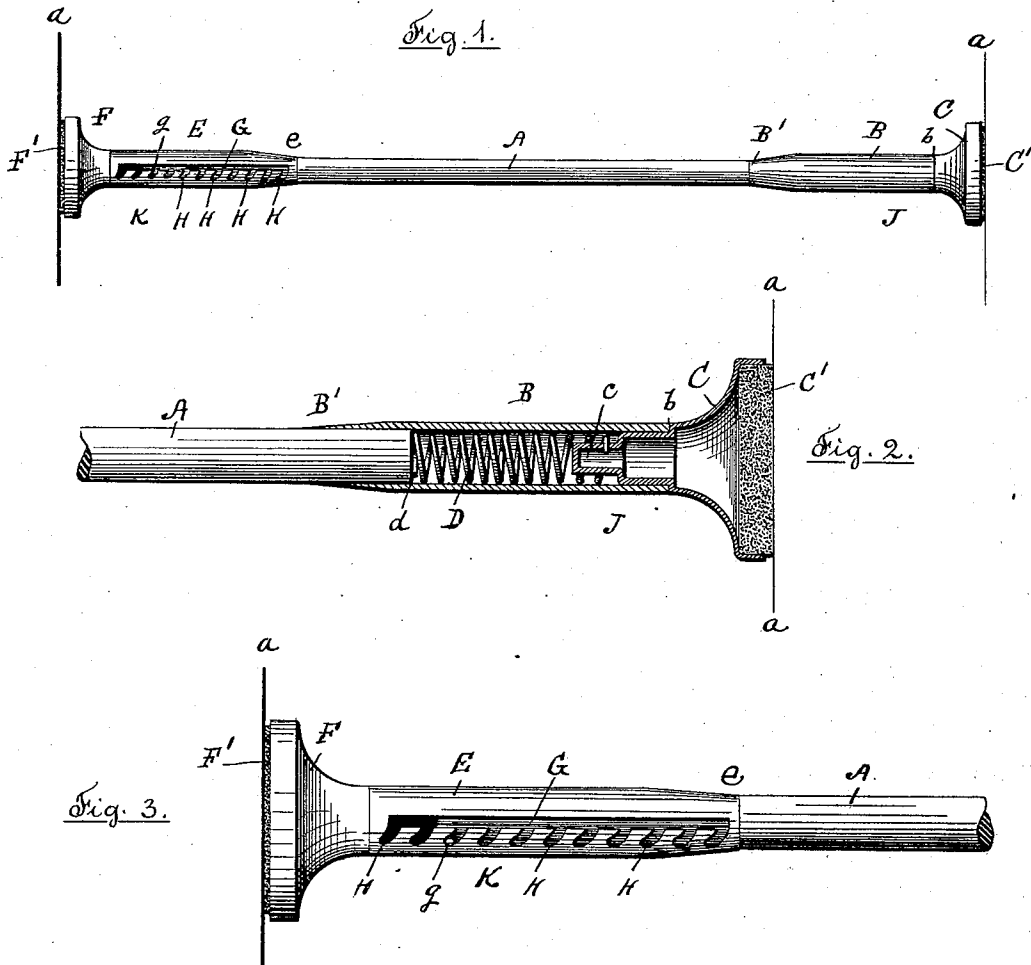


(No Model.)

H. A. FOWLER, J. H. LINGLEY & C. W. DODGE.
CURTAIN ROD.

No. 468,987.

Patented Feb. 16, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY A. FOWLER, OF NORTHBRIDGE, AND JOHN H. LINGLEY AND CARROLL W. DODGE, OF WORCESTER, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO SAID FOWLER AND LINGLEY, AND SAMUEL FOWLER, OF NORTHBRIDGE, MASSACHUSETTS.

CURTAIN-ROD.

SPECIFICATION forming part of Letters Patent No. 468,987, dated February 16, 1892.

Application filed July 12, 1889. Serial No. 317,492. (No model.)

To all whom it may concern:

Be it known that we, HENRY A. FOWLER, residing at Northbridge, in the county of Worcester, and State of Massachusetts, and JOHN H. LINGLEY and CARROLL W. DODGE, residing at Worcester, in the county and State aforesaid, all citizens of the United States, have invented a new and useful Improvement in Curtain-Rods, of which the following is a specification, accompanied by drawings, which represent a curtain-rod embodying our invention, and which form a part of the specification.

Our invention relates to that class of curtain-rods which are used to support a curtain and which extend across and between the vertical and opposing sides of a door or window casing, and in the accompanying drawings—

Figure 1 represents a curtain-rod embodying our invention as held in position between the vertical sides of the casing represented in the drawings by the lines *a a*. Fig. 2 represents in central longitudinal sectional view one of the sliding ends containing the spring by which a pressure is exerted upon the casing. Fig. 3 is an enlarged view of the opposite or adjustable end.

