(No Model.)

E. E. PIPER & G. H. DAVIS.

CURTAIN HOLDING DEVICE.

No. 491,588. Patented Feb. 14, 1893.

Fig. 1.

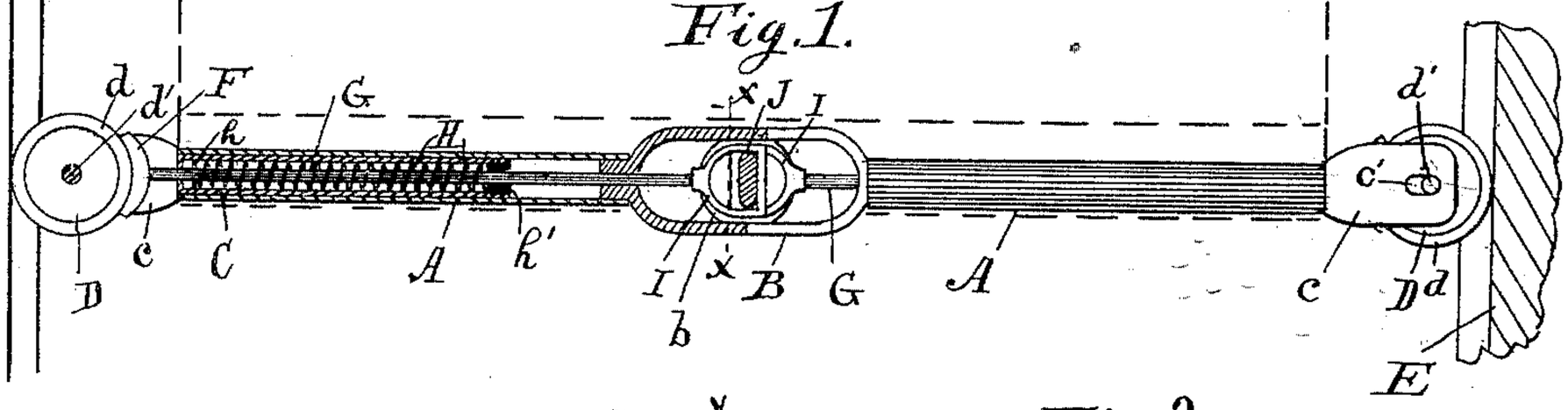


Fig. 3.

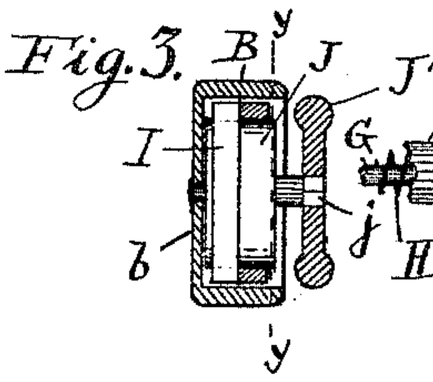
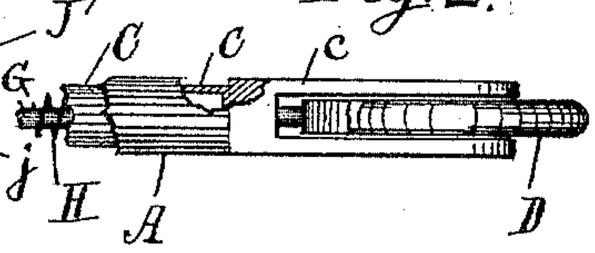


Fig. 2.



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UNITED STATES PATENT OFFICE.

EDWARD E. PIPER AND GEORGE H. DAVIS, OF PORTLAND, MAINE.

CURTAIN-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 491,588, dated February 14, 1893.

Application filed September 5, 1892. Serial No. 445,060. (No model.)

To all whom it may concern:

Be it known that we, EDWARD E. PIPER and GEORGE H. DAVIS, citizens of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Curtain-Holding Devices; and we do 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.

