Nov. 8, 1955 C. C. MOORE 2,723,098

RURAL MAIL BOX SUPPORTS

Filed Feb. 26, 1953 2 Sheets-Sheet 1

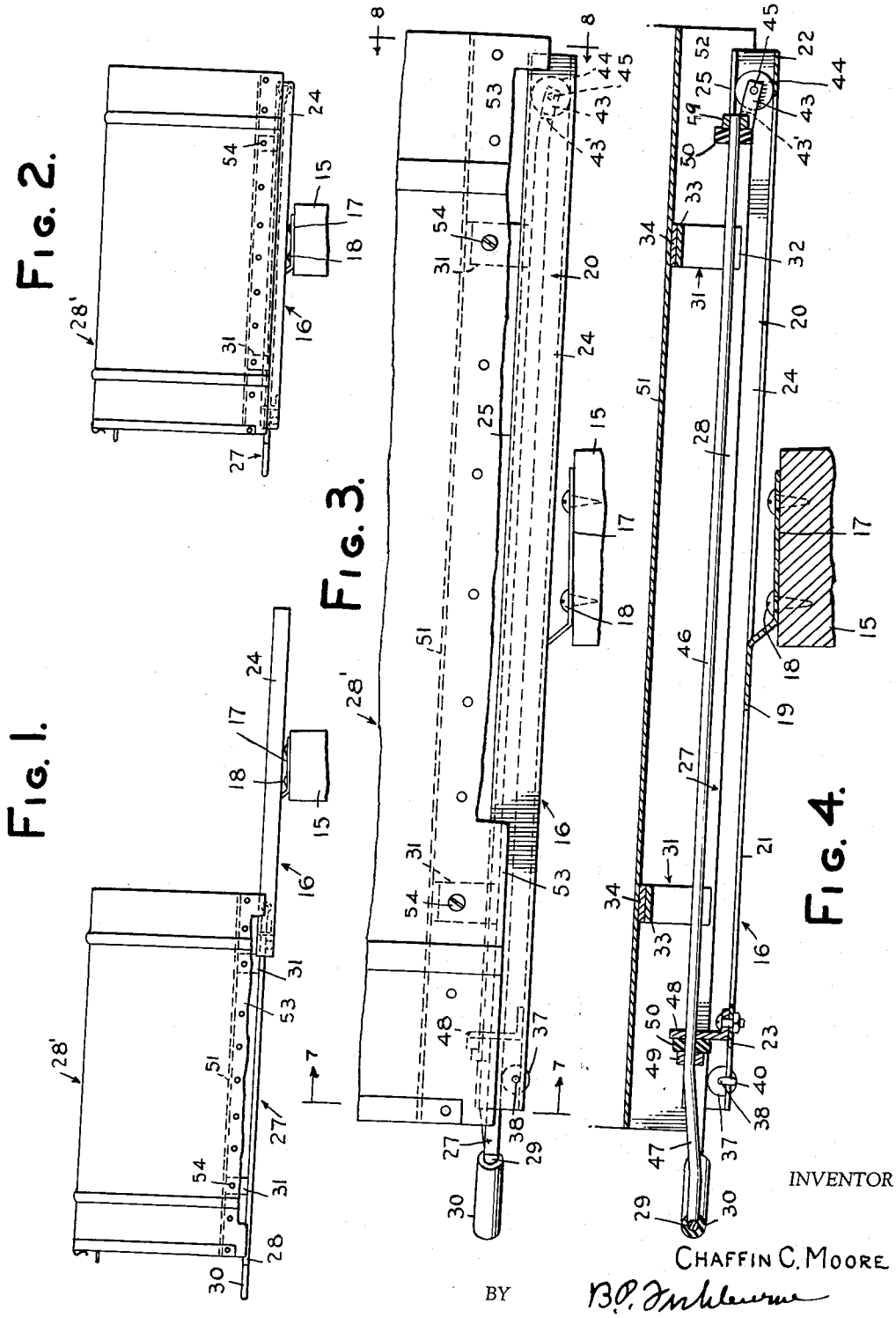


FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

