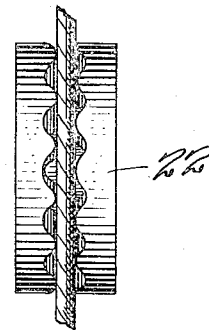
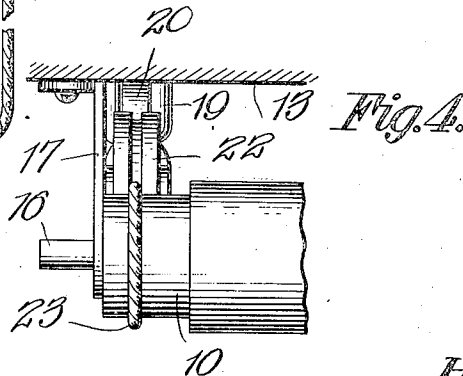
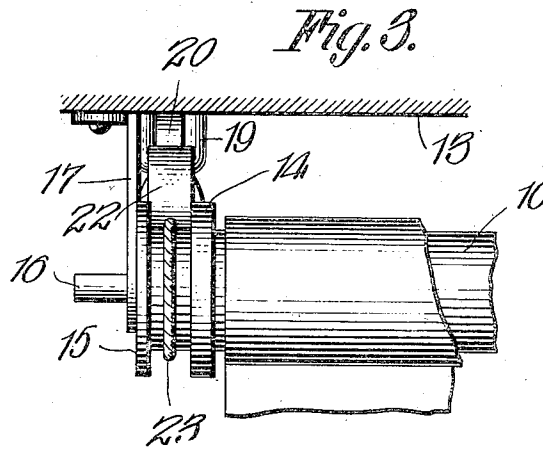
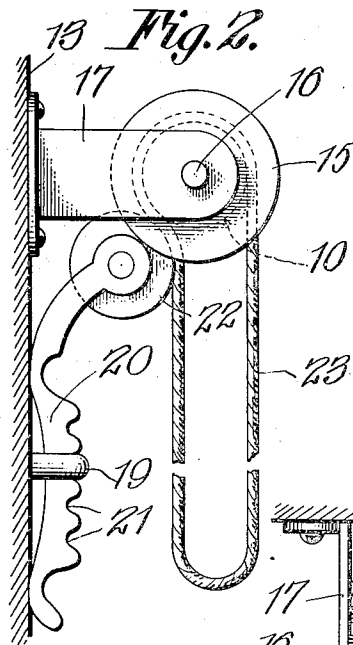
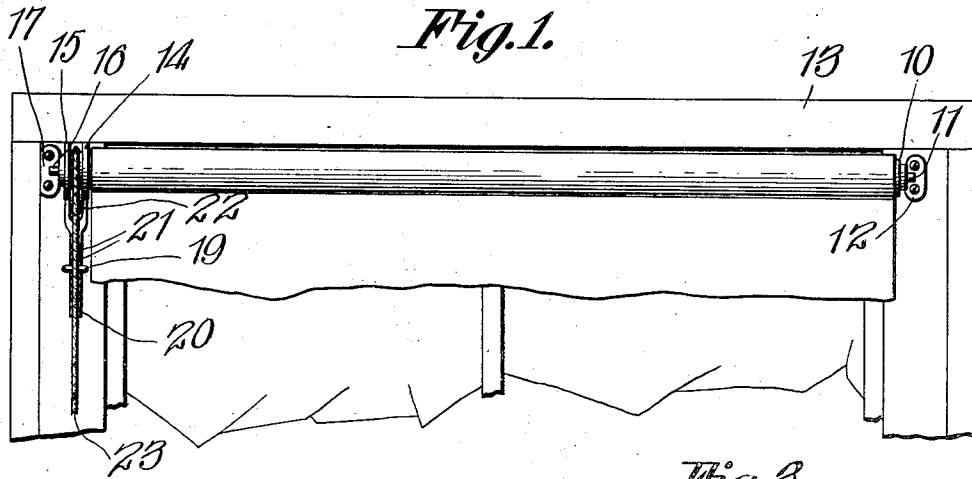


936,387.

Patented Oct. 12, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

HAMILTON TRIPP, OF HONEY GROVE, TEXAS.

CURTAIN-ROLLER.

936,387.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed October 9, 1908. Serial No. 457,019.

To all whom it may concern:

Be it known that I, HAMILTON TRIPP, a citizen of the United States, residing at Honey Grove, in the county of Fannin, State of Texas, have invented certain new and useful Improvements in Curtain-Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvement in curtain rollers, and has for one of its objects to provide a simply constructed device whereby the curtain is retarded in its movement so that it will remain in its adjusted position, and without the necessity for employing springs, weights or like devices.

