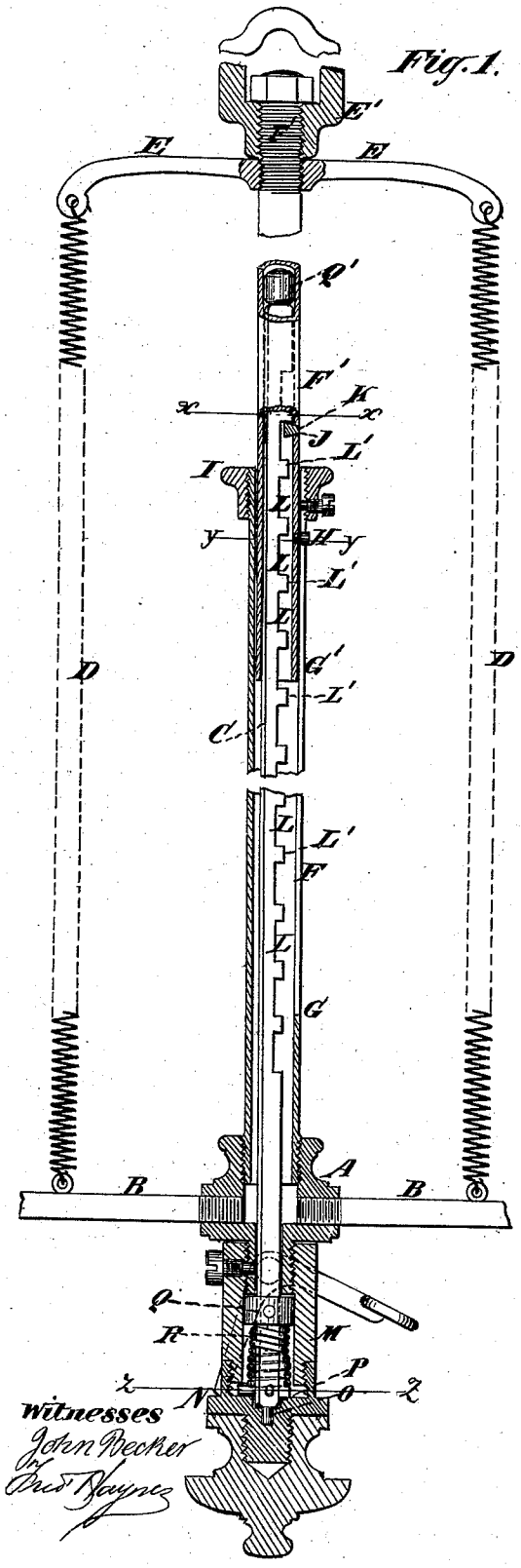
J. T. BRUEN.

Extension Slide-Support for Chandeliers.

No. 214,549. Patented April 22, 1879.

Fig. 1.



Witnesses

John Becker

Chas. Haynes

Fig. 3.

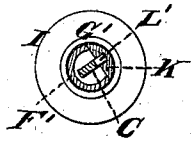


Fig. 4.

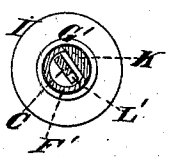


Fig. 5.



Fig. 6

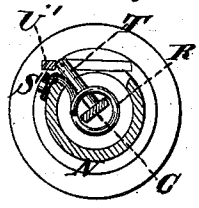


Fig. 7.

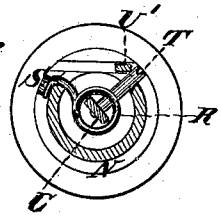
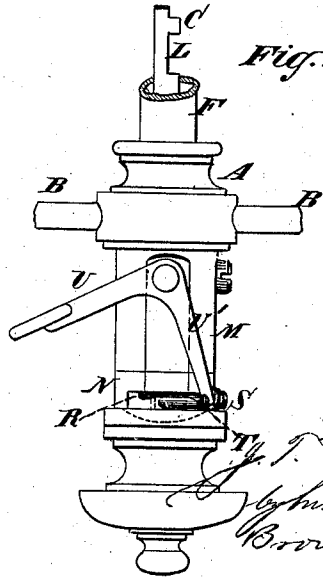


Fig. 2.



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JOHN T. BRUEN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN EXTENSION-SLIDE SUPPORTS FOR CHANDELIERS.

Specification forming part of Letters Patent No. **214,549**, dated April 22, 1879; application filed September 16, 1878.

To all whom it may concern:

Be it known that I, JOHN T. BRUEN, of the city of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Extension Slides or Supports for Chandeliers and other Articles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention has for its object to supply a cheaper, more durable, and more easily manipulated extension slide or support for chandeliers and lamps than has heretofore been supplied, and which is also applicable to the support of goods for the display of the same, and for other purposes.

Figure 1 in the drawings is a vertical section through the central part of an extension slide or support constructed in accordance with my invention. Fig. 2 is an outside view of the lower part of the same. Figs. 3 and 4 are, respectively, sections made on the line *x x* in Fig. 1, but showing parts in different positions. Fig. 5 is a section made on the line *y y* in Fig. 1. Figs. 6 and 7 are, respectively, sections made on the line *z z* in Fig. 1, but showing parts in different positions.

The invention will be sufficiently illustrated by the description of the same as applied to an ordinary chandelier.

A in the drawings represents the distributer of a chandelier, and B arms or tubes leading from said distributer for the support of burners or lamps. Said distributer is formed with an opening through the central part for the free passage through the same of a notched rod or bar, C. The said distributer is supported by the arms B, which are in turn supported by springs D, attached to said arms and to the bar E, attached to the loop E′, from which the entire apparatus is suspended; or weights and pulleys may be substituted for the springs D. To the upper part of said distributer is screwed or otherwise suitably attached a tube, F. Within this tube F slides or telescopes a tube, F′, which is, furthermore, attached to the suspending-loop E′ by a screw-thread or any other suitable attachment.

