

To all whom it may concern:

Be it known that I, JAMES BROWN, of Brooklyn, Kings county, New York, have invented, made, and applied to use Improvements in the Construction of Extension-Chandeliers or Drop-Lights; and that the following is a full, clear, and correct description of my invention, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a vertical section of my improvement, the extension-tube being shown up. Fig. 2 is a cross-section of Fig. 3 at the line *x x*. Fig. 3 is a vertical section of my improvement, the extension-tube being shown down.

In the drawings like parts of the invention are designated by the same letters of reference.

The nature of the present invention relates to improvements, as more fully hereinafter set forth, in the construction of extension-chandeliers; the object of the invention being the provision of proper mechanical devices to allow the extension-tube to the chandelier to be easily drawn down and pushed back or restored to its original position, and to hold the extension-tube at any desired height or position.

To enable those skilled in the arts to make and use my invention, I will describe its construction and operation.

B is the extension-tube, made preferably square, and which may be provided at its lower end with a gas-burner. C shows a circular box, placed over the tube B, and through which it is passed. The lower portion of the box C is made separate from its upper portion, and can be easily removed from the same by unscrewing the screws *c*, and thus give access to the interior of the upper portion of the box when desired.

Upon the interior of the upper portion of the box C are secured, in line with each other and opposite each other, the rear ends of the helical springs D, the forward or front ends of which are attached to the rear ends of the binding or retaining plates E. E shows the binding or retaining plates for holding the extension-tube B in the desired position. They are provided with the segmental lugs *e* upon each side, which extensions of the plates E extend over the tube B, and serve to guide and keep the same in a vertical position (so to speak) when drawn down or pushed up. The faces of the plates E, which are intended to have their bearing upon the sides of the tube B, are covered with leather, chamois, or some like material, so that the tube B, when drawn down or pushed up, shall not be injured or defaced.

Such being the construction, the operation may be thus described: When the tube B is drawn down, the friction between the sides of the tube B and the faces of the plates E causes the plates E to be drawn into a right line with each other, at which point they exert their full bearing or binding power, and thus to hold the tube B securely in the desired position or at the proper height, the springs D re-enforcing the plates at this point, and from time to time compensating for the wear upon the same.

When the tube B is pushed up or restored to its original position, by its movement the plates are thrown out of the right-line position, so that they rock, as it were, upon the forward ends of the helical springs, and, to a great extent, being removed from contact with the sides of the tube, and for the greater portion of their length being released from contact with the same, as shown in Fig. 1, the tube B is easily pushed up.

Having now set forth my invention, what I claim as new is—

In an extension-chandelier, the combination of the following elements: a tube, B, circular box C, helical springs D, and retaining-plates E, provided with the segmental lugs *e*, constructed and operating substantially as and for the purposes set forth.

JAMES BROWN.

In presence of—
A. SIDNEY DOANE,
EDWARD S. PECK.