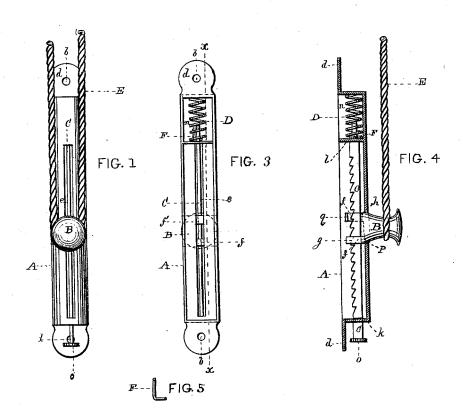
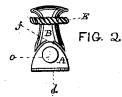
## S.E.Baum,

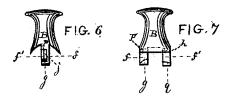
Cuitain Fixture.

NO. 106,770.

Falented Aug. 30.1870.







WITNESSES.

I. S. Chahorus Theo. N. Jown. frINVENTOR.

John & Boum By his attorney Stephen Ustick

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## United States Patent Office.

## JOHN E. BAUM, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 106,770, dated August 30, 1870.

## IMPROVED CURTAIN-CORD TIGHTENER

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN E. BAUM, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Window-curtain-cord Tighteners, of

which the following is a specification.

The nature of my invention consists of an adjustable cord-holder, in connection with a sliding ratchetbar, which moves in a stationary case. The said case is provided with a spring which gives elasticity to the movements of the bar. The cord-holder has a rigid connection with the latter, whereby the only friction in the movement of the holder is that occasioned by the sliding of the bar.

To enable others to make and use my invention,

I will now give a detailed description thereof.

In the accompanying drawing which makes a part of this specification-

Figure 1 is a face view of the improved device.

Figure 2 is an end view of the same.

Figure 3 is a reversed face view.

Figure 4 is a vertical section at the line xx of fig. 3. Figure 5 is a side view of the stop-wire F.

Figures 6 and 7 are views at right angles to each other of the cord-holder B.

Like letters in all the figures indicate the same parts.

A is a case, which is confined to the window-jamb by means of screws or tacks, there being holes, b b, in the end flanges d d, for that purpose.

In the front of the case there is a vertical slot, e, in which the bifurcated tongue  $ff^{\prime}$  of the cord-holder B has a free movement.

The parts ff' are recessed in their opposite sides, the part f being provided with the catch g, and the

part f' with the guide-shoulder h.

Between the parts f f' there is a space, j, seen clearly in fig. 6, for the passage of the sliding bar C, which has its bearing in appropriate slots of the lower end k of the case A, and the cross-piece L, at the upper end of the same.

There is a space, n, above the cross-piece l, in which is placed a wire spring, D, surrounding the upper end of the ratchet-bar C, for giving an elastic tension to

the cord E.

The said bar C is provided with a head, o, beneath which the thumb is placed for giving the bar an upward inclination when the cord-holder B is being ad-

F is a bent wire, which is passed through a hole in

the ratchet-bar C, above the cross-piece I, to regulate the downward movement of the bar. The said wire

is seen clearly in fig. 5.

The several parts of the tightening device are so constructed as to be very expeditionally connected together, without rivets or screws. The cord-holder B being placed in the slot e of the case A, and the ratchet-bar C put in the position it assumes in the drawing, the bent wire F is connected with the upper end of the bar, and the lower end of the spring D placed over the same, and the vertical part of the wire F; then the upper end of the spring is pushed in place. The wire spring, thus inclosing the bent stopwire F, keeps it securely in connection with the bar C.

The case A being fastened to the window-jamb in the usual manner, and the cord E connected with the holder B, and the latter adjusted on the ratchet-bar C so as to give the proper tension to the cord E, the eatch g of the holder, by the tension of the cord, is brought into connection with a tooth of the bar, and the holder being inclined upward by the tension of the cord, the shoulder h of the part f' is brought against the front edge of the bar, whereby the holder is firmly connected with the latter, and the tongue of the holder having a free movement in the slote of the case A, the only friction in the operation of the tightener is the small amount caused in the sliding of the ratchet-bar C.

In the adjustment of the holder B, the front end of the same is pressed downward to disengage the catch g from the bar C, so as to bring the shoulder pof the part f against the front edge of the bar, the lug q of the part f' at the same time resting against the blunt points of the teeth of the bar, thus providing for the free movement of the cord-holder in its

adjustment without moving the bar.

What I claim as my invention, and desire to secure by Letters Patent, is-

The combination and arrangement of the cordholder B, ratchet-bar C, spring D, and case A, substantially as and for the purpose above described.

In testimony that the above is my invention, I have hereunto set my hand and affixed my seal this 16th day of July, 1870.

JOHN E. BAUM. [L. S.] Witnesses:

STEPHEN USTICK. THOMAS J. BEWLEY.