Nov. 5, 1929. N. M. FAULDS 1,734,800

DEVICE FOR PORCH CURTAINS

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Fig. 1.

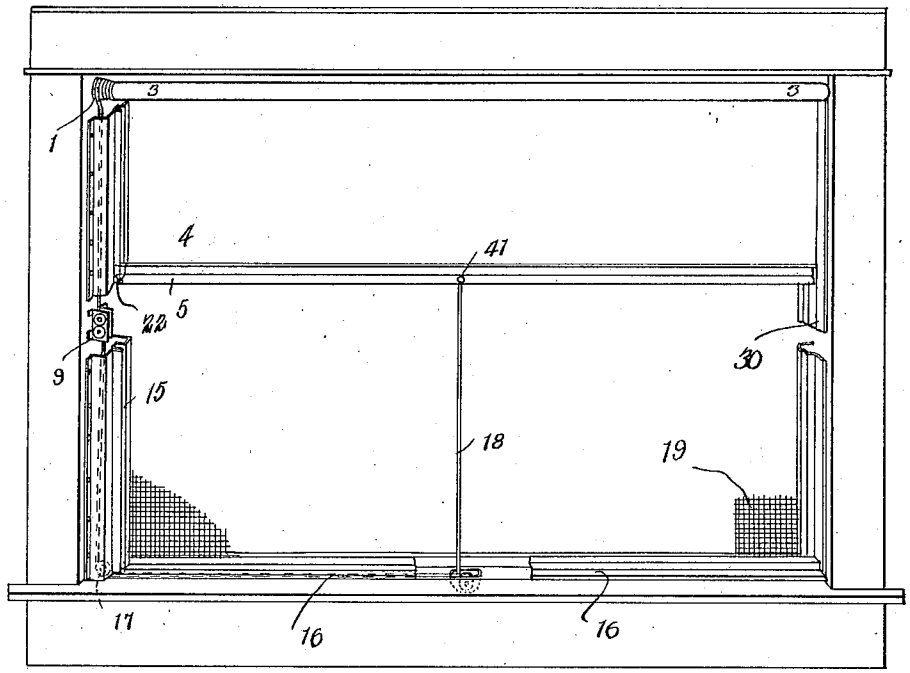


Fig. 12.

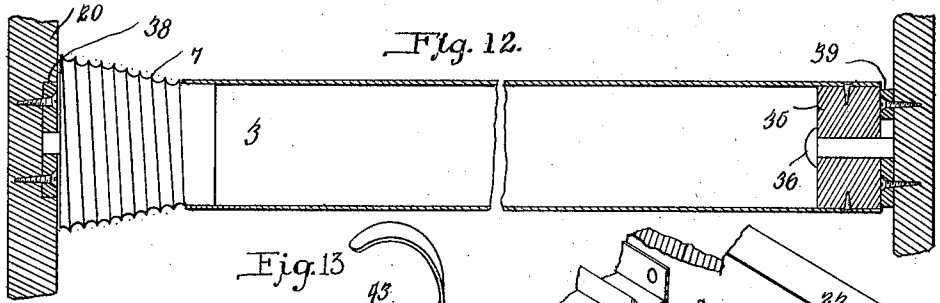
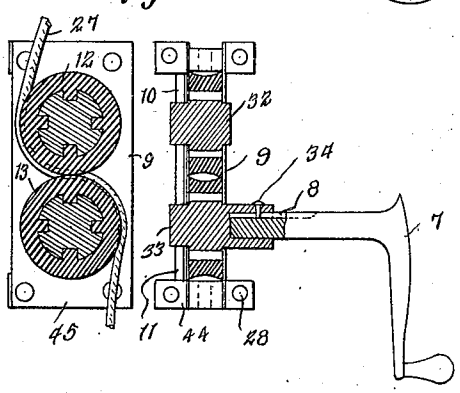


Fig. 13

Fig. 9.



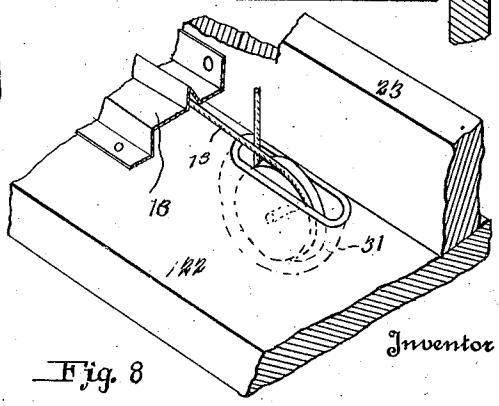


Fig. 8

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DEVICE FOR PORCH CURTAINS

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Fig. 2.