Our invention relates to curtain sticks or curtain holders of that class wherein the curtain stick contains a clamping device by which the curtain is held in position against the tension of the spring. In the curtain sticks of this class hitherto in use, the ends of the stick were provided with rubber tips which ran up and down in grooves in the sides of the window casing, being pressed against the casing by means of a spring. The difficulty with these curtains sticks was that the rubber tips were very liable to stick in the grooves and so cause one side to bind. In this way the rubber tips were liable to be withdrawn from the groove and the curtain disarranged.

The object of our invention is to substitute for the rubber tip a friction wheel which will travel in the groove and which, while holding the curtain with great firmness, will allow it to run freely up and down.

We illustrate our invention by means of the accompanying drawings, in which

Figure 1. is a part elevation and part section of our improved curtain stick, on *y y* of Fig. 3. Fig. 2. is a view of one end taken transversely to that of Fig. 1. Fig. 3. is a section on *x x* of Fig. 1.

We prefer to construct our curtain stick of two hollow tubes A joined together endwise by means of the open center piece B. At the outer end of each of the tubes A we journal a truck or wheel D in bearings which will permit of a limited amount of longitudinal motion. The wheels as herein shown are not journaled direct to the tubes A but to tubes C which are adapted to fit in the ends of the tubes A. Either construction may be used but we prefer that here given because it enables us to remove the wheel when necessary. The wheel is journaled between two ears *c* which are constructed on the end of the tube C. The hole *c'* in which the wheels are journaled are made oblong so that the wheel may have a limited motion as already stated. *d'* represents one of the journals of the wheel. A spindle G extends through the tube C from the wheel into the center piece B, its outer end being connected with a brake F which is adapted to press against the wheel. Within the tube C there is a spiral spring which surrounds the spindle G and presses against a pin *h* placed in the spindle and the inner end of the tube which is stopped by a plug *h'*. The spring H forces the spindle continually outward and consequently it forces the brake against the wheel. The inner end of each of the spindles G is provided with a stirrup shaped extension I and pivoted within the center piece B is a cam or button J. The cam J is pivoted in such a way as to pass through both of the extensions I, so that when it is turned in either direction both spindles will be retracted. It is provided with a knob handle J' by which it is turned.

b is the web on the back side of the center piece B to which the cam J is pivoted.

The wheel D may if desired be made toothed or corrugated but we prefer to construct it with a rubber tire *d* as herein shown this being less likely to slip than any other construction that would be practical.

The operation of our curtain stick is obvious from its construction. The spring H presses the brake normally against the wheel *g* and so keeps the wheel D from slipping and the curtain, which is represented in dotted lines, from rolling up. When the knob or handle J is turned, the brake is withdrawn and the wheels are then free to revolve so that the curtain moves easily up and down without danger of catching.

We claim;—

1. A curtain stick for retaining window shades in position having a truck or wheel journaled in bearings in the end thereof said bearings being adapted to allow of a limited motion at right angles to the window casing, a spring actuated brake for checking the rotation of said wheel and at the same time forcing it against the casing, substantially as described.

2. A curtain stick composed of two hollow

tubes connected by an open center piece, a truck or wheel journaled in bearings in the outer ends of said tubes said bearings being adapted to allow of a limited motion at right angles to the window casing, a spindle extending through each of said tubes into said center piece the outer end of each spindle being provided with a brake adapted to bear against one of said wheels, a spring for forcing each spindle outward, and a cam or button pivoted in said center piece so arranged as to retract the said spindles when turned, substantially as described.

3. A curtain stick for retaining window shades in place having journaled on the end thereof a truck or wheel, said truck or wheel being pressed normally against the window casing, a brake pressed normally against said truck or wheel and means for releasing said brake, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD E. PIPER.
GEORGE H. DAVIS.

Witnesses:
S. W. BATES,
JAMES T. TODD.