(No Model.)

J. T. BRUEN.

EXTENSION CHANDELIER.

No. 251,516. Patented Dec. 27, 1881.

Fig. 1.

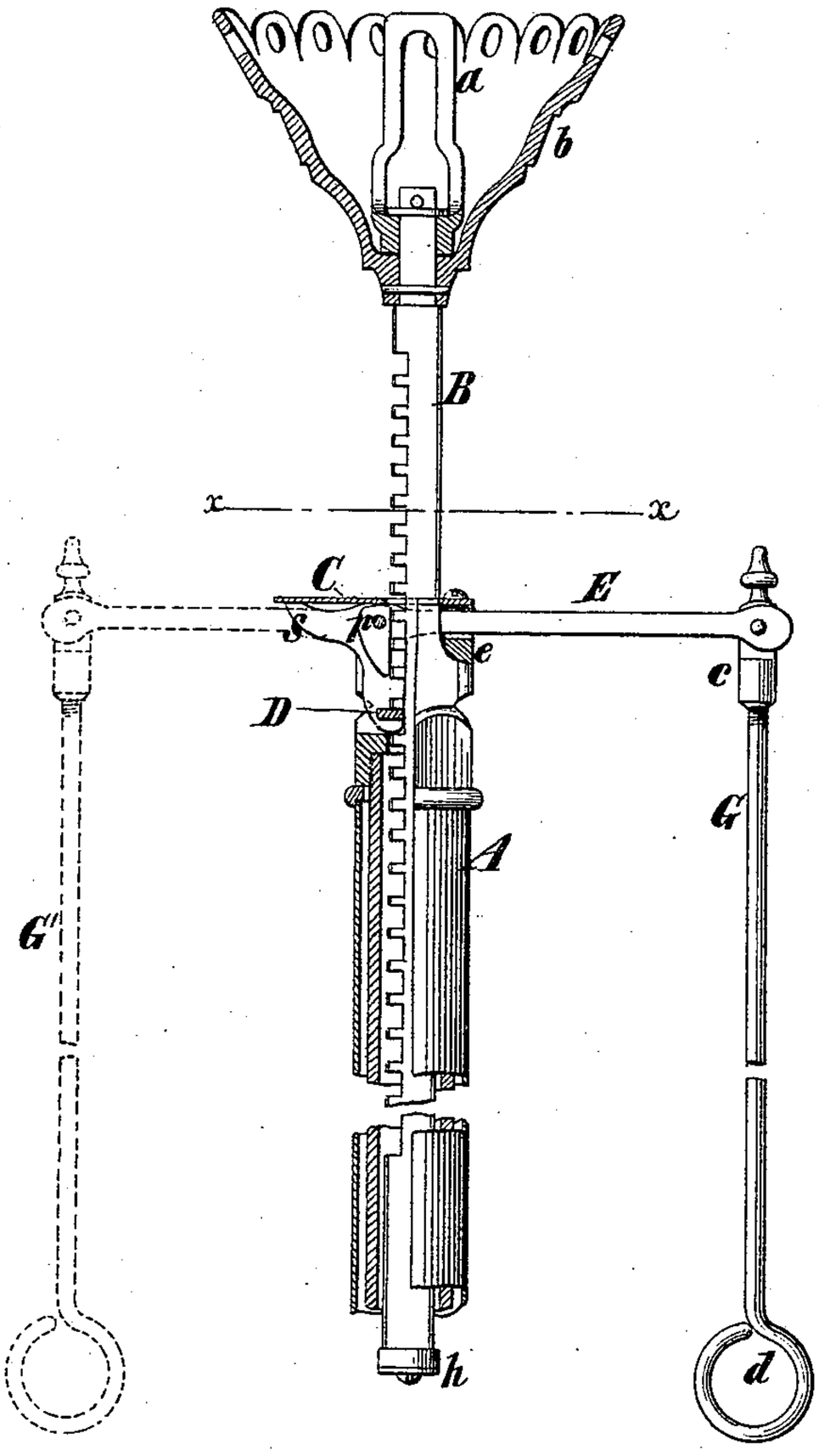
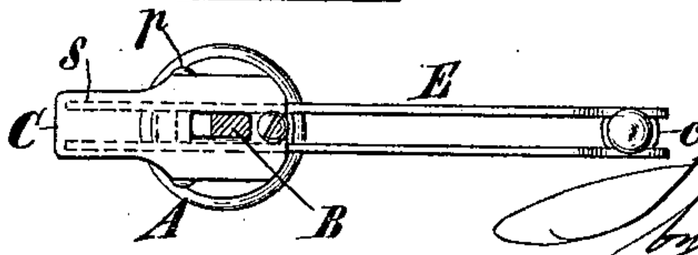


Fig. 2.



Witnesses:-
Fred. Haynes
Ed. Platzmayer

Inventor:-
John T. Bruen
by his Attorneys
Brown & Brown

UNITED STATES PATENT OFFICE.

