C. P. JADWIN.

Curtain-Fixtures.

No. 206,794. Patented Aug. 6, 1878.

Fig 1.

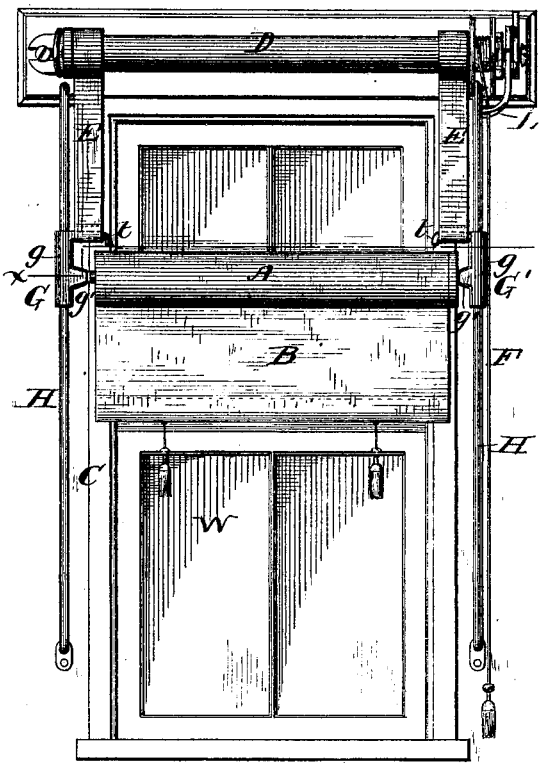
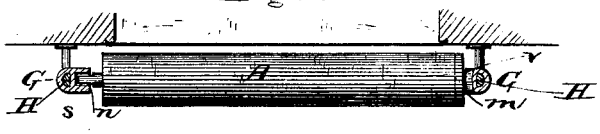


Fig 2.



WITNESSES

Harry King.

William Blackstock.

By

INVENTOR

Charles P. Jadwin,

by L. Hill.

His Attorney.

UNITED STATES PATENT OFFICE.

CHARLES P. JADWIN, OF SCRANTON, PENNSYLVANIA.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **206,794**, dated August 6, 1878; application filed July 8, 1878.

To all whom it may concern:

Be it known that I, CHARLES P. JADWIN, of Scranton, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Window Curtains and Fixtures; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my invention, and Fig. 2 is a sectional view taken in the line *x x*, Fig. 1.

Similar letters of reference in the several figures denote the same parts.

Various attempts have been heretofore made by others to produce a window-curtain the roller of which can be adjusted at any desired height and the curtain then rolled up or unrolled without altering the adjustment of the roller. These devices have been more or less inconvenient and defective in operation, and hence have not come into use to any great extent.

The object of my invention is to improve and perfect the application of this principle to window-curtains; and to this end it consists in a certain novel construction and arrangement of devices, which I will now proceed to describe, and point out particularly in the claims.

In the drawings, W is the window; C, its casing; A, the lower roller of the common self-winding and self-locking spring variety, known by the generic trade-name of "Hartshorn roller;" B, the curtain fixed to said roller; D, the lock-lever roller for raising and lowering the Hartshorn roller; E E, the straps connecting said two rollers, by means of which the lower roller is raised and lowered by the revolution of the upper one; F, the cord by which the upper roller is turned to raise the lower one; G G′, the sliding blocks or boxes having sockets which support the lower roller; H H, guide-rods on which the blocks G G′ slide, and L the lever, which, by means of the cord F, is caused at will to lock or unlock the upper roller.

The general operation is, that by moving the cord F out from the window the operator unlocks the upper roller and allows it to revolve, and then, by pulling upon said cord longitudinally, he turns said roller so as to wind up the straps E and raise the roller A and curtain B, or, by slacking up on said cord, he allows the weight of the lower roller and its attachments to unwind the straps E and lower the curtain and its roller; and, by moving the cord in again at any time toward the window, he locks the upper roller once more and holds the lower one adjusted in position, after which the curtain can be rolled up or unrolled on the lower one without disturbing the adjustment of the latter.

The Hartshorn roller, as is well-known, is supported at one end by a revolving journal, *m*, and at the other by a fixed non-revolving boss or projection, *n*, the journal *m* being made round to facilitate, and the boss *n* being made flat to prevent, rotation. I use these rollers, with their journal and boss, and also the upper rollers, with their supports and operating attachments, just as I find them already, respectively, on the market, my invention being adapted to them and involving no change whatever in their construction in any respect.

In order to accomplish this result, the blocks G G′ must be made in pairs, one, G, having a deep narrow slot or socket, *s*, open at its top to receive the boss *n* and hold it from turning, and the other, G′, having a round hole, *v*, to receive the journal *m* and allow it to revolve. The sockets *s v* must be held rigidly from inclining laterally or vertically; hence the guide-rods H cannot be round, but must be of oblong or other uneven cross-section, which will prevent the blocks G G′ from turning laterally; and the vertical bearing of the blocks and guide-rods must be sufficiently elongated to prevent any vertical inclination of the sockets. I accordingly make the blocks in the form of a hollow sleeve, *g*, having a hole which fits the guide-rods, and having on its inner face a protuberance, *g′*, in which is formed the open slot *s* or round hole *v*, as the case may be. Instead of a continuous sleeve, *g*, it is evident that a plate having horizontal arms at its upper and lower ends, with vertical holes in them to fit the guide-rods so as not to turn on them, might be employed. From the upper end of each block G or G′ an arm, *t*, ex-

tends inward horizontally to receive the lower end of the suspending-straps E E. It is important that flat straps be employed, inasmuch as they will wind up or unwind evenly and uniformly, and always preserve the proper position of the curtain, and prevent all binding or cramping of the sockets on the guide-rods. Round cords might be employed instead of straps; but they would be inferior, and would be liable to wind and unwind unevenly, and cause more or less trouble in operating the device.

The perfection of the contrivance comes from the use of an upper roller, which brings a straight even draft on both supports of the lower roller, and the use of such form of connecting-straps as will always maintain the relative position of the two rollers.

The device, constructed and combined as I have described, always runs smoothly, keeps, therefore, in working order, is easy and convenient to operate, and is neat and ornamental in appearance.

It is not, of course, essential that the upper roller should operate by a cord and locking-lever, as any other practical means of revolving it will answer; but the lock-lever device is preferred.

I claim as my invention—

1. The combination of the Hartshorn roller and its supports *m n* with the blocks G G′, having the sockets *s v*, and having the elongated bearing for the guide-rods H H, the latter being of such cross-section as to prevent the turning of the blocks therein, substantially as described.

2. The combination of an adjustable lower spring-roller, guided by rods H H, with the straps E E and the upper adjusting-roller and means for operating the same, substantially as described.

3. The socket-blocks G G′, constructed with the elongated bearing for the guide-rods, with holes of such form as to prevent lateral turning thereon, and having the projections on their inner faces, with sockets *s r* to receive and hold the supports of the spring-roller, substantially as described.

CHARLES P. JADWIN.

Witnesses:

WM. C. THOMAS,

DUNCAN WRIGHT.