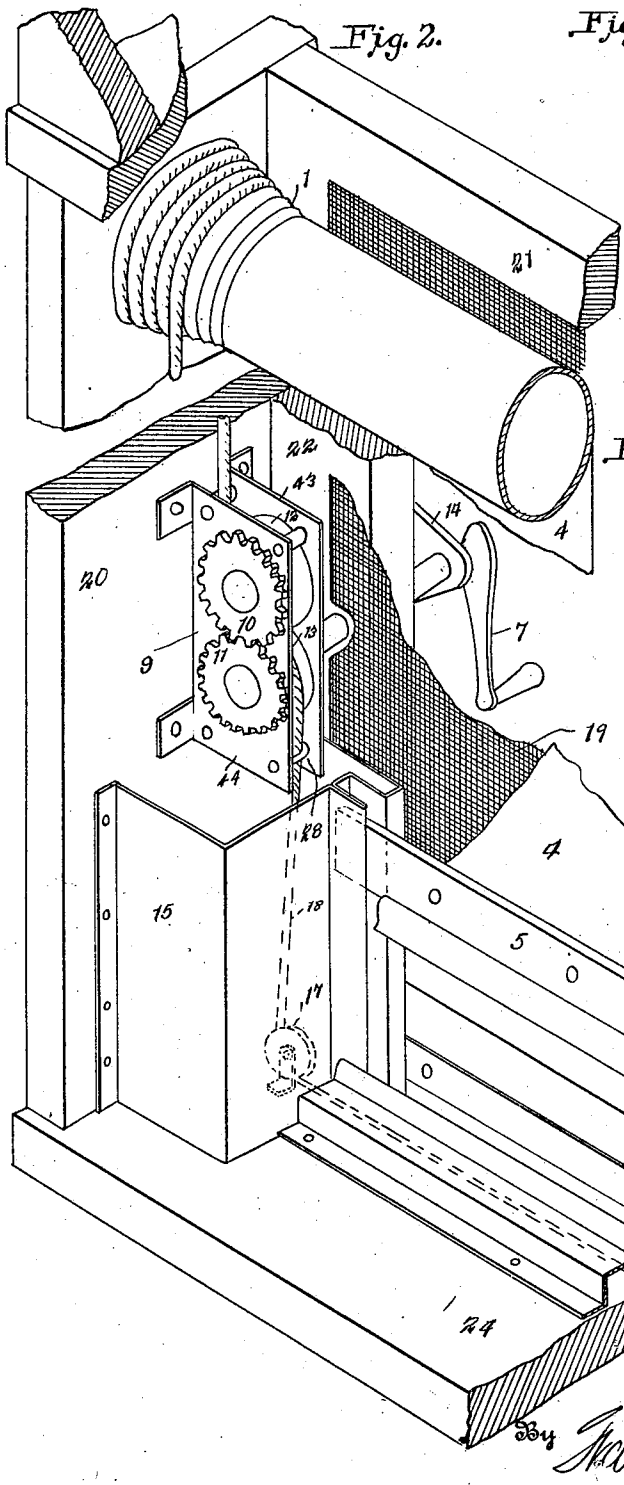


Fig. 3.

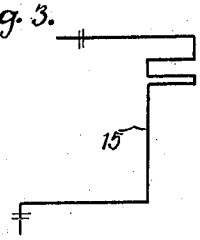


Fig 4.



Fig. 5.

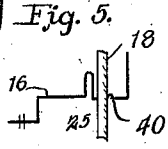


Fig. 6.

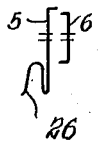


Fig. 7.

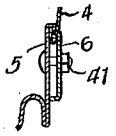


Fig. 10.

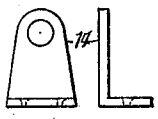
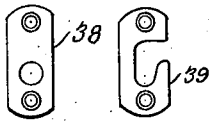


Fig. 11.



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Patented Nov. 5, 1929 1,734,800

UNITED STATES PATENT OFFICE

NORVAL MERRITT FAULDS, OF CLEARWATER, FLORIDA

DEVICE FOR PORCH CURTAINS

Application filed April 25, 1927. Serial No. 186,295.

This invention relates to porch curtains and movable mountings therefor.

It is an object of this invention to provide a porch curtain which may be associated with screen frames and the like, the said invention being effective to hold a curtain for movement with respect to a screen, frame, or the like, associated with operative means for raising and lowering the curtain and for holding the same in different positions of adjustment.