JOHN T. BRUEN, OF BROOKLYN, NEW YORK.

EXTENSION-CHANDELIER.

SPECIFICATION forming part of Letters Patent No. 251,516, dated December 27, 1881.

Application filed April 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. BRUEN, of Brooklyn, in Kings county, and State of New York, have invented certain new and useful Improvements in Extension-Chandeliers, of which the following is a specification.

This invention relates to that class of extension-chandeliers wherein are employed toothed racks and catches engaging therewith to retain the extensible portions of the chandeliers in different positions to which they may be adjusted.

My invention consists in the combination, in an extension-chandelier, with a rack on one part, of a catch on the other part, a bell-crank lever carrying said catch, and a head upon the part having said catch provided with slots through which said lever is inserted, and the bottoms of which form stops for limiting the movement of said lever, all as hereinafter described.

It also consists in a combined guide for the toothed rack, and spring for actuating the catch to engage with the rack.

In the accompanying drawings, Figure 1 represents a sectional elevation of the upper portion of an extension-chandelier embodying my invention; and Fig. 2 is a horizontal section of the same at the dotted line *x x*, Fig. 1.

Similar letters of reference designate corresponding parts in both figures.

A designates a tubular stem comprised in the lower or extensible portion of the chandelier, and B designates a toothed or indented rack, which forms the upper or stationary portion of the chandelier. This rack is provided at the top with a suspending-loop, *a*, by which it may be suspended from any fixture, and is furnished with a canopy, *b*, whereby the loop is concealed and an ornamental finish imparted to the end of the rack. At the lower end the rack is provided with a circular head, *h*, fitting snugly in the tubular stem and holding the said end of the rack in proper position therein. At the top of the tubular stem A is a plate, C, having an opening through which the rack passes, and constituting a guide for the rack.

D designates a catch or tooth, which is affixed to the tubular stem, and is capable of being moved transversely to the rack, toward and from the same, so as to be engaged with the rack and hold the tubular stem in any desirable position relatively to it, or to be disengaged from the rack to permit of the adjustment of the tubular stem relatively to it. As here shown, this catch is affixed to one arm of an elbow or bell-crank lever, E, which is pivoted to the tubular stem A near the top, as at *p*, so that the arm carrying the catch will extend downward and the other arm laterally outward. The plate C, which, as above explained, forms a guide for the rack B, is made of spring metal, and extended over a projection or third arm, *s*, extending from the lever E, and thus constitutes a spring, which, when the lever is not otherwise actuated, impels the catch D so as to engage and remain in engagement with the rack. At the end of the outwardly-extending arm of the lever E is attached a rod, G, which, when pulled downward, serves to disengage the catch from the rack to permit of the adjustment of the extensible part of the chandelier. Preferably the lever E is made, as shown, of two plates, which pass one on each side of the rack and embrace the end of a head, *c*, of the rod G. As shown, the rod G is connected to this head *c* by being screwed into the same, and hence may be disconnected therefrom at pleasure. The rod G is provided at the lower end with a loop or ring, *d*, whereby the rod may be pulled down by the thumb or finger of the person seeking to adjust the extensible portion of the chandelier. A cord or chain might be used in lieu of the rod, if desirable.

I have shown by dotted outline in Fig. 1 that the lever E might be extended in the opposite direction and a push-rod, G′, substituted for the pull-rod G, if desirable. I prefer to use the pull-rod G, however, as a pull is a more easy and natural motion to effect the disengagement of the catch from the rack, and because the hold on the rod may then serve to prevent the extensible part from moving upward under the influence of the springs which will be used to counterbalance its weight in case the person adjusting it carelessly neglects to hold it otherwise. The outwardly-extending arm of the lever passes through openings or slots in a head, *e*, arranged at the top of the stem A, and the plate C is fastened by a screw, or otherwise, to

the head just above these slots. The bottom of the slots and the plate C therefore form stops for limiting the motion of the lever.

It will be seen that by my invention I provide a very simple, cheap, and desirable extensible chandelier, wherein the extensible part may be retained in position perfectly positive, the means for retaining it in position being such that there is no limitation of their retaining power except the strength of the rack.

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

1. In an extension-chandelier, the combination, with a rack on one part, of a catch on the other part, the bell-crank lever E, carrying said catch, and the head *e*, constructed with slots for said lever, and the bottoms of which slots form stops for limiting the movement of said lever, substantially as specified.

2. In an extension-chandelier, the combination, with a rack on one part, of a catch on the other part, a lever for actuating said catch, and a spring for actuating said catch to engage with the rack, constructed, as described, to form a guide for the rack, substantially as specified.

3. In an extension-chandelier, the combination, with the rack on the stationary part, of a catch on an extensible tubular part, a lever for actuating the catch, and a spring for actuating the catch, constructed, as described, to form a combined cover for the extensible part and a guide for the rack, substantially as specified.

JOHN T. BRUEN.

Witnesses:
T. J. KEANE,
ED. GLATZMAYER.