(No Model.)

J. KINTZ.

EXTENSIBLE SUPPORT.

No. 389,844. Patented Sept. 18, 1888.

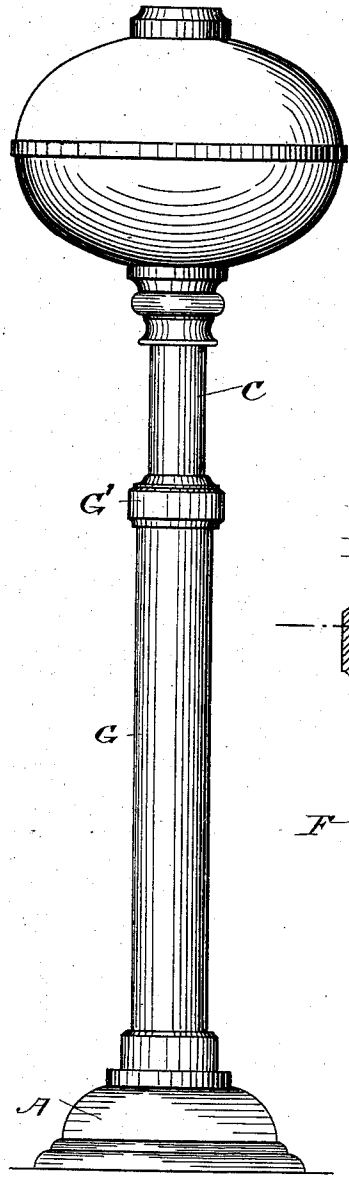


Fig. 1.

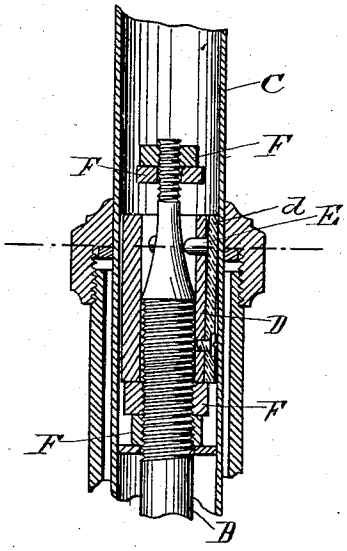


Fig. 3.

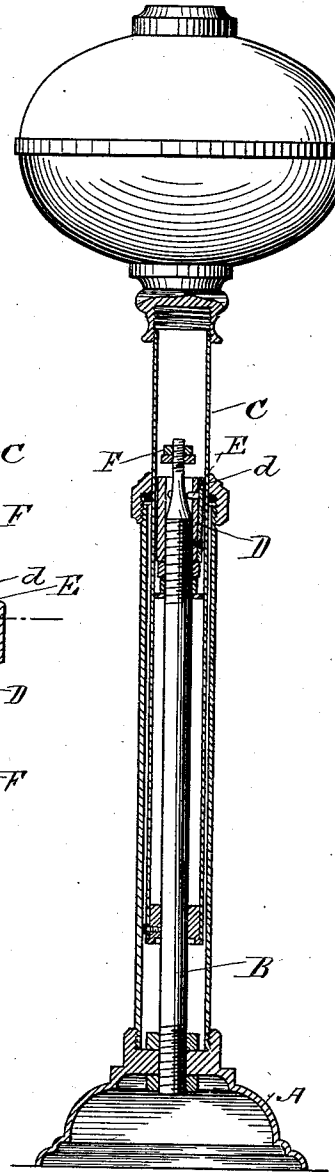


Fig. 2.

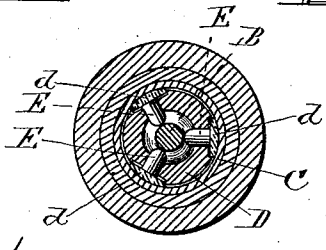


Fig. 4.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH KINTZ, OF BALLARD VALE, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND THE CRAIGHEAD & KINTZ MANUFACTURING COMPANY, OF MASSACHUSETTS.

EXTENSIBLE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 389,844, dated September 18, 1888.

Application filed May 28, 1888. Serial No. 275,360. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KINTZ, of Ballard Vale, in the county of Essex and State of Massachusetts, a citizen of the United States, have invented certain new and useful Improvements in Extensible Supports, of which the following is a specification.

