Nov. 29, 1938. M. BARROW 2,138,564

ROLLER SCREEN CONSTRUCTION

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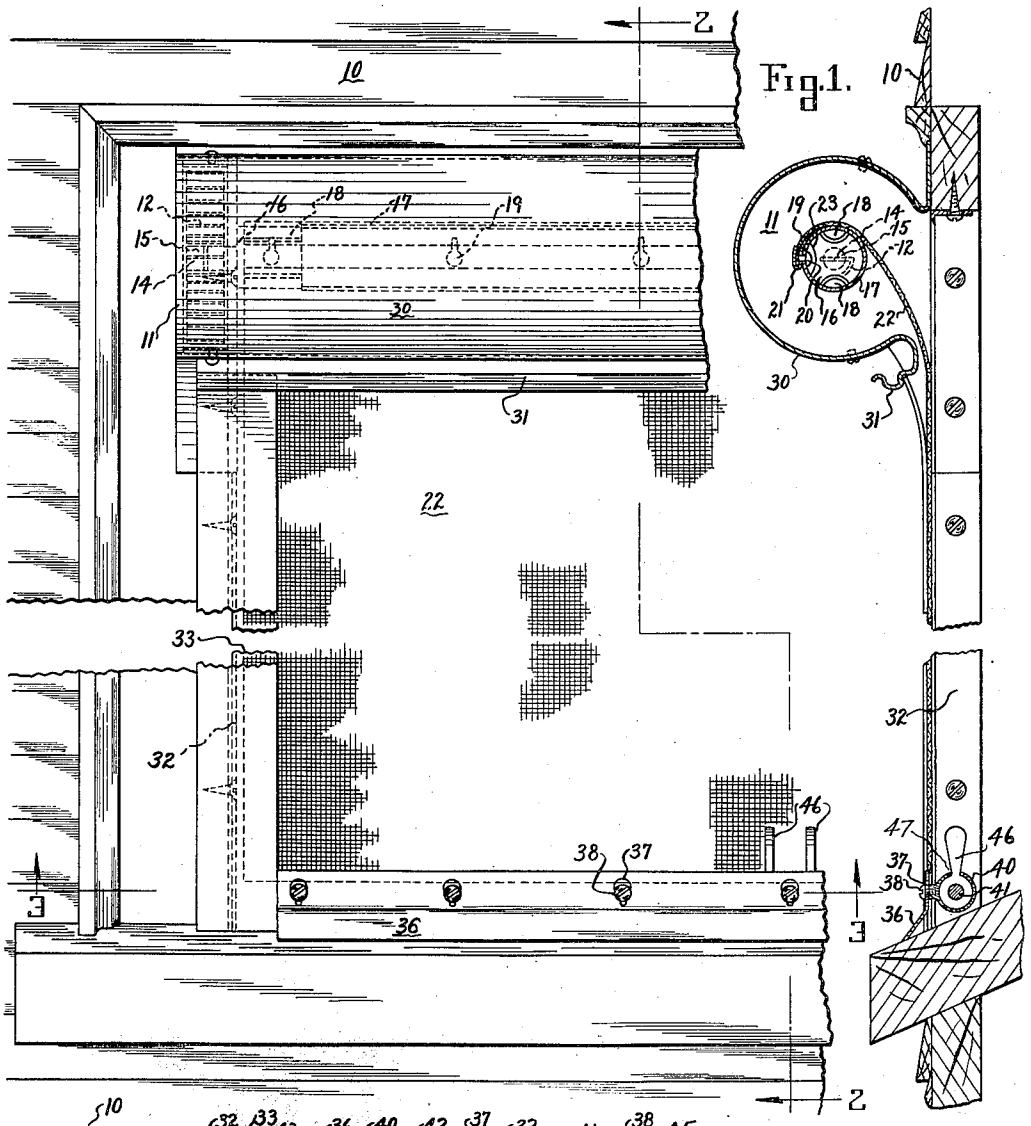

Fig.1.

Fig.2.

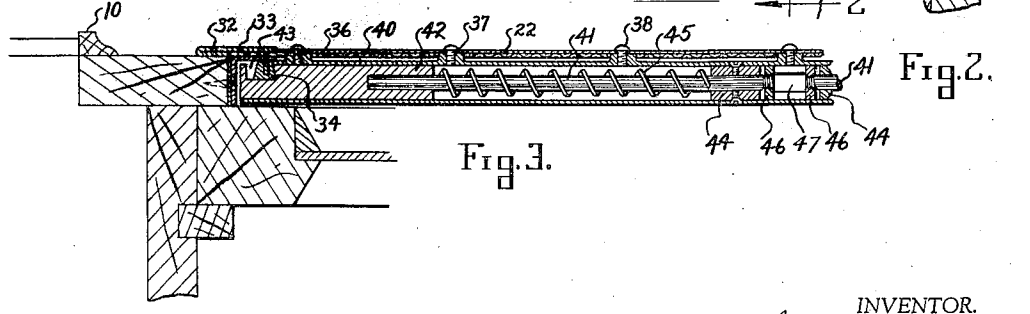

Fig.3.

INVENTOR.

BY May Barrow

Daniel G. Cullen

ATTORNEY.

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ROLLER SCREEN CONSTRUCTION

Max Barrow, Boston, Mass.

