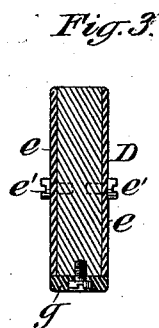
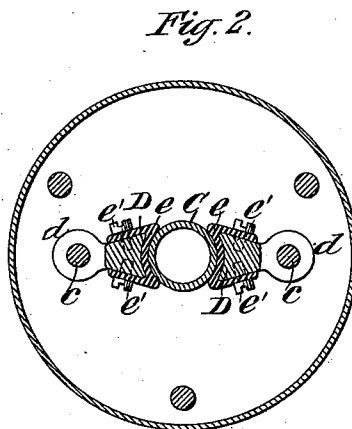
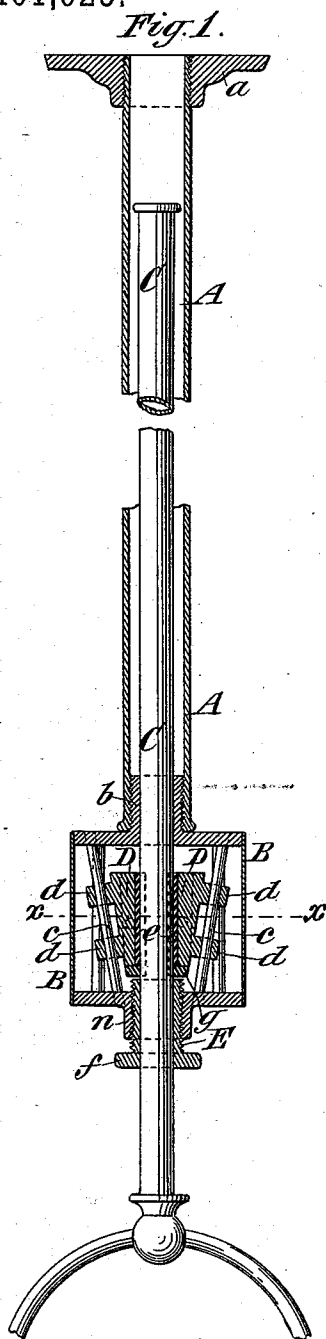


(No Model.)

G. W. BAYLEY.
EXTENSION LIGHT FIXTURE.

No. 401,925.

Patented Apr. 23, 1889.



Witnesses:

Ed. Sundgren.
Arthur H. Gamblin.

Inventor.
George W. Bayley.
by his Attorneys.
Brown & Griswold.

UNITED STATES PATENT OFFICE.

GEORGE W. BAYLEY, OF BROOKLYN, NEW YORK.

EXTENSION LIGHT-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 401,925, dated April 23, 1889.

Application filed September 13, 1888. Serial No. 285,269. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BAYLEY, of Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Improvement in Extension Light-Fixtures, of which the following is a specification.

I will describe an extension light-fixture embodying my improvement, and then point out the novel features in claim.

In the accompanying drawings, Figure 1 is the vertical section of an extension light-fixture embodying my improvement. Fig. 2 is a transverse section of the same, taken on the plane of the dotted line *xx*, Fig. 1. Fig. 3 is a vertical section of one of certain wedges employed in the device.

Similar letters of reference designate corresponding parts in all the figures.

A designates a tube or pipe. In the example of my improvement illustrated in Fig. 1 this tube or pipe is rigidly connected at its upper end to a supporting-piece, *a*, which latter may be secured to a ceiling or other suitable support. At its other end the pipe or tube A is secured to a case or shell, B. I have shown it as secured by means of a screw-thread connection with a neck, *b*, extended upwardly from the case or shell B. The neck *b* is provided centrally with an aperture, through which extends a rod or pipe, C. The rod or pipe C extends through the case or shell B and below the same, and is to be connected at its lower end, or that portion that is below the case or shell B, with the harp or other portion of a chandelier or other light-fixture. The rod or pipe C extends upwardly within the pipe A, and is capable of being moved longitudinally therein for the purpose of raising or lowering the chandelier or other fixture to which it is secured.

It is desirable in extension-fixtures to provide a lock for maintaining the extensible part of the fixture in any position in which it may be adjusted. In such locks, however, it is desirable that the upward movement of the chandelier or other fixture should be free, and that the lock should not operate except when the chandelier or other fixture has been adjusted to the desired position. In my device the locking of the extensible part in the de-

sirable position is accomplished by means of wedges D, which, when the weight of the chandelier or other fixture operates to tend to cause it to drop, will bind upon the extensible part of the fixture and prevent such dropping. In Figs. 1, 2, and 3 the wedges D are arranged within the case or shell B and are capable of vertical movement therein. Their upward movement is such as to release their grip upon the extensible rod or pipe C. Their downward movement, on the contrary, causes them to grip said pipe or rod. I accomplish this result by means of inclined guides *c*, which guides consist of rods secured at their ends to the top and bottom of the case or shell B. It will be observed that these guide-rods are arranged at an incline, their lower ends being nearer to the rod or pipe C than are their upper ends. The wedges D are provided with projections *d*, which projections are provided with suitable apertures, through which the guide-rods C extend loosely. I prefer that the faces of the wedges D, or their portions which are adapted to bear upon the rod or pipe C, should be faced with rubber, leather, or similar material, which will tend to increase the frictional contact of the parts. I have illustrated such a facing at *e*. This facing may be secured to the wedges by screws *e'*, or in any other suitable manner.

E designates an adjustable abutment for the wedges. This abutment consists of a hollow nut, through which the extensible rod or pipe C extends, and has a screw-thread connection with the neck or boss *n* upon the under side of the case or shell B.

I have shown a hand-piece, *f*, by which the abutment may be rotated to adjust it inwardly and outwardly. It will be apparent that as this abutment is adjusted in one direction or another the degree of downward movement of the wedges D may be limited in order to cause the wedges to bind more or less tightly upon the rod or pipe C. I have shown upon the lower ends of the wedges D elastic cushions *g*, which may be made of rubber and secured to the wedges by screws or otherwise. These cushions are advantageous, because they allow a slight play of the wedges after they have reached the limit of their downward movement, and the wedges

are thereby caused to have a slightly-yielding bite upon the rod or pipe C. In this example of my improvement, when the rod or pipe C is moved upwardly, the wedges D are
5 caused to release their grip upon the rod or pipe, and the latter may then be moved freely. When the upward movement of the rod or pipe ceases and gravity tends to cause the rod or pipe to fall, the wedges are moved
10 downwardly by reason of their frictional contact with the rod or pipe and will bind upon the latter to maintain it and the chandelier or other fixture in the position to which it has been adjusted.

15 My invention is applicable to extension light-fixtures either for gas or oil. When used for a gas-fixture, suitable stuffing-boxes will of course be necessary to prevent the leakage of gas from about the extensible
20 part C.

What I claim as my invention, and desire to secure by Letters Patent, is—

In an extension light-fixture, the combination, with a fixed part, of an extensible part, a cylindrical case or shell on the fixed part, 25 guide-rods within said shell extending at a downward incline and secured at their upper and lower ends to the top and bottom of the case or shell, brakes having faces adjacent to the extensible part and provided with lugs 30 or projections, through which said guide-rods loosely extend, and elastic cushions upon the lower ends of said brakes, said brakes being moved to clamp the movable part of the fixture by said movable part during its downward movement, substantially as specified. 35

GEORGE W. BAYLEY.

Witnesses:

JAMES D. GRISWOLD,
ARTHUR H. GAMBLIN.