It is furthermore an object of this invention to produce a curtain operating device, associated with novel operative means whose movement is proportional to the movement of the curtain and which is capable of compensating for the increased or diminished diameter of the roll and pile with relation to which the curtain moves.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this application, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 illustrates a view in elevation of a curtain storing and operating device embodying the invention;

Figure 2 illustrates a perspective view of a fragment of the said device,

Figure 3 illustrates a sectional view of one of the moldings;

Figure 4 illustrates a similar view of another molding;

Figures 5, 6 and 7 illustrate details of the curtain clamp and parts associated with it;

Figure 8 illustrates a perspective view of a fragment of a sill and parts associated with it;

Figure 9 illustrates a detail view of the curtain operating mechanism;

Figure 10 illustrates a bearing guide for crank handle;

Figure 11 illustrates the two bearings for both ends of the roller;

Figure 12 illustrates a sectional view of the roller; and

Figure 13 illustrates a clamp for holding the curtain on the roller.

In these drawings, 1 denotes a spiral groove for an operating cord or flexible element which is wound on the roller 3, whereby the said roller is turned to wind and unwind the curtain 4 therefrom. The curtain has a clamp at its lower edge between plates 5 and 6 and the plates are clamped together by elements 41, such as screws, bolts or the like. The plate 5 is associated with a clip 26 that engages the flange 25 of the molding 16 when the curtain is lowered, and this effects a water-tight joint which will prevent rain from entering the guarded structure between the curtain and the said molding.

The molding 15 is formed with a channel to receive the end of the curtain stick and the molding acts as a guide, and the joint between the stick and molding is such as to prevent rain from gaining access to the interior of the guarded structure.

A cable, cord, or rope 18 is wound on the spiral pulley or groove and it is guided between rollers 12 and 13 that are preferably grooved to increase the frictional contact between the flexible element and the said rollers in order that when the said rollers are rotated, the flexible element will be drawn in one or another direction, according to the direction of rotation of the said rollers. The roller 12 is associated and rotates with a gear wheel 10 on the core 32 and the gear wheel 10 is in mesh with a gear wheel 11, which with the roller 13 is associated with a core 33, and the gearing rotates with the roller 13. One part of the crank 7 extends through or is attached to the roller 13 and the said crank is journaled in a bearing or guide plate 14 and in the frame comprising cheek plates 44 and 45 that are secured together in any appropriate way.

Power may be applied to the crank 7, which has a slot 8, for rotating the core 33 clockwise or anti-clockwise and moving the flexible element in the desired direction. The crank is secured to the core by a pin 34

extending into the slot 8 of the crank.

The flexible element may operate through suitable guides 27 and 28 associated with the plates 44 and 45 and flexible element is also guided over an idler 17 and an idler in a housing 31 at the center of the sill or case with which the curtain is associated, and the said flexible element is, of course, connected to the curtain stick. The curtain is secured to the roller preferably by clips, such as 43, and the curtain is wound on the roller or unwound therefrom, according to the direction of rotation of the roller. By reason of the fact that the flexible element is connected to the curtain stick, pull is exerted on the curtain stick when the curtain is to be lowered, whereas when the roller is rotated in the opposite direction, the curtain will be wound thereon and the flexible element will be fed toward the curtain and will follow the curtain as it rises.

The roller has a trunnion at one end which rotates in a bearing plate 38. and at the other end the roller has a plug 35 through which a trunnion 36 extends and the said trunnion is intended to be seated in the plate 39 having an open bearing with relation to which the trunnion may be moved for assembling the parts or dismantling them. The plug may be secured to the roller in any appropriate way, and the bearing plates 38 and 39 may be secured in place by suitable fastenings.

The device may operate in conjunction with a window sill or frame comprising suitable parts, such as 20, 22, 24 and 25 and a screen frame 21, which parts are of conventional type and need not, it is thought, be described in detail.

I claim:

In a mounting for porch curtains, a curtain roller, a curtain wound thereon, a conical pulley for rotating the roller, a flexible element on the said pulley, grooved pulleys between which the flexible element is held, shafts on which the pulleys are mounted, intermeshing gear wheels on the said shafts, means for rotating one of said shafts, guides for the said flexible element, and means for connecting the flexible element to the free end of the curtain, whereby the flexible element draws the curtain from the roller when the flexible element moving mechanism is turning in one direction.

NORVAL MERRITT FAULDS.