With this and other objects in view the invention consists in a roller having an annular channel at one end, an endless flexible element operating in the channel, a tension wheel bearing against the flexible element within the channel, and yieldable means for supporting the wheel.

The invention further consists in certain novel features of construction as hereafter shown and described, and specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a front elevation of a portion of a window opening including the casing with the improved roller attached. Fig. 2 is an end elevation of the roller and the adjacent portion of the window casing and frame with the roller in end elevation and the adjustments in side elevation. Fig. 3 is a detail of the improved device in plan view. Fig. 4 is a view representing a modified form of the tension roller. Fig. 5 is a detail view illustrating another modification in the construction.

The improved device comprises a curtain roller 10 of the usual size and with the curtain material connected thereto in the usual manner. At one end the roller 10 is provided with a central pin 11 mounted for rotation in a bracket 12, the latter connected to the window casing represented at 13. At the opposite end the roller 10 is provided with an annular rib 14 spaced from the end of the roller, and the end of the roller provided with a stop plate 15 somewhat larger than the roller, the rib 14 forming one side of an annular channel and the plate 15 form-

ing the opposite side of the channel, as shown.

Extending from the end of the roller which carries the plate 15 is a pin 16 fitting in a bracket 17 attached to the casing 13, the roller thus being mounted for rotation in the brackets, as shown.

Connected to the casing 13 below the line of the roller 10 is a keeper device, preferably in the form of a staple 19, and engaging through this staple is a resilient bar 20 having spaced notches 21 adapted to be engaged consecutively with the staple 19. The bar 20 is formed of resilient material and curved outwardly so that it bears at two separate points against the casing 10, and thus holds the notches in position to be engaged yieldably with the staple 19. Thus by pressing the member 20 inwardly the notches may be released from the staple and the bar adjusted vertically, as required. At its upper end the bar is forked and supports a tension roller wheel 22 in the forks, the tension roller bearing between the rib 14 and the plate 15.

An endless flexible belt or chain 23 is carried in the channel between the members 14-15, and hangs vertically with its lower end in convenient position to be reached by the operator. The length of the belt 23 will depend upon the height of the window, and may be varied to correspond therewith. The wheel 22 thus bears against the belt 23 and within the channel, and produces the requisite tension thereon to prevent the roller from rotating too readily, the amount of the tension being gaged by the position of the bar 20 relative to the staple 19, as will be obvious, thus if a greater tension is required the bar 20 carrying the roller 22 is adjusted to a higher point, and if a lesser tension is required the bar and its roller is adjusted to a lower point the adjustment being controlled by the notches 21, as will be obvious.

The belt 23 may be a cord, a flexible wire cable, or a chain, and it is not desired to limit the invention to any specific material for this portion of the device.

The roller wheel 22 will preferably be formed with corrugations or an irregular surface within the groove of the wheel to prevent the belt from slipping, the preferred form of this modification being shown in Fig. 4.

The improved device may be applied to rollers of various lengths and sizes, and is

thus readily adapted to window curtains of any size.

By this simple arrangement the curtain is held from movement except when force is applied to the flexible element 23 or to the curtain material. Thus when the curtain is to be lowered it is only necessary to draw downward upon the pull element at the bottom of the curtain material, and the friction produced by the resiliently held member 22 will retain the curtain at any point desired, and when the curtain is to be raised it is only necessary to draw down upon the center portion of the flexible member 23, the member 22 yielding sufficiently to permit the roller 10 to be rotated, but it will effectually prevent the curtain from "running down", as will be obvious.

In Fig. 5 a slight modification in the construction is shown consisting in dispensing with the rib 14 and the end plate 15 and providing the roller 22 with flanges at its ends, thereby producing a roller having an annular channel, which bears over the flexible member 23, as shown, and prevents lateral movement of the same, and thus performs the same function as the channel of the roller

as shown in Fig. 1. This modification does not constitute a departure from the principle of the invention, as substantially the same results are produced in both constructions.

The improved device is simple in construction can be inexpensively manufactured, and operates effectually for the purposes described.

What is claimed is—

The combination with a curtain roller, of an endless flexible belt operating over the same, a keeper adapted to be attached to a window casing adjacent to the roller, a resilient bar having spaced notches and operating through said keeper with the keeper engaging in one of the notches, and a friction roller mounted for rotation in said bar and bearing against the flexible belt upon said curtain roller; whereby said bar may be adjusted relative to the keeper to control the tension of the roller.

In testimony whereof, I affix my signature, in presence of two witnesses.

HAMILTON TRIPP.

Witnesses:

A. E. GORUM,

A. E. NEWHOUSE.