

J. KINTZ.
Extension-Chandelier.

No. 224,442.

Patented Feb. 10, 1880.

Fig. 1.

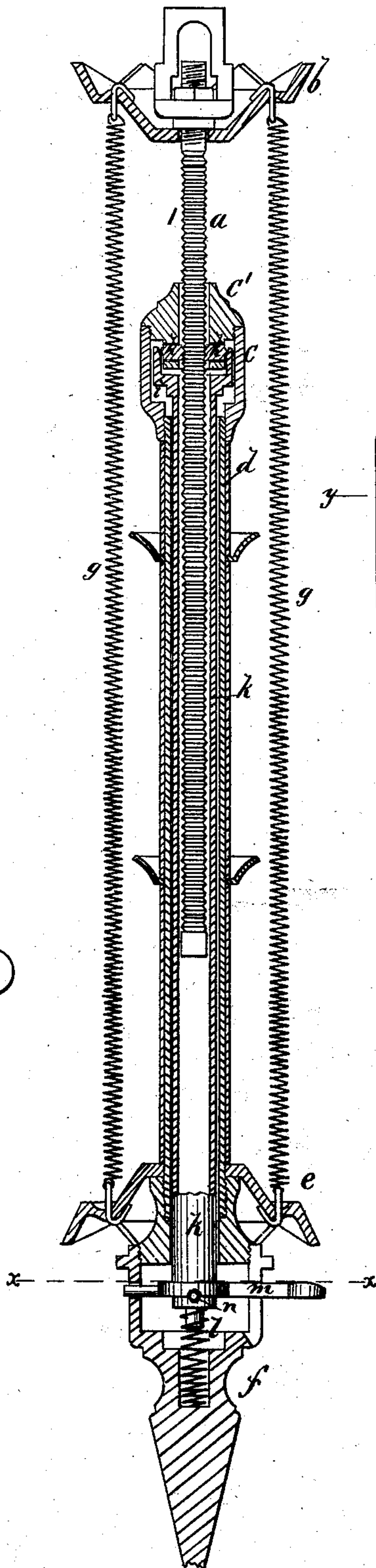


Fig. 2.