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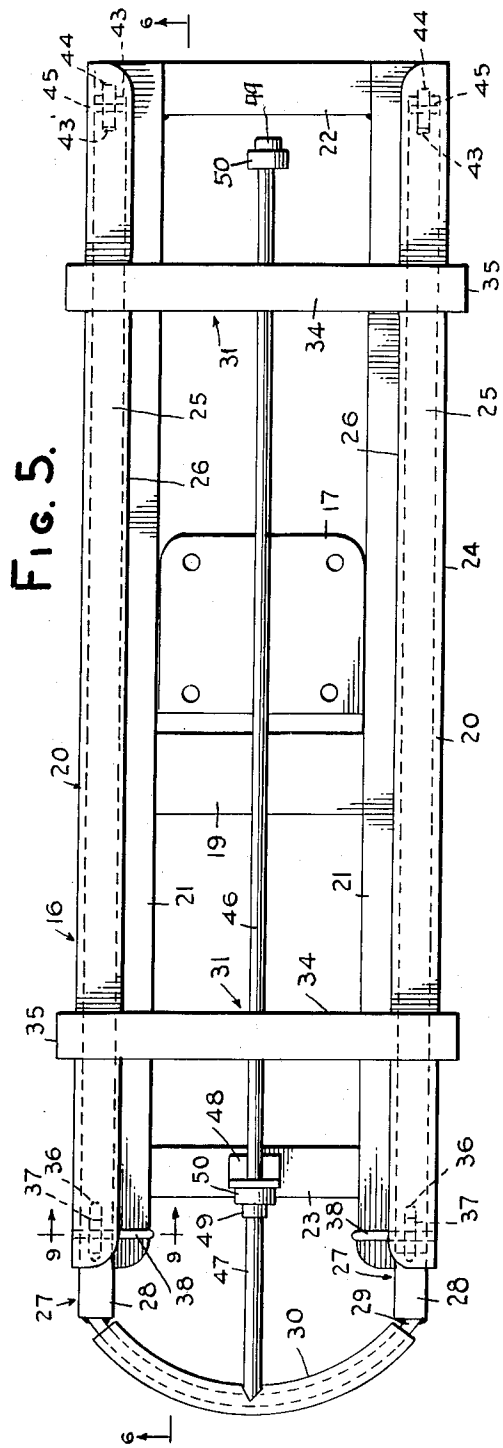


FIG. 5.

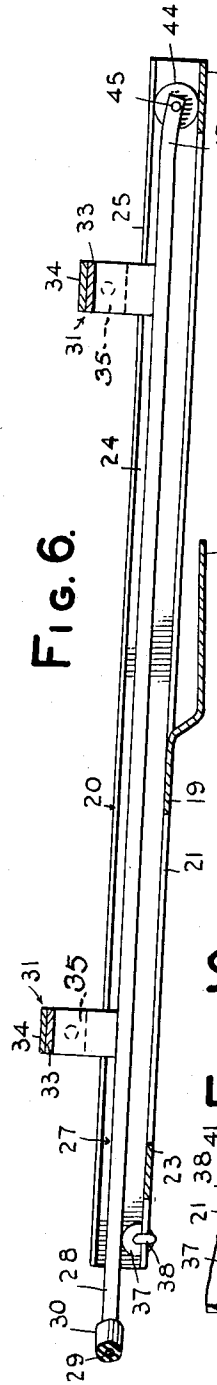


FIG. 6.

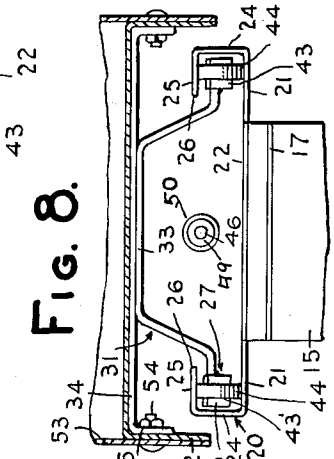


FIG. 8.

