2 Sheets—Sheet 1.

J. K. DAVISON.

Curtain Fixtures.

No. 211,890. Patented Feb. 4, 1879.

FIG. 2

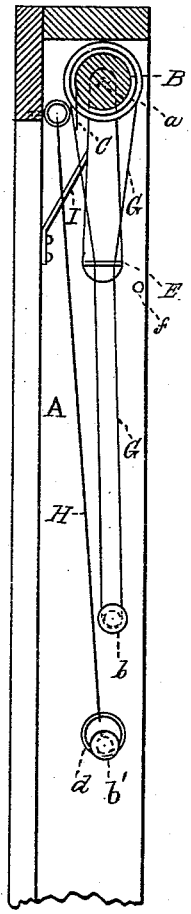
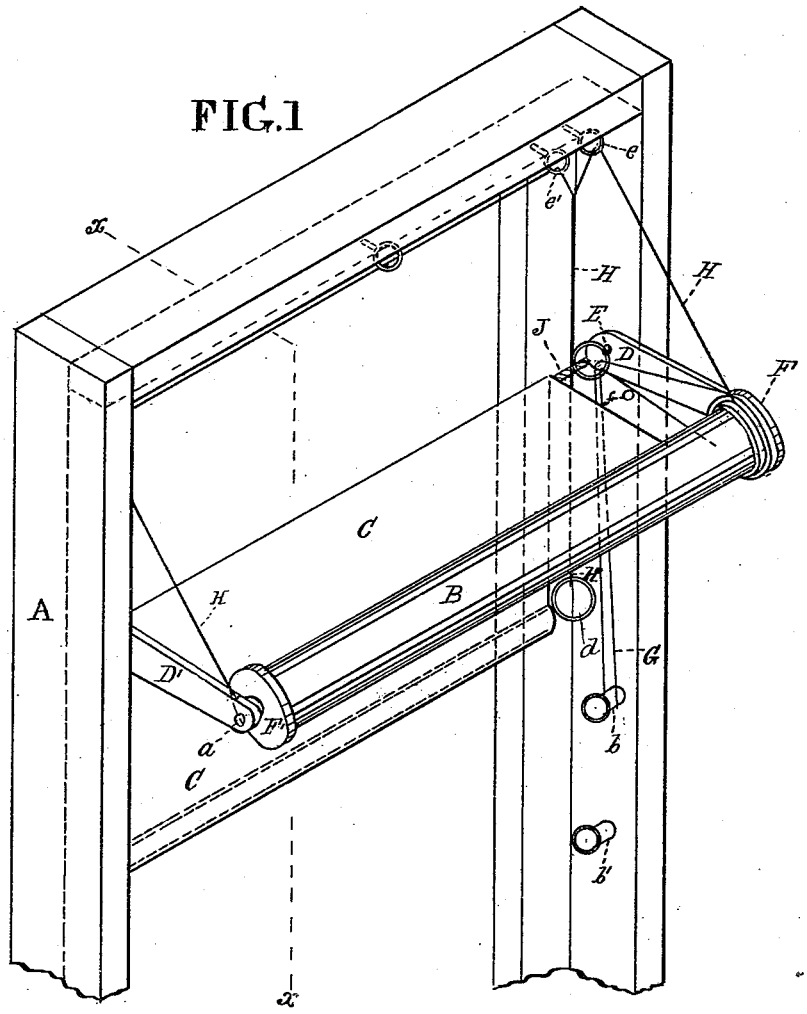


FIG. 1



Witnesses.

Thomas J. Bewley.

Chas. A. Dury

Inventor.

Joseph K. Davison.

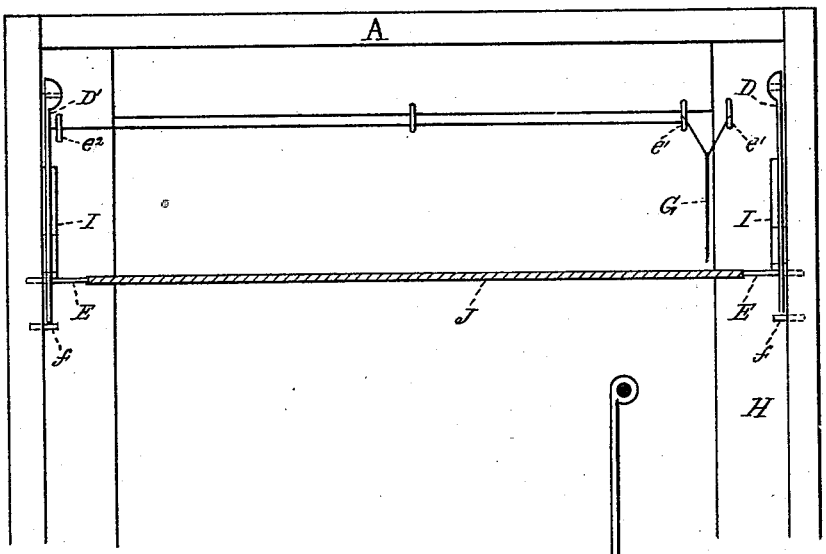
per Stephen Ustick attorney

J. K. DAVISON.

Curtain Fixtures.

No. 211,890. Patented Feb. 4, 1879.