Similar letters refer to similar parts in the different figures.

The central section of our curtain-rod (shown at A) is a bar which can be either solid, as represented in the drawings, or tubular, with one end entering a short piece of tubing B, made thin at one end B' to allow a curtain-hem or curtain-ring to slide freely from the bar A upon the tube B. The opposite or outer end of the tube B is attached to the tip C, with the end of the tube abutting a shoulder *b* on the tip. The tip C is flaring or trumpet-shaped and is provided with a block of rubber or semi-elastic material to rest against the surface *a a* of the casing. The inner end of the tip has a shank *c*, slightly reduced in diameter to receive a spiral spring D, which is attached at one end to the shank *c* and having its opposite end bearing against the end *d* of the bar A. A pressure therefore upon the outer surface of the elastic block C' will act to compress the spiral spring D and slide the tube B upon the

bar A. Upon the opposite end of the bar A we place a short piece of tubing E, made thin at its end *e* and attached to a tip F at its outer end in the same manner as already described with reference to the tube B, the tip F being identical in construction to the tip C. The spiral spring shown in connection with the tip C is omitted in the tube E and the tube E is provided with a slot G, extending longitudinally nearly the entire length of the tube E and having a series of curved notches H H H, opening into the slot G. The end *f* of the bar A is placed within the tube E, and a short stud or pin *g* is inserted in the bar *a* and projecting into the slot G. The tube E is capable of sliding on the end of the bar A, the pin *g* sliding in the slot G until the entire length of the curtain-rod is slightly longer than the distance between the vertical sides of the casing *a a*. The tube E is then rotated on the bar A, bringing the pin *g* within one of the notches H, and as the notches are curved toward the tip F, a pressure upon the outer end of the tip will serve to carry the pin *g* into the notch and resist any tendency of the tube E to rotate on the bar A and release the pin *g* from its notch. The tip F is provided with a block of rubber F', similar to the block C' and for the same purpose.

In use the adjustable end J is adjusted, as just described, until the entire length of the curtain-rod is somewhat greater than the distance between the vertical and opposing sides of the casing with which the rod is to be used. One end is then placed in position with its rubber block resting against the side of the casing and the opposite end K moved in sliding the tube B upon the bar A until the rod can be entered between the sides of the casing and the opposite end of the rod placed at the same vertical height, when the pressure of the tips C and F against the sides of the window-casing, caused by the tension of the spiral spring D, will hold the rod firmly in position. When taken from the casing, either of the ends J or K can be removed, allowing the curtain to be placed upon the central bar A.

The tips C and F can be made of solid pieces of metal and the elastic blocks C' and F' at-

tached thereto; but we consider it better to construct them, as represented in the drawings, of sheet metal stamped into the desired form, with the rubber blocks C' F' inserted in the open ends.

The rod, when in position, is maintained by the tension of spring D, and it is obvious that in cases where the rods were of the requisite length and the adjustment secured by the adjustable end K unnecessary, both ends could be constructed like the end J, each having a spiral spring, thereby increasing the pressure against the sides of the casing. A limited amount of adjustment is obtained by means of the compression of the spiral spring D in the tube C, and in case ends like the end J were used upon both ends of the bar A a double amount of adjustment could be obtained, which in most cases will be found sufficient.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a curtain-rod, the combination of a rod or bar A, upon which the curtain is supported, a flaring shell C, forming a tip, a tubular sleeve with one end of said sleeve inclosing the smaller end of said shell or tip C and forming a tight fit, whereby said shell and tube form practically a single piece, the opposite end of said tube being reduced in thickness, as at B', and inclosing and sliding upon the rod A, so the curtain held upon said rod will slide freely over the tube B, a shank c, preferably formed integrally with said shell or tip C and concentric with the tube B, and

a spiral spring held on said shank with its bore slightly less than the diameter of the shank and with its end bearing against the inclosed end of the rod A, substantially as described.

2. In a curtain-rod, the removable end consisting of a tubular sleeve with one end B' reduced in thickness and with the opposite end connected with a shell or tip arranged to bear against the casing and provided with a shoulder b, a shank c, forming a part of said shell or tip to receive one end of a spiral spring, and a spiral spring with one end held on said shank and inclosed within the tube B, substantially as described.

3. The within-described curtain-rod, comprising the supporting rod or bar A, sliding tubular sleeve B, provided with a thin edge B' and a flaring tip C, inclosing a semi-elastic washer or disk C', and a spiral spring D, inclosed within said tubular sleeve at one end of the bar A, and at the opposite end of said bar A a sliding sleeve E, provided with a slot G and notches H and having a flaring tip F and a semi-elastic washer F', and a pin g, held in the rod A and engaging said notches, substantially as described.

Dated June 27, 1889.

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Witnesses:

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