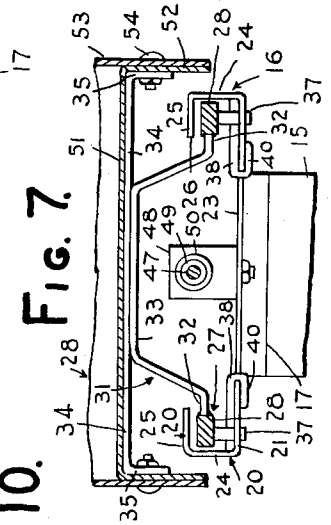


FIG. 7.

FIG. 10.

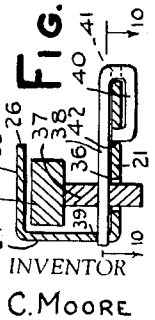


FIG. 9.

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United States Patent Office

2,723,098

Patented Nov. 8, 1955

2,723,098

RURAL MAIL BOX SUPPORTS

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Application February 26, 1953, Serial No. 339,034

4 Claims. (Cl. 248—128)

My invention relates to rural mail boxes, and more particularly to a movable support therefor.

Rural mail boxes are usually located near the right hand side of the road, and the postman in the driver's seat at the left hand side of the mail delivery truck must leave the truck to deposit the mail in the mail box. An important object of the present invention is to provide a movable mail box support which may be pulled forwardly by the postman from the driver's seat, by means of a hook or the like, to enable the postman to deposit the mail without leaving the driver's seat.

Another object is to provide a movable support for rural mail boxes which necessitates no structural changes in conventional rural mail boxes.

A further object is to provide a movable mail box support which is simplified in construction, rugged and durable, and cheap to manufacture.

A further object is to provide a movable support of the above mentioned character which is protected or shielded by the mail box from the elements.

A still further object is to provide a movable mail box support which may be pulled forwardly and returned to the retracted position by the postman in the mail delivery vehicle.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of my movable rural mail box support in the extended position, part broken away,

Figure 2 is a similar side elevation of the support in the normal or retracted position,

Figure 3 is an enlarged fragmentary side elevation of the movable support and associated elements,

Figure 4 is a fragmentary central vertical longitudinal section through the device illustrated in Figure 3,

Figure 5 is a plan view of the movable support, with the rural mail box removed,

Figure 6 is a longitudinal vertical section taken on line 6—6 of Figure 5,

Figure 7 is a transverse vertical section taken on line 7—7 of Figure 3,

Figure 8 is a similar section taken on line 8—8 of Figure 3,

Figure 9 is an enlarged fragmentary vertical section taken on line 9—9 of Figure 5, and

Figure 10 is a horizontal section taken on line 10—10 of Figure 9.

In the drawings, where for the purpose of illustration is shown a preferred embodiment of my invention, the numeral **15** designates an upright post or other suitable fixed support, anchored in the ground adjacent to the side of the road. My movable mail box mounting or support **16** is arranged at the top of the post **15**, and includes a flat mounting plate **17**, rigidly secured to the top of the post by means of nails **18**, screws, or the like. The mounting plate **17** carries an integral rigid upwardly

offset extension **19**, spaced slightly above the top of the post **15** and extending somewhat forwardly thereof, and the plate extension **19** is arranged at a slight angle of inclination to the mounting plate **17**, as shown clearly in Figure 4. The plate extension **19** slopes upwardly, forwardly of the mounting plate **17** and post, as shown, for a purpose to be described. The mounting plate **17** and plate extension **19** preferably extend for the entire width of the post **15**, Figures 7 and 8.

A pair of generally horizontal parallel channel-shaped guide rails or tracks **20** are provided above the post **15**, and these channel-shaped tracks include lower generally horizontal flanges or webs **21**, rigidly secured by welding or the like near their longitudinal centers to the opposite sides of the elevated plate extension **19**, Figure 5. The flanges **21** of the tracks **20** are arranged in the plane of the inclined plate extension **19**, and are themselves slightly inclined with respect to the horizontal, as shown. The lower flanges **21** are further rigidly connected at their rear ends by a transverse bar or plate **22**, welded or otherwise rigidly secured thereto. A similar transverse bar or plate **23** is rigidly secured to the lower guide rail flanges **21** near and slightly rearwardly of their forward ends, as shown.