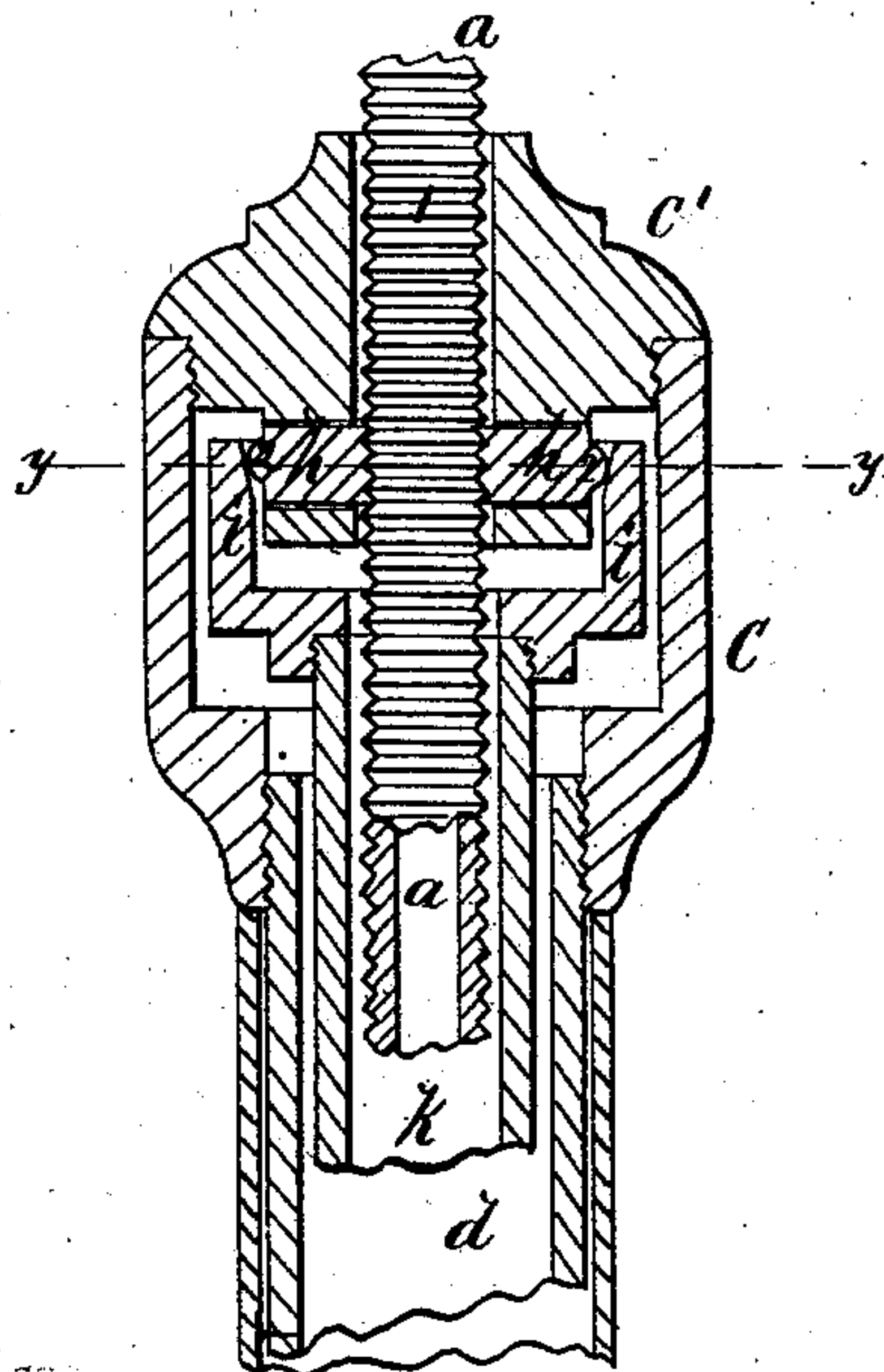


Fig. 3.

