(No Model.)

G. H. DAVIS.

CURTAIN HOLDING DEVICE.

No. 551,758. Patented Dec. 24, 1895.

Fig. 1.

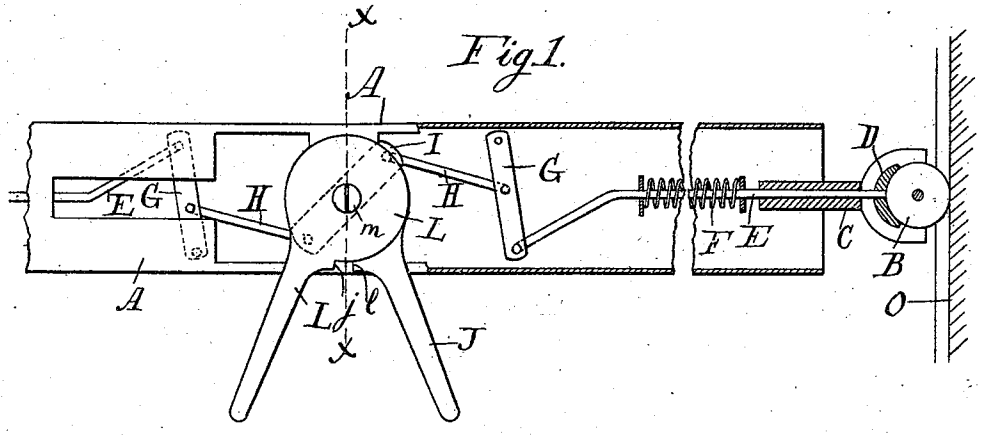
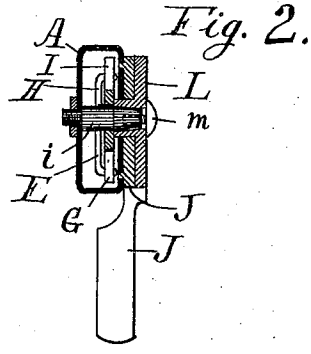


Fig. 2.



Witnesses:
E. Sumner Freeman
Robert S. Byers

Inventor:
George H. Davis
by S. N. Bates
his Atty.

UNITED STATES PATENT OFFICE.

GEORGE H. DAVIS, OF PORTLAND, MAINE.

CURTAIN-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 551,758, dated December 24, 1895.

Application filed April 18, 1894. Serial No. 507,998. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. DAVIS, a citizen of the United States, and a resident of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Curtain-Holding Devices; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a curtain-holding device of that class wherein a hollow curtain-stick is secured to the lower end of the curtain, the curtain-stick being provided with friction devices at its ends which are pressed outward against the window-casing for the purpose of holding the curtain in place.

The friction device is secured on the outer end of a spindle, and the class to which my invention particularly applies has a centrally-pivoted lever for retracting the spindle and releasing the friction from the window-casing, the lever being secured to an arbor operated by a handle-lever on its outer end. Opposed to this movable handle-lever is a fixed handle to provide a bearing for the fingers in operating the device.

In fitting the curtain-sticks in car or other windows it is desirable that when they are in position the two handles should occupy the same relative position to each other in all the curtains of the same car; but as the handle-lever, as it has hitherto been made, has been secured permanently to the arbor, the relative positions of the handles would vary with the variation in the width of the windows of the car, which would often be considerable. Thus when the window-casing was narrower than the standard reckoned on the friction end would be forced inward and the movable handle might be pressed down against the fixed handle so that the device could not be operated. In order to correct this difficulty I make the movable handle adjustable on the end of the arbor and provide means of clamping it in any desired position so that the curtain-stick can be inserted in the window and the movable handle secured at the proper distance from the fixed handle after the arbor has come to its proper position for that particular window.

A further object of my present invention is to so connect the inner end of the spindle with the pivoted lever that a given motion of the lever or the handle will be increased when it reaches the spindle and so that a small motion of the handle will produce a considerable retraction of the frictional device. This I accomplish by introducing an additional lever between the central lever and the spindle, making a system of compound levers by which the motion of the handle is increased.

In the accompanying drawings I have illustrated a curtain-stick embodying the several features of my invention.

In the drawings, Figure 1 is a front view of the curtain-stick with a portion cut away to show the interior, and Fig. 2 is a section on the line *x x* of Fig. 1.

A represents a hollow flat curtain-stick. B is the friction-wheel pivoted to the end of the tube C and adapted to press against the casing O. D is the brake by which the rotation of the wheel is controlled. E is the spindle connecting with the brake and extending inward to a point at or near the center of the tube, F being the spring which forces the spindle outward. These parts are all common and well known, having been described in various patents to myself and E. E. Piper, and they need no further description.

I is a lever secured to the arbor *i*, which is journaled in the curtain-stick at or near its center. To each end of the lever I is pivoted a link H the other end of which is pivoted to a lever G between its ends. One end of this lever G is pivoted to the curtain-stick and the other end is pivoted to the spindle.

It will be seen that the motion of the lever I is applied to the lever G and to the spindle in such a way that it is increased, and it may be increased more or less according to the location of the pivoting-point of the link H.

The outer end of the arbor *i* is adjustably connected with the handle-lever L. As herein shown I make this connection by forming the outer end of the arbor on a taper and providing the handle-lever with a tapering socket into which the end of the arbor fits. A binding-screw *m* enters the end of the arbor, its head bearing against the outer rim of the socket.

J is the permanent handle fixed to the front

side of the curtain-stick and opposed to the handle L. On the handle J is formed a projection *j* and on the handle L is an opposing projection *l* so arranged that they will limit the motion of the handle L as it is pressed toward the handle J.

When it is desired to fit the curtain-stick, the screw *m* is loosened, allowing the arbor to turn in its socket. The wheels are then placed in the grooves of the casing and the lever I having taken its proper position for that window, the movable handle L is brought to such a position that the projections *j* and *l* are preferably about one-eighth of an inch apart and the screw is set up. The handle L can thus only be moved the amount allowed by the projections *j* and *l*, which is so little that the wheel can never slip out of the grooves in the window-casing.

I claim—

1. A hollow curtain stick having a friction device at each end, spring actuated spindles for releasing said friction devices, levers G each of which is pivoted by one end to the curtain stick and by the other end to the inner end of said spindle, a centrally pivoted lever I and an arbor therefor and links connecting the ends of the lever I with the levers G between their ends, substantially as described.

2. A hollow curtain stick having a friction device at its end, a spindle for releasing said friction device, a lever for retracting said spindle, an arbor to which said lever is secured, said arbor having a tapering end, a handle lever having a conical socket for receiving said tapering end and a clamping device for holding said socket in any desired position on said tapering end, substantially as described.

3. A hollow curtain stick having a friction device at its end, a spindle for releasing said friction device, a lever for retracting said spindle, an arbor to which said lever is secured and a handle lever adjustably secured to the outer end of said arbor, substantially as described.

GEORGE H. DAVIS.

Witnesses:
S. W. BATES,
E. S. STANWOOD, Jr.