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2 Claims. (Cl. 156—39)

This application relates to roller screen constructions and aims to provide a novel and efficient roller screen construction for screening an open area in a surface. More particularly the invention relates to roller screen constructions adapted to screen window openings in building walls.

For an understanding of the invention, which relates most particularly to details of construction, reference should be had to the annexed drawing, an understanding of which may be gained by reference to the following detailed descriptive matter. In the drawing,

Fig. 1 is a small scale view showing a window opening equipped with a roller screen construction of the invention;

The remaining figures show details of construction in larger scale.

Referring to the drawing, it will be seen that at 10 there is shown a building wall or the like in which is a window opening representing the open area to be screened. Disposed within opposed vertical edges or jambs of the opening at the upper end of the same are housings 11 containing drum wound springs 12 whose free ends are seated within the slots or kerfs 14 of pins 15 journalled in central openings of the housings, these pins having enlarged portions 16 within the area to be screened. Extending between and connecting the enlarged portions 16 of the journalling pins 15 and receiving them is a tubular roller 17 having indentations 18 keying the roller to the pin portions 16. The roller is formed with keyhole slots 19 some of which are between the enlarged portions 16 of the pins and others of which are in registry with these enlarged portions of the pins, and in all of the keyhole slots are disposed buttons 20 formed on sheet metal edge strips 21 receiving and soldered to the upper free end of the roller screen 22.

Since some of the buttons pass through keyhole slots of the roller in registry with the enlarged portions of the pins, these portions are slotted as indicated at 23 to provide clearance for the buttons disposed in the adjacent keyhole slots.

Shielding the roller 17 is a hood 30 which connects and receives enlarged portions of the housings 11, whereby it is disposed in sealed relation with the wall 10 except for a line at the juncture of the lower surface of the hood with the area to be screened, which line provides a passage for the screen 22 as it rolls off and onto the roller 17. For protecting the screen against raindrip from the hood, there is provided on the lower surface of the hood adjacent the line above described a retroverted flange construction defining a gutter 31 whose free edge is considerably spaced from the screen.

Extending along opposed vertical edges of the open area to be screened, from the upper to the lower ends of the same, is a pair of tracks, each pair of which includes a side portion 32 and a back portion 33, the latter having a track proper or runner 34 of trapezoidal construction. The side tracks are secured to and extend from the lower end of the open area to be screened along the jamb or side edges up to points somewhat below the gutter 31 from which points they are directed away from the wall 10 towards the gutter which is formed in its lower surface with indentations receiving the upper ends of the side tracks. The back tracks and with them their runners 34 extend from the lower end of the area to be screened along the jamb or side edges of such area to the upper edge of the area and at their upper and lower ends the back tracks are fixed to the upper and lower ends of the edge of the open area to be screened.

The lower end of the screen is provided with a sheet metal reinforcing strip 36 formed with keyhole slots 37 and the reinforcing strip is formed to be somewhat pliable so as to form a wiping seal with the lower edge of the area to be screened. The slots 37 receive pins 38 formed on a tube 40. Disposed within the tube are elongated bars 41 on whose free ends are blocks 42 provided with slots 43 receiving the tracks or runners 34, and telescoped around the bars between their blocks 42 and center blocks 44 stationarily mounted within the tube 40 are compression springs 45 which tend to urge the blocks 42 on the free ends of the bars 41 away from the center line of the area to be screened, so that the inner edges of the slots 43 will be biased into clamping engagement with the runners 34.

For providing a manually operable means whereby such clamping engagement may be destroyed, there are secured to the ends of the bars 41 that project through and are guided in the fixed blocks 44 finger pieces 46 projecting through an elongated slot 47 of the tube 40. It will be observed that when the finger pieces are directed towards each other in a manner that will be obvious, the blocks 42 on the free ends of the bars 41 will be pulled towards each other to destroy the clamping engagement aforesaid; and when the finger pieces are released, the springs 45 will urge the blocks 42 away from each other and create the clamping engagement aforesaid.

The provision of the manually controllable

clamping arrangement at the lower end of the screen provides a means which when held will permit the screen to be moved up and down as desired with perfect freedom and which when released will provide a clamping engagement which holds the screen in any desired position.

Now having described the roller screen construction of this application, reference will be had to the claims which follow for a determination of the monopoly sought to be covered herein.

I claim:

1. A movable screen construction including in combination stationary tracks at opposed vertical edges of the open area to be screened, the tracks being in the form of vertically extending strips, the front and two sides of each of which are exposed, a bar on and reinforcing the lower edge of the screen and formed at its free ends and in its back with grooves receiving the strips so that the lower end of the screen may be guided in its vertical movement by the cooperation of the strips and grooves, each groove having two side surfaces and a back surface, the bar comprising separated sections, resilient means at the lower end of the screen tending to bias the free ends of the bar sidewise to cause sides of the grooves to be urged into clamping engagement with sides of the strips to hold the lower end of the screen stationary, and manually operable means operable for opposing the resilient means and for freeing the aforementioned sides of the grooves in the bar ends from clamping engagement with the strips, the bar being separable as a whole from the strips by movement of the bar in a direction transverse to its longitudinal axis, frontwards.

2. A construction of the character described in claim 1 wherein the resilient means at the lower end of the screen tends to bias the free ends of the bar away from each other and wherein the means operable for opposing the resilient means so operates by drawing the free ends of the bar towards each other.

MAX BARROW.