FIG. 3



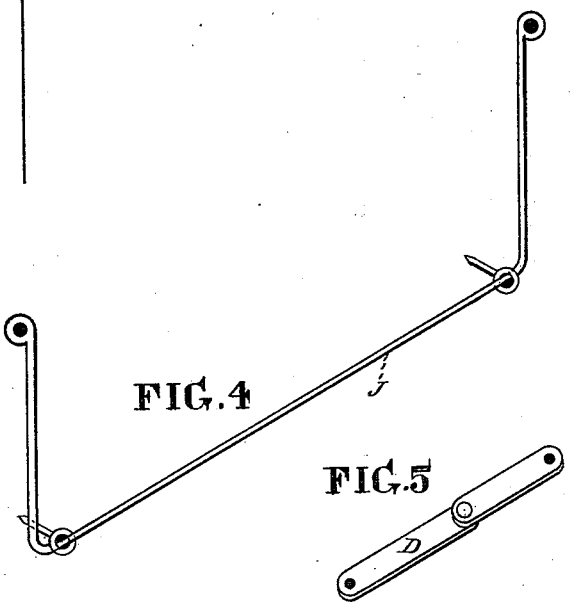


FIG. 4

FIG. 5

Witnesses.

Thomas J. Bewley.

Chas. A. Deas

Inventor.

Joseph K. Davison

per Stephen Ustick, attorney.

UNITED STATES PATENT OFFICE.

JOSEPH K. DAVISON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **211,890**, dated February 4, 1879; application filed July 11, 1878.

To all whom it may concern:

Be it known that I, JOSEPH K. DAVISON, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Curtain-Fixtures for Ventilation, of which the following is a specification:

My invention mainly consists in the combination of swinging bars with a curtain-roller and a window-frame provided with eye-bolts, on which the bars oscillate to vary the height of the curtain; springs adapted to press the bars from the window, and cords to retain the bars against the same; and a band for operating the curtain-roller, the band being doubled and passed through the eyes of said bolts, and thence down and around a hitching-knob, so that, the eyebolts being made the center of oscillation of both the band and the bars, the former is kept at a uniform tightness in all the positions the curtain-roller assumes when swung downward or upward, as hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation, in isometrical perspective, of a window-frame, A, with a curtain and roller connected therewith, with my improved fixtures. Fig. 2 is a vertical section at the broken line *x x* of Fig. 1. Fig. 3, Sheet No. 2, is a front elevation, with the roller and curtain removed. Fig. 4 is an isometrical view of the swinging bars D and D′ and the stretcher J, made in a single piece. Fig. 5 is a like view of a bar, D, jointed at the middle.

Like letters of reference in all the figures indicate the same parts.

Referring to the drawings, A represents the upper part of a window-frame; B, the curtain-roller, and C the curtain attached thereto. D D′ are swinging bars, which fit at their lower ends on the screw eyebolts E E, that are screwed into the jaws of the frame A. The upper ends of the rods fit on the pivots *a a* of the roller, which project from its end fittings F F′. G is a band, which connects with an annular groove of the fitting F, and with the knob *b*, which is screwed into the jamb *c*, the lower part of the band being doubled and passed through the eye of the bolt E before connecting it with the knob. By thus connecting the band with the eyes of the bolts the latter become the points of oscillation for it, as well as for the bars D D′, whereby a uniform tightness of the band is maintained in the different altitudinal positions of the roller.

H is a cord, which is doubled after connecting it with the ring *d*, which is used for fastening it to the knob *b′*. The cord is passed upward to within a short distance of the eyebolts *e* and e^1, and tied together. One strand is then passed through the eye of the bolt *e* and connected with the swinging bar D, and the other strand is passed through the eye of the bolt e^1, and thence through the eye of the bolt e^2, at the left upper corner of the frame A, and connected with the swinging bar D′.

I I are springs, which are fastened to the jambs of the frame A by means of screws, and have their resilient ends bearing against the contiguous edges of the swinging bars D and D′, the springs yielding to admit of the roller B being swung back into its upward position when the cord H is drawn downward and fastened to the knob *b′*, as seen in Fig. 2. When the cord is unfastened the springs force the upper ends of the bars D and D′ from their vertical position until they rest upon stop-pins *f*, and thereby swing the roller B into the position seen in Fig. 1 to form an open space for ventilation.

As the upper part of the curtain is thus swung inward from the window, the lower part would also be brought with it unless some means should be used to hold it back. For this purpose I use the stretcher J, the ends of which are connected with the eyes of the screw-bolts E E. The stretcher is represented as formed of twisted wire; but any other suitable material will answer the purpose as well.

The swinging bars D and D′ may be jointed in their middle, if desired, so as to admit of being folded up to occupy less space, or to increase the space for ventilation; and they may be pivoted to the jambs of the frame A, near its outer edge, to admit of the roller being dropped down, instead of being swung from the window when lambrequins or other curtains are

used, so as to prevent the curtains being swung or dropped forward. If desired, the swinging bars D D′ and stretcher J may be made in a single piece, as shown in Fig. 4.

I claim as my invention—

1. The combination of the swinging bars D D′ and band G with the roller B, eyebolts E E, springs I I, and cord H, the said bars being hung on the eyebolts, and the band doubled and passed through the eye of the contiguous bolt, and thence to and around the knob *b*, whereby the bolt is made the point of oscillation for both the band and bar, as and for the purpose set forth.

2. The combination of the springs I I with the swinging bars D D′ and frame A, substantially as and for the purpose set forth.

JOSEPH K. DAVISON.

Witnesses:
THOMAS J. BEWLEY,
STEPHEN USTICK.