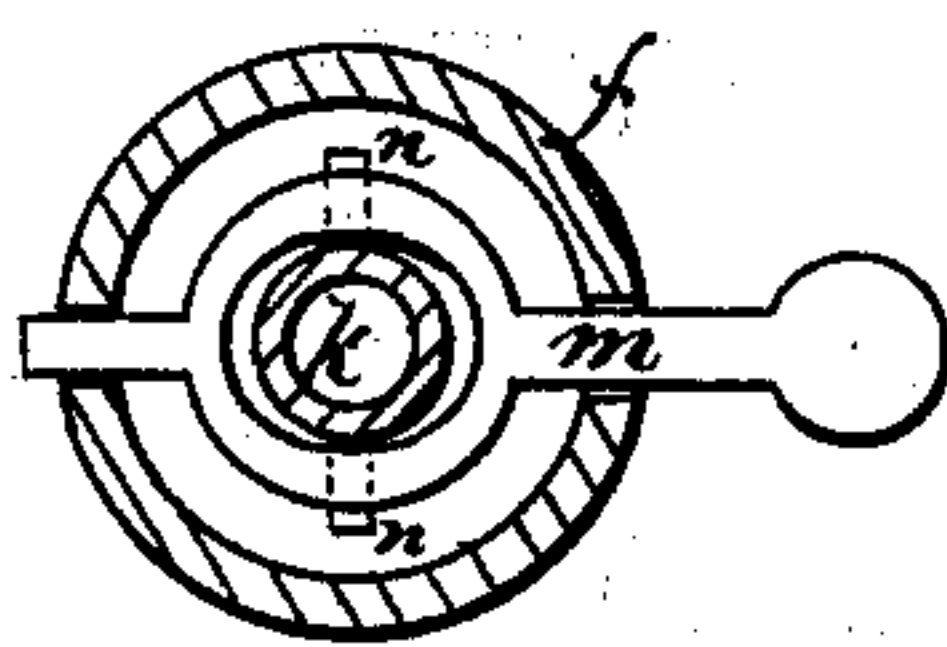
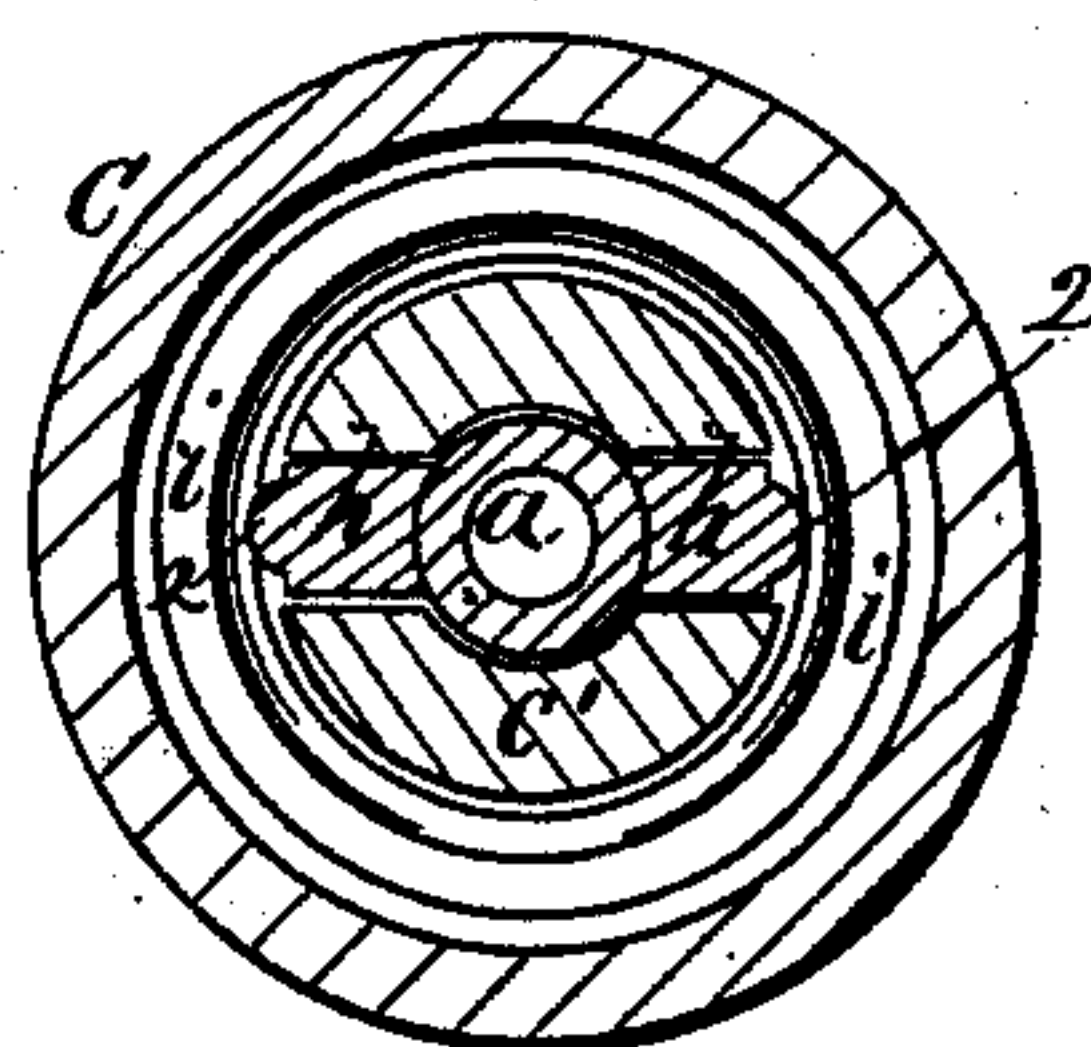


Fig. 4.



WITNESSES:

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JOSEPH KINTZ, OF WEST MERIDEN, CONNECTICUT, ASSIGNOR TO HIMSELF
AND PARTRICK J. CLARK, OF SAME PLACE.

EXTENSION-CHANDELIER.

SPECIFICATION forming part of Letters Patent No. 224,442, dated February 10, 1880.

Application filed October 23, 1879.

To all whom it may concern :

Be it known that I, JOSEPH KINTZ, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Extension-Chandeliers, of which the following is a specification.