The channel-shaped tracks **20** further comprise outer vertical sides **24**, integrally connected with the lower flanges **21**, and extending above the same. Upper track sides or flanges **25** are integrally secured to the vertical sides **24**, and extend laterally inwardly thereof in spaced parallel superposed relation to the lower flanges **21**. The inner longitudinal edges **26** of the upper track flanges **25** terminate substantially at the transverse centers of the lower flanges **21**, which are preferably about twice as wide as the upper flanges **25**. The inner opposed sides and opposite ends of the channel-shaped tracks **20** are open, as indicated. The tracks **20** extend forwardly and rearwardly of the post **15** for substantial distances, and are inclined upwardly toward their forward ends, due to the inclination of the mounting plate extension **19**, upon which the tracks **20** are bodily mounted.

The numeral **27** designates generally a carriage for a rural mail box **28'** of conventional construction. This carriage comprises a pair of elongated parallel longitudinal arms or bars **28**, of approximately the same length as the tracks **20**, and rigidly connected at their forward ends by an arcuate pull bar **29**, welded or otherwise rigidly secured thereto. If desired, the pull bar **29** may be covered by a section of rubber tubing **30** or the like. The arms **28** are further rigidly connected at longitudinally spaced points by transverse braces **31**, having lower extensions or feet **32**, welded or otherwise rigidly secured to the inner sides of the arms **28**, Figures 7 and 8. These feet **32** are at the elevation of the arms **28**, and consequently below the upper track flanges **25**, the arms **28** being disposed between the upper and lower track flanges **21** and **25**, just inwardly of the vertical track sides **24**. The transverse braces **31** have elevated central body portions **33**, spaced a considerable distance above the tracks **20**, and carrying transverse mounting brackets **34**, welded or otherwise rigidly secured thereto. The transverse mounting brackets **34** extend laterally beyond the outer sides of the tracks **20** for slight distances, and the mounting brackets **34** are provided at their ends with short depending apertured extensions **35**, integral therewith. The extensions **35** are vertical, and their lower ends terminate just above the upper track flanges **25**, and slightly outwardly of the vertical track sides **24**, Figures 7 and 8. The rearmost brace **31** and its mounting bracket **34** are arranged near and somewhat forwardly of the rear ends of the arms **28**, while the forwardmost brace **31** and bracket **34** are arranged

near and rearwardly the forward ends of the arms 28, Figure 5.

The lower track flanges 21 are provided just rearwardly of their forward ends with longitudinal slots 36, within which a pair of forward rollers 37 are arranged for rotation. The forward rollers 37 are freely journaled for rotation upon transverse horizontal wire axles 38, Figures 9 and 10, arranged above and close to the lower track flanges 21, and transversely thereof. The outer ends of the axles 38 are anchored within small openings 39 formed within the vertical track sides 24, just above the flanges 21 and near the forward ends of the tracks. The inner ends of the wire axles 38 carry loop extensions 40, integral therewith which extend about the inner longitudinal edges of the track flanges 21 and are anchored within small V-shaped notches 41, formed in the edges of the flanges 21, Figures 9 and 10. The remote ends of the loop extensions 40 are upturned, and anchored within small openings 42 formed within the track flanges 21, inwardly of the notches 41 and below the axles 38. The wire axles 38 are thus held stationary, relative to the tracks 20, and the forward rollers 37 are freely rotatable, but held against axial movement upon the axles 38 by the slots 36, Figures 9 and 10. The rollers 37 are positioned at the transverse centers of the upper track flanges 25 and longitudinal arms 28. The arms 28 rest upon the forward rollers 37 and are movably supported hereby just beneath the upper track flanges 25 and close to such track flanges, as best shown in Figure 9.