My present invention relates to extensible supports, and particularly to that class of those supports the extensibility of which is obtained by the use of a two-part device, one part of which travels within the other somewhat after the manner of a telescope.

The object of my present invention is to improve the clutch mechanism by which the length of the support is adapted to be varied by the person using it, and also whereby when the apparatus is set at any given length it is adapted to remain in that position under the weight ordinarily brought to bear upon it.

In the accompanying drawings I have represented my present invention as embodied in the form now best known to me in an upright portable lamp-stand adapted for use upon a table or pianoforte.

Figure 1 is a representation of the device in elevation, and Fig. 2 in vertical section. Figs. 3 and 4 are enlarged sections of the stopping or holding mechanism.

It will be understood that my invention is not confined to portable lamp-standards, but may be embodied, if desired, in a depending or projecting chandelier or light-carrier, and it is obvious that it may also be utilized as an extensible support for other articles than light-carriers or lamps if occasion requires.

In the drawings, A represents the base which carries the rod or post B, which forms one element of the standard. This may be made either solid or hollow, as desired.

C represents the other element of the standard, which forms the light-carrying portion. This is preferably tubular and surrounds the part B and is adapted to be moved relatively thereto.

The clutch mechanism consists of a sleeve, D, having an exterior diameter corresponding to the interior diameter of the sliding part C of the support, so as to fit therein. The exterior face of the sleeve D is recessed to contain a number of friction-pieces, *d*, (preferably three, as shown,) and in connection with each friction-piece there is provided a sliding piece or dog, E, adapted to slide in a slot through the wall of the sleeve D. The motion of this sleeve is regulated by check-nuts F F F F, as shown, or by any other suitable adjustable stops upon the post B. The dogs E are made slightly longer than the thickness of the wall of the sleeve D, so that their inner ends will slightly project into the interior of the sleeve. That portion of the post B lying within the interior of the sleeve is formed with a taper or wedge shape, as shown. When the light-carrying part C is moved, the sleeve D moves with it by reason of the slight friction between them, the limit of motion of the sleeve being governed by the adjustable nuts F. When the sleeve is moved in one direction, or so as to bring the inner ends of the dogs against the wedge faces of the post B, their wedge action forces the dogs outwardly and so crowds the friction-pieces *d* against the inner wall of the tube C. The movement of the sleeve in the other direction, however, carries the inner ends of the dogs away from the wedge faces, and the crowding of the friction-pieces against the interior of the sleeve immediately ceases.

In the apparatus represented in the drawings the weight of the lamp carried by the part C is always exerted downwardly to force the dogs against the wedges and so crowd the friction-pieces against the inner walls of the part C. Therefore the apparatus will always be normally in a state of rest at the position in which it is left, the weight of the lamp being assumed to be so great as to overcome the friction. If, now, it is desired to raise the lamp, this may readily be done by lifting the lamp-carrying portion, during which operation the dogs do not act to crowd the friction-pieces. If, on the other hand, it is desired to lower the lamp-carrying portion, it may be pressed down by the hand by imparting sufficient pressure to overcome the frictional force with which the friction-pieces are crowded by the dogs against the inner wall of the light-carrying tube. As has been previously stated, the de-

vice will always automatically remain at the position in which it is left after having been either raised or lowered.

It is desirable in practice that the apparatus as described above should be inclosed in an external tube or case, intended mainly for ornament and to conceal the working parts, and such a case is represented at G, with an ornamental collar, G'.

I am aware that telescopic two-part standards have heretofore been made in which the carrying portion is maintained at any desired height by means of a friction-stop interposed between it and the other portion of the standard, and I make no claim, broadly, to such a construction.

I claim—

The improved extensible two-part telescopic standard herein described, having an exterior movable carrying portion, an interior stationary post provided with a wedge portion, as described, a slotted sleeve surrounding the post at the wedge portion and fitting the exterior tube, one or more friction-pieces mounted upon the exterior face of the sleeve, and a corresponding number of friction-dogs adapted to slide in slots in the sleeve and projecting slightly into its interior, whereby when the exterior tube is moved toward the interior post the wedges thereupon, acting through the dogs, force the friction-pieces against the interior of the tube, and thus stop or hold the tube in place relatively to the post, all substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name this 24th day of May, A. D. 1888.

JOSEPH KINTZ.

Witnesses:
J. HENRY TAYLOR,
ATHERTON HASTINGS.