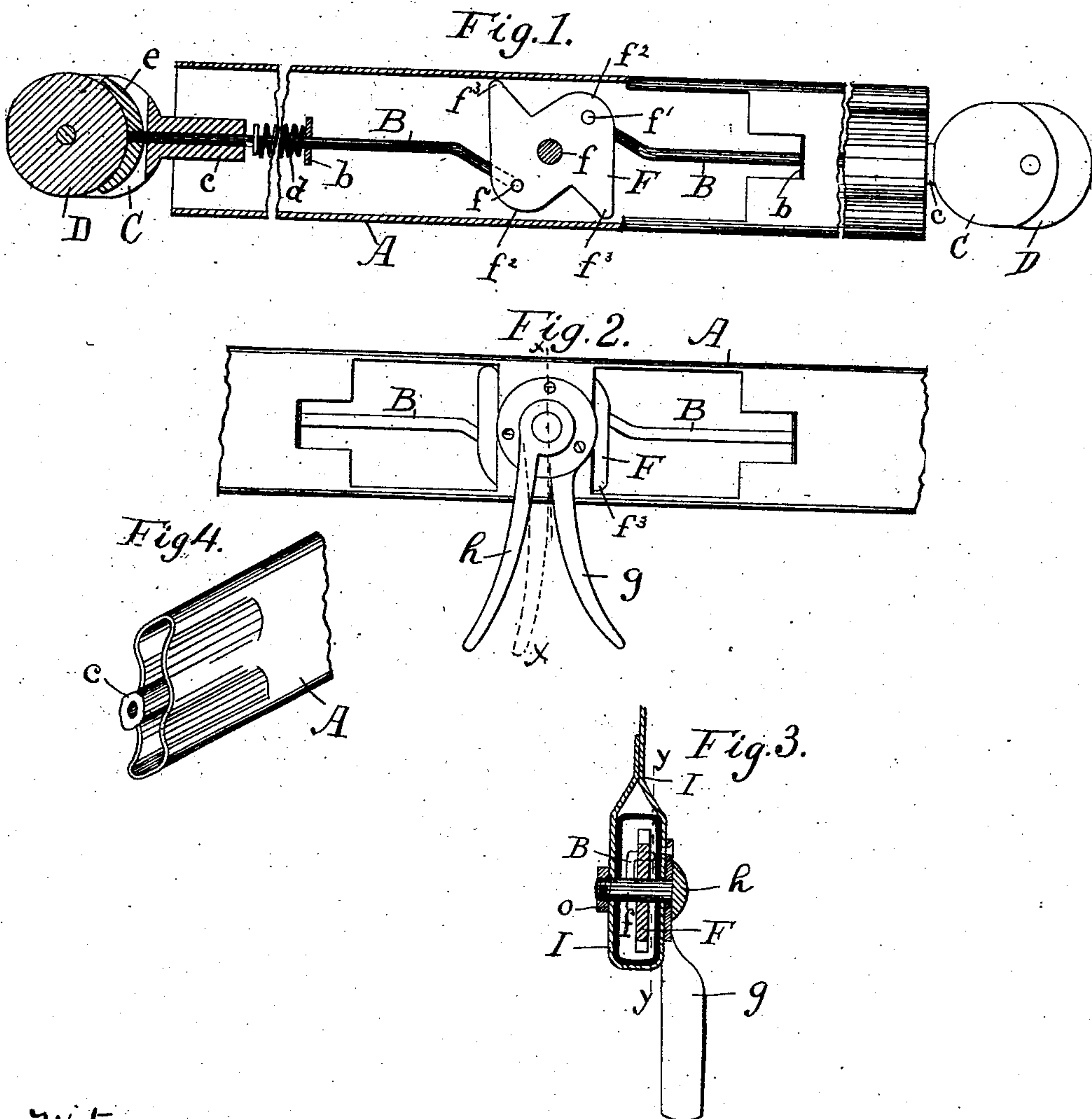


(No Model.)

E. E. PIPER.
CURTAIN HOLDING DEVICE.

No. 516,280.

Patented Mar. 13, 1894.



Witnesses
H. S. Wainhouse
W. L. Eaton.

Inventor
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UNITED STATES PATENT OFFICE.

EDWARD E. PIPER, OF PORTLAND, MAINE.

CURTAIN-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 516,280, dated March 13, 1894.

Application filed October 19, 1893. Serial No. 488,608. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. PIPER, a citizen 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 I 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.