Rear end portions 43 of the arms 28 are downwardly inclined slightly, Figure 4, and slotted at 43', for the reception of rear rollers 44, journaled for rotation upon short transverse pins or axles 45, rigidly secured within openings formed in the rear ends of the arms 28. The rear rollers 44 are arranged in longitudinal alignment with the forward rollers 37, and the rear rollers and rear inclined portions 43 maintain the longitudinal arms 28 elevated close to the bottoms of the upper track flanges 25. The rear rollers 44 support the rear ends of the arms 28 and move with the arms through the channel-shaped tracks 20. The diameters of the rear rollers 44 are such that the rear rollers have a close running fit between the upper and lower track flanges 25 and 21, as shown.

A longitudinal guide rod 46 is arranged midway between the arms 28, and parallel therewith and near the elevation of the arms, and the forward end portion 47 of the guide rod is inclined downwardly slightly, Figure 4, and rigidly secured by welding or the like to the arcuate pull bar 29, at the center of the latter. The guide rod 46 is slidable through an opening in an upstanding guide element 48, rigidly mounted upon the forward transverse bar 23, at the longitudinal center of the same. Enlargements or heads 49 are formed upon the guide rod 46 at its rear end and near and rearwardly of its forward end. Rubber bumper elements or washers 50 are mounted upon the guide rod 46 adjacent to the heads 49, for engagement with the upstanding guide element 48, which serves as a stop to limit the forward and rearward movement of the carriage 27. The longitudinal guide rod 46 extends throughout substantially the entire length of the carriage 27, and the rear end of the guide rod is unsupported.

The rural mail box 28' has its bottom 51 resting upon the transverse mounting brackets 34, and the bottom 51 carries depending side flanges or skirts 52, integral therewith, and arranged upon the outer sides of the depending bracket extensions 35. The mail box further comprises vertical sides 53 which extend downwardly over the depending skirts 52, in contacting relation therewith, Figures 7 and 8. Bolts 54 extend through openings in the sides 53, skirts 52 and extensions 35, and serve to rigidly secure these elements together. The depending skirts 52 and the sides 53 of the rural mail box extend for some distance below the upper flanges 25 of the tracks 20, and are spaced slightly beyond the outer sides 24 of the tracks. The sides 53 and skirts 52 extend continuously throughout the entire length of the rural mail box, which is slightly longer than the tracks 20, Figures 2 and 3. The arrangement is such that the depending skirts 52 and the sides 53 of the mail box shield and protect the tracks 20 and associated elements from rain and the elements. The bottom 51 of the mail box covers substantially the entire movable carriage 27 at all times, and also covers the tracks 20 when in the normal retracted position shown in Figure 2.

In use, the carriage 27 is normally in the retracted or inner position shown in Figure 2, wherein the longitudinal arms 28 are housed within the channel-shaped tracks 20, and the forward rubber bumper element 50 is in engagement with the stop 48. The mail box 28 now shields the carriage 27 and tracks 20 and associated elements from rain and the like. Due to the slight rearward inclination of the tracks 20, the carriage 27 and mail box 28 will tend to remain in the retracted position shown in Figure 2.

When the postman stops at the mail box to deposit the mail, he uses a hook, such as a cut-off walking cane, or the like, to engage the pull bar 29 and draws the carriage 27 forwardly to the extended position of Figure 1, wherein the rear bumper element 50 engages the stop 48 to limit the forward movement of the carriage 27 and mailbox. The postman may then deposit the mail in the mail box 28' from the driver's seat of the delivery vehicle, and return the carriage and mail box to the retracted position of Figure 2 with his hook implement, or the like. The mail box and carriage are then out of the way of other vehicles passing along the road, and the delivery of the mail has been accomplished without the postman leaving the driver's seat. The slope or inclination of the tracks 20 is not intended to cause the mail box to return automatically to the retracted position, but merely causes the mail box to tend to remain in the retracted position, without the likelihood of shifting to the forward or extended position until pulled forwardly by the postman.