My improvements relate to the means for retaining the extension-rod in any position, as drawn out to lengthen the chandelier, and for releasing the same, so that the spring may act to draw up the rod. I make use of a slide-rod having its surface grooved or ribbed concentrically and sliding in a collar that is fitted with loose sectional nuts or clamping-blocks, which are inclosed within a beveled cup or ring. The cup is moved in one direction by a spring to force the nuts inward and clamp the slide-rod, and is fitted for movement by hand to release the nuts by means of a trigger placed in a convenient position operating through a sliding tube that is connected to the cup.

The construction and operation will be more particularly described with reference to the accompanying drawings, wherein—

Figure 1 is a central vertical section of the chandelier. Fig. 2 is a partial section, showing the clamping devices in enlarged size. Fig. 3 is a horizontal section on line *x x* of Fig. 1. Fig. 4 is a horizontal section on line *y y* of Fig. 2.

Similar letters of reference indicate corresponding parts.

The slide-rod *a* is formed at its upper end with the pendent cap *b*, that is fitted for being suspended, and passes through the cap *c'* of the collar *c*, that is secured on the upper end of the outer tube, *d*. On the lower end of tube *d* is secured the crown-ring *e*, to which the branching arms of the chandelier will be connected, but are not shown, and beneath the ring *e* is a knob, *f*, by which the tube *d* is handled.

g g are spiral springs connected with cap *b* and ring *e*, and tending to draw tube *d* and its attached parts upward on the rod *a*.

The rod *a* is formed upon its outer surface with concentric creases or ribs, as shown at 1, throughout its length, which are rounded upon their surfaces.

The cap *c'* is formed with a depending an-

nular flange within collar *c* and around rod *a*, which flange is apertured radially to receive the sectional nut or clamping pins or blocks *h*, that are formed at their inner ends with creases or grooves corresponding with the ribbed surface of the rod *a*, with which the blocks *h* are intended to fit. The outer ends of blocks *h* are formed with rounded, inclined, or beveled projections 2, as shown. Within collar *c*, around the depending flange of the cap *c'*, is a ring or cup, *i*, the inner surface of which is in contact with the projections 2 of blocks *h*, and is beveled so that the upward movement of cup *i* will force blocks *h* inward. This cup *i* is fitted rigidly on the upper end of an inner tube, *k*, which, for convenience of manipulation, extends to the lower end of tube *d* and into a recess of the knob *f*, at which place the tube *k* rests upon a spiral spring, *l*, that tends to force tube *k* upward, and by the cup or ring *i* force blocks *h* inward to clamp rod *a*. In the recess of knob *f* is fitted a lever or trigger, *m*, which is apertured to pass around tube *k* above the pins *n*, that project from *k*, and the moving end of lever *m* extends outside through a slot in knob *f*. By this construction the blocks *h* act automatically to retain the tube *d* and its attached parts in any position to which it may be drawn down on the rod *a*.

To release the blocks *h* for drawing down the chandelier or allowing it to be drawn up by springs *g*, the knob *f* is to be grasped and trigger *m* depressed, which action draws down the ring or cup *i* and frees the blocks *h* from pressure, so that they will be thrown out by the pressure caused by springs *g* or the strength applied to draw down the tube *d*.

It will be seen that the ribs or creases of the rod *a* serve to increase the friction between the rod and clamping-blocks, so that less pressure is required to hold the parts; but it is evident that by increasing the pressure the ribs may be made quite small, or even a smooth tube used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In extension-chandeliers, the combination, with the slide-rod *a* and extension-tube *d*, of

the cap *c'*, radial clamping blocks or pins *h*, and beveled cup or ring *i*, the ring *i* being fitted to clamp or release the block *h*, substantially as and for the purposes specified.

- 5 2. In extension-chandeliers, the combination, with the slide-rod *a* and extension-tube *d*, of the cap *c'*, radial clamping-blocks *h*, beveled

cup or ring *i*, tube *k*, spring *l*, and trigger, substantially as described and shown, and for the purposes set forth.

JOSEPH KINTZ.

Witnesses:

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CHAS. WM. MANN.