My invention relates to a curtain holding device of that class wherein the spring actuated curtain is provided with a hollow curtain stick having rods or spindles extending from the center to the ends, the outer ends of said rods being provided with friction tips which are pressed normally against the window casing to hold the curtain in place. The inner ends of these rods have heretofore been retracted by means of thumb pieces or pendants acting directly on the rods or by pivoted levers or cams. In using a cam or lever for this purpose I have found that when it has been provided with a knob or handle for turning it, the turning of the knob had a tendency to lift one end of the curtain stick and to throw it out of its groove in the window casing. I have also found that the cam or lever should be allowed to turn in but one direction for the reason that when reversed it is apt to bend the wire rods.

One portion of my invention therefore is directed to an improvement in the form of the cam or lever to be used so that it can turn but one way and to provide means for operating the same which will be free from the objections noted, and another portion of my invention is directed to so forming the end of the hollow flat tube which I use that it will make a suitable bearing for a sleeve, rod or other cylindrical member which may be inserted in the end.

I illustrate my invention by means of the accompanying drawings in which—

Figure 1 is a section on the line *yy* of Fig. 3, of a portion of the curtain stick and a front elevation of the balance. Fig. 2 is a front elevation of the central portion. Fig. 3 is a section on the line *xx* of Fig. 2 and Fig. 4 is a perspective view of the end of the tube showing the manner of forming the end to

make a bearing for the rod or cylinder which enters it.

A represents a flat tube which serves as the curtain stick. Extending from each end to the center is the rod or spindle B on the outer end of which is the brake *e* pressed normally outward against the truck D by means of the coiled spring *d*. The truck D is journaled between the ears C C which are secured to the outer end of a sleeve *c* entering the end of the tube A. In order to hold this sleeve in place in the end of the tube and to form a bearing for it I compress the sides of the tube at and near the end to close around the sleeve and thus form a bearing for it. In this way I am enabled to avoid the expense of fitting a plug in the end of the tube and boring it out, it being only necessary by my present method to insert a mandrel and stamp the end with a die.

The tube A has a portion of its face cut away on each side of the center to give access to the inside and a portion *b* is turned inward to form a bearing for the rod B and a rest against which the spring *d* can press. The inner end of each rod is connected by means of pivots with a centrally pivoted lever F having a journal *f* which extends through the tube and which has formed on its outer end a handle lever *h*. A nut *o* holds the journal *f* in place. A stationary handle *g* is secured to the face of the tube A and it extends down to form a rest for the hand while operating the handle lever *h*.

I represents the curtain.

The form of the lever F is such that it can be turned only in one direction without striking against the inside of the tube. To accomplish this I cut away that portion of the edge of the lever (marked *f*²) which comes adjacent to the point at which the rod is pivoted on each side so that it will be permitted to turn to retract the rods without striking. Projections *f*³ are formed in such a position that when the lever is in its normal position with the rods out, they will rest against the inner surface of the tube and so prevent it from turning in the wrong direction and bending the rods.

It will be seen that the handles *h* and *g* by which the device is operated extend down below the end of the curtain where they are

be readily grasped and where the pull will be directly downward. Another advantage of this construction is that I am able to get a leverage for turning the levers against the force of the stiff springs much greater than I could get with a knob or knob handle.

It is evident that if the sleeve *c* is dispensed with as it is in some forms of curtain holding devices, the end of the tube can be bent in the same manner as described to form a bearing for the spindle.

It is evident that the work done by the lever *F* may also be done with a cam and that the two would be equivalents in this connection.

I claim—

1. In a curtain holding device, a hollow tube, a spring actuated spindle extending longitudinally through said tube from the end to the center, a friction tip on the outer end of said spindle, a lever journaled within said tube for retracting said spindle, the journal of said lever being provided at its outer end with a handle lever and a stationary handle opposed to said handle lever and secured to said tube, substantially as described.

2. In a curtain holding device, a hollow tube, a spring actuated spindle extending longitudinally through said tube from each end thereof to the center, a friction tip on the outer end of each of said spindles, a lever journaled within said tube for retracting said spindles, said lever having two opposite pivoting points to which said spindles are pivoted, the edges of said lever being cut away adjacent to said points, so that they will clear the inner surface of said tube when the lever is rotated to retract said spindles and two opposite projections on said lever so located as to strike the inside of said tube when the same is rotated in the opposite direction, substantially as described.

3. A curtain stick composed of a hollow tube of oblong cross-section bent or compressed at the ends thereof to form a bearing for a rod or cylinder, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD E. PIPER.

Witnesses:

H. G. PALMER,
S. W. BATES.

DISCLAIMER.

516,280.—*Edward E. Piper*, of Portland, Maine. CURTAIN-HOLDING DEVICES. Patent dated March 13, 1894. Disclaimer filed November 20, 1894, by the inventor.

Enters his disclaimer "to that portion of the specification which is included in claim one." [*Official Gazette*, November 27, 1894.]