It is to be understood that the form of the invention, herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention or scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a rural mail box support, a pair of spaced substantially horizontal tracks including upper and lower track flanges, a mounting plate arranged between the tracks and secured thereto and adapted to be secured to the top of a post or the like and bodily carrying the tracks, a pair of spaced elongated arms arranged between said upper and lower track flanges and being of substantially the same length as said tracks, a pair of forward rollers journaled upon the tracks near their forward ends and engaging the bottoms of said arms and supporting the arms, a pair of rear rollers rotatably mounted upon the arms near their rear ends and disposed between said upper and lower track flanges and supporting the arms, transverse members secured to the arms at longitudinally spaced points upon the same and projecting above the upper track flanges and adapted to be secured to the rural mail box for supporting the same, and a transverse bar connecting the arms near their forward ends and serving as a means for shifting said arms longitudinally of the tracks.

2. In a rural mail box support, a pair of spaced generally horizontal tracks, a mounting plate arranged between the tracks near their longitudinal centers and secured to the tracks and adapted to be secured to the top of a post or the like, the mounting plate being somewhat inclined longitudinally with respect to the tracks so

that the tracks slope upwardly somewhat toward their forward ends when the mounting plate is secured to the post, a pair of elongated arms movably connected with the tracks and shiftable longitudinally of the tracks and being substantially co-extensive with the tracks when in a retracted position, a transverse bar connecting the arms near their forward ends and adapted to be engaged for pulling the arms forwardly within the tracks to an extended position, a longitudinal rod secured to said transverse bar and extending rearwardly thereof between the tracks and arms and carrying longitudinally spaced bumper elements, a stop device secured to the tracks near their forward ends and engageable with the bumper elements to limit the forward and rearward longitudinal movement of said arms, and a pair of transverse mounting brackets secured to said arms at longitudinally spaced points upon the same and having parts arranged above the tracks and arms for attachment to the rural mail box and adapted to support the mail box.

3. In a support for a rural mail box, a pair of spaced substantially horizontal tracks including upper and lower track flanges, a member secured to the lower track flanges near the longitudinal centers of the tracks and adapted to be secured to a post or the like, a pair of elongated arms arranged between the upper and lower track flanges and shiftable longitudinally of the tracks, means connected with said arms to limit the extent of their longitudinal movement relative to the tracks in both directions, transverse members connecting the arms at longitudinally spaced points upon the same and having parts spaced above the upper track flanges for receiving and supporting the rural mail box, rollers rotatably secured to the arms near their rear ends and supporting the rear ends of the arms in closely spaced relation to said upper track flanges, said rollers operating between said upper and lower track flanges, said lower track flanges having slots formed therein near their forward ends, said lower track flanges being provided in their inner longitudinal edges and opposite said slots with notches, transverse axles arranged above said lower track flanges adjacent to said slots and notches and extending across said slots, looped extensions secured

to said transverse axles and engaging within the notches and secured therein, and rollers journaled upon said transverse axles and projecting into the slots and having their tops spaced above said lower track flanges and engaging the bottoms of said arms and supporting the arms in closely spaced relation to said upper track flanges.

4. A supporting device comprising, a pair of spaced substantially parallel channel-shaped guide rails, each guide rail including an outer closed side, a top flange and a bottom flange, each guide rail having its inner side open, a member connected with the guide rails and holding them in fixed relation and adapted for connection with a post or like support, a pair of elongated arms mounted within the channel-shaped guide rails and covered by the same throughout the major portion of their length when the arms are in the inner position, a transverse member disposed forwardly of the guide rails and secured to the forward ends of said arms to move the arms longitudinally, a rod secured to the transverse member and extending between said arms throughout the major portion of the length of said arms, a bracket secured to said guide rails and including an apertured element slidably receiving said rod, stop devices carried by the rod for coaction with the apertured element, rollers arranged within the channel-shaped guide rails near their forward ends and disposed beneath said arms and supporting said arms, rollers secured to the rear ends of said arms and arranged within said channel-shaped guide rails to travel therein, at least one brace having its lower ends extending beneath the top flanges of the guide rails and secured to said arms, said brace extending above the top flanges of said guide rails, and a mail box including a bottom wall which is secured to the top of said brace, said bottom covering the top flanges of the guide tracks.

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