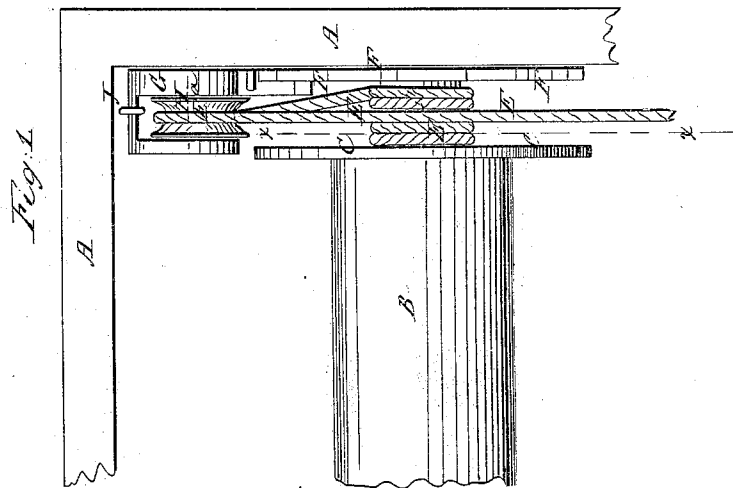
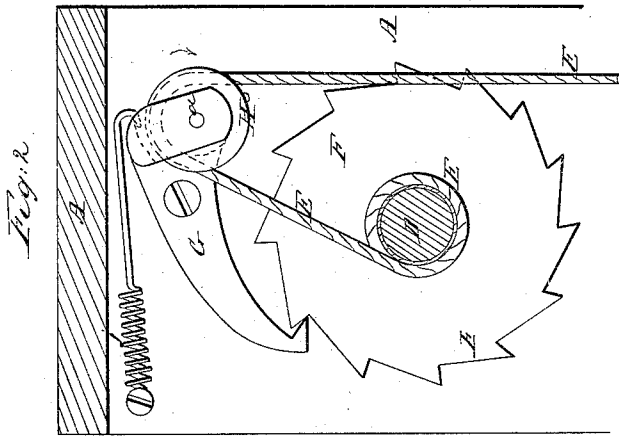


J. Smith,

Curtain Roller

N^o 27,747.

Patented Apr 3, 1860.



Witnesses
(O'Connell)
William Thompson

Inventor
Joseph Smith

UNITED STATES PATENT OFFICE.

JOSEPH SMITH, OF NEW YORK, N. Y.

CURTAIN-FIXTURE.

Specification of Letters Patent No. 27,747, dated April 3, 1860.

To all whom it may concern:

Be it known that I, JOSEPH SMITH, of the city, county, and State of New York, have invented a new and useful Improvement in
5 Curtain-Fixtures; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

10 Figure 1 represents one end of a curtain roller hung to the window frame or bracket showing in a front view the ratchet wheel, pawl with its pulley, and the arrangement of the pulley cord over this pulley and the
15 end of the roller. Fig. 2 is a transverse section, taken through the red line *x, x*, of Fig. 1, showing clearly the arrangement of the several parts for operating the roller for raising or lowering the curtain.

20 Similar letters of reference indicate corresponding parts in both the figures.

The object of this invention is to obtain a more simple, less expensive and at the same time a more efficient and durable curtain fixture than those that are at present in
25 the market; and to obtain by a novel arrangement of devices a means of establishing the curtain at any desired point independent of the cord used to raise or lower
30 the same. The cord will thus require no lower fixture, and, after a time should it suddenly break while operating the curtain will be instantly stopped and prevented from coming down, which is not the case
35 where lower cord fixtures are used. The cord will require no adjusting to tighten or loosen it, and the parts may be applied directly to a window frame or to suitable brackets hung from the window frame.

40 To enable those skilled in the art to fully understand my invention I will proceed to describe its construction and operation.

In the drawings, A represents a bracket or window frame, and B, the curtain roller,—
45 or a portion of it,—with a circular flange C, nailed to its end to prevent the curtain from being rolled off.

D is the winding drum for the pulley cord E, which is somewhat smaller in diameter
50 than the roller B.

F is a suitable ratchet wheel secured to the

end of the drum D, which serves as a ratchet wheel and as a flange to keep the pulley cord on the drum as it is being wound up or unwound. 55

Over the ratchet wheel F, is pivoted at *a*, to frame A, a hooked pawl G, carrying on one end, opposite the hook, a grooved pulley or roller H, which projects out from the inside of the frame A, sufficiently to be
60 directly in a line with the drum D. The exact position over the drum D, for placing the pawl with its pulley is unimportant.

J is a spring which may be of metal or rubber, or a weight would answer the purpose intended for it, of keeping the pulley
65 on the end of the pawl down and in contact with the teeth of the wheel F, when the pulley rod E, hangs loosely. A spring, or its equivalent will be found necessary to
70 effect this object as the friction of the cord over the pulley on the pawl would not be sufficient to operate the pawl with certainty. The cord E, has one end fixed to the small
75 drum on the end of the roller B, and passes up and over the grooved swinging pulley H, and down within reach where it may hang loosely or be attached to any convenient fixture.

C is a stop pin projecting out from the
80 frame A, to prevent the pulley H, from being drawn down too far.

The small parts forming my improved curtain fixture for raising or lowering a curtain by one string, having thus been described, the operation will be readily understood, it being only to draw down lightly
85 on the cord E, until the pawl is disengaged from the ratchet wheel, on the roller, and while the cord is kept taut the hand is gradually raised, when the weight of the curtain will unwind it from the roller as long as the ratchet wheel is free to move
90 but by letting go the cord the spring J, will instantly throw the hook on the end of the pawl into gear with the ratchet wheel and suddenly stop the roller. To raise the curtain it is only necessary to draw on the cord in the usual manner of rolling up curtains. 95

The whole operation of rolling up or unrolling a curtain can be performed with one 100

cord for which purpose only it is used, the parts for establishing the curtain being an independent fixture.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

The combination of the hooked pawl with its grooved pulley H, spring J, and ratchet

wheel F, arranged and operated with one cord, so as to raise, lower or stop the curtain at any desired point as described and represented.

JOSEPH SMITH.

Witnesses:

B. GIROUSE,

WM. THOMPSON.