

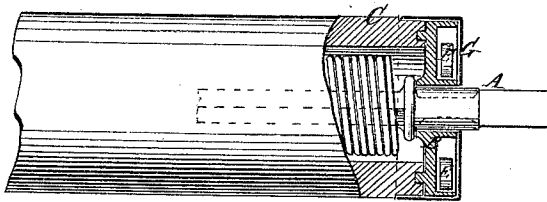
S. HARTSHORN.

Improvement in Curtain-Fixtures.

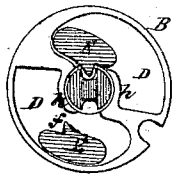
No. 128,798.

Patented July 9, 1872

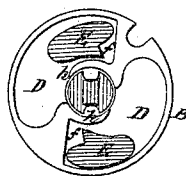
*Fig. 1*



*Fig. 2*



*Fig. 3*



Witnesses:

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# UNITED STATES PATENT OFFICE.

STEWART HARTSHORN, OF NEW YORK, N. Y.

## IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 128,798, dated July 9, 1872.

Specification describing a new and useful Improvement in Curtain-Fixtures, invented by STEWART HARTSHORN, of the city, county, and State of New York.

The object of this invention is to simplify, cheapen, and improve the stop-motion of the spring curtain-fixture; and it consists in a pawl-plate and one or more loose pawls arranged and operating on the spindle at the end of the curtain-roller, as hereinafter more fully described.

In the accompanying drawing, Figure 1 is a sectional side view of one end of the curtain-roller, showing the spindle and the spiral spring and the recessed pawl plate on the end of the curtain-roller. Figs. 2 and 3 represent the pawl-plate detached, showing it and the pawls in two different positions in regard to the spindle.

Similar letters of reference indicate corresponding parts.

A is the spindle, which is recessed on one or both sides, as seen in Figs. 2 and 3, so that the pawl may engage with it. B is the pawl-plate attached to the end of the curtain-roller C, as seen in the drawing. Its outer side has one or more recesses, D, in which are placed one or more pawls, E. These pawls are loose in the recesses, and are simple pieces of metal, of any suitable form, with a lip, *f*, projecting from one side. The pawls are confined in their recesses by a cap, G, which fits onto the end of the roller C over the pawl-plate, as seen in Fig. 1, thus confining the pawls, so that they cannot turn over or change ends as

they are carried round with the roller. *h h* represent partitions in the pawl-recesses D, which prevent the pawls from engaging with the spindle, except they are in a particular position, or as seen in Fig. 2, and not then unless the motion is slow. When the motion of the roller is quick, as in pulling down the curtain and giving tension to spring, or when the spring is at liberty to roll up the curtain unrestrained or nearly unrestrained, the pawls will be thrown, by centrifugal force, into the position seen in Fig. 3, where they will remain while such rapid motion continues. When the motion slackens the gravity of the pawl will overcome the centrifugal force, and the pawl will drop and engage with the spindle, as seen in Fig. 2. It is, therefore, only necessary to slacken the motion by pulling down slightly upon the curtain to have the pawl engage and the curtain stop at any desired point.

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

The loose pawls E, having side lips *f* held by a cap, G, and a plate, B, attached to roll C, and having the partitioned recesses D *h*, in combination with a recessed spindle, A, and curtain-roller C, as and for the purpose described.

STEWART HARTSHORN.

Witnesses:

T. B. MOSHER,  
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