The tube F is slotted from the point marked G in Fig. 1 throughout the remainder of the same, the said slot being parallel with the longitudinal axis of the tube, and running out at the upper extremity of the same. The said slot is indicated by the letter G′.

The tube F′ is provided with a stud, H, or projection, which slides in the slot G′ and prevents said tube from turning in the tube F.

The tube F has, at the upper extremity of the same, a strengthening band or collar, I, wherewith the stiffening-joints and other attachments of a chandelier are held in position.

In the side of the tube F′ is cut a dovetailed slot, J, and in this slot is inserted a stop, K, the inner edge of which is preferably straight, as shown in Figs. 3 and 4. With the said stop K the rod or bar C engages for the support of the suspended chandelier at any desired position when the said rod or bar is operated, as hereinafter described.

To the bottom of the distributer A is attached, by a screw-thread or otherwise, a hollow block, M. To the bottom of said block M is attached a cap or cover, N, preferably screwed upon the said block. In the center of the cap N is a bearing for a pivot, O, formed on the lower extremity of the rod or bar C. The said rod or bar has its lower part also preferably let into a recess in said cap. To said rod or bar is attached, at a short distance from the pivot O, a cylindrical block, Q, the exterior of which is fitted easily to the cylindrical interior of the hollow block M. At the upper extremity of the said rod C is also attached a block, Q′, the exterior of which is fitted easily to the interior of the tube F′. The object of these blocks Q and Q′ is to keep the rod C in proper relation with the central axis of the tube F′, around which axis the said rod partially turns for disengaging or engaging the stop K, as hereinafter described.

Between the block Q and the cap N is placed a spring, R, which is preferably a coiled spring wound about the bar or rod C, and attached thereto by flattening the upper part down against said rod or bar.

The pivot O prevents the lateral crowding of the lower part of the bar C by the action of either the spring R or lever T, which would otherwise create friction of the block Q against the block M.

The block M bears against the under ex-

tremity of the distributer A, and thus holds the rod C from moving upward.

The recess in the cap N, which receives the end of the rod C, forms a bearing which prevents the downward movement of said rod. The lower extremity of said spring is passed out through a slot in the lower part of the cap N, and is attached to said cap, as shown at S, Fig. 2.

From the lower part of the rod or bar C projects, at about a right angle with the longitudinal axis of said bar, an arm or lever, T.

To the exterior of the block M is pivoted a bell-crank lever, U U′, in such relation with the lever T that one arm of said bell-crank lever may press against the outer extremity of the lever T when the other arm of said bell-crank lever is pressed upward. By the pressing upward of the arm U the bar C is turned about one-sixth of a revolution against the pressure of the spring R, and when the pressure against said arm U is removed the said spring restores the bar to its original position.

The notches L, formed in the edge of the flat rod or bar C, leave projections L′, which engage the stop K, for holding the suspended article in the desired position.

I do not limit myself to the precise means described for turning the rod C on its vertical axis, as there are many devices which may be employed for the purpose. The devices described, however, answer a good purpose, and sufficiently illustrate the invention. Neither do I confine myself to forming projections on the edge of the rod or bar C by notching the same, but reserve the right to use a bar of any suitable cross-section, having a series of projections arranged along one side thereof, and operating by turning on its vertical axis. Neither do I limit myself to the precise form of the stop K, or the manner of inserting or attaching the same in or to the tube F. Other forms of stops and other modes of inserting the same in said tube in relation with the projections on the rod C may be employed.

The operation of the improvement is as follows: To raise or lower the suspended chandelier or other weight the operator grasps with one hand the boss or handle below the bell-crank lever U U′, and, pressing upward against the arm U of said lever with the thumb, releases the rod or bar C from its engagement with the stop K. He then pushes upward or pulls downward upon said boss or handle till the desired position of the suspended chandelier or other article is reached. Then, releasing the lever U U′, the spring immediately turns the bar into its original position, and one or other of said projections L′ on said bar engages the stop K, and no further movement of the suspended article is then permitted.

If (as with springs D properly adjusted will be the case) the suspended article when raised considerably more than counterbalances the tensional power of the springs, it will be the lower side of the projection that will engage said stop; and when, in a lower position, the weight of the suspended article is more than counterbalanced by the power of said springs, it will be the upper side of the projection which will press against the stop. Said projections L′ are, therefore, preferably placed only far enough from each other to permit the turning of the bar C through the short distance it is turned by the spring R before the suspended article can rise or fall through said distance. This insures the engagement of the projection nearest the stop, either above or below the said stop. But the device will work without the springs D, and for various purposes may be used without said springs, the article being lifted or lowered by the hand of the operator.

Although the slides F and F′ are herein described and shown as tubes sliding one within the other, such form being considered preferable, this form of the slides is not absolutely essential. It is only necessary that the said slides constructed in any other manner to work in relation with each other should be provided, one with a stop and the other with a bar having projections, which, by the turning of either said bar or stop on its vertical axis, will cause the engagement or disengagement of said stop with said projections.

I claim—

The combination, in an extension slide or support, of an inner tube provided with a stop, an outer tube sliding over the said inner tube, a notched or toothed bar attached to said outer tube and adapted to turn on its axis therein, for engaging it with and disengaging it from the stop in the inner tube, a spring for turning the said bar in one direction, and a lever attached to the said bar for turning it in an opposite direction, all substantially as herein described.

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FRED. HAYNES.