July 7, 1925. 1,545,006

W. J. MILLER

SUPPORT FOR MAIL BOXES

Filed Dec. 13, 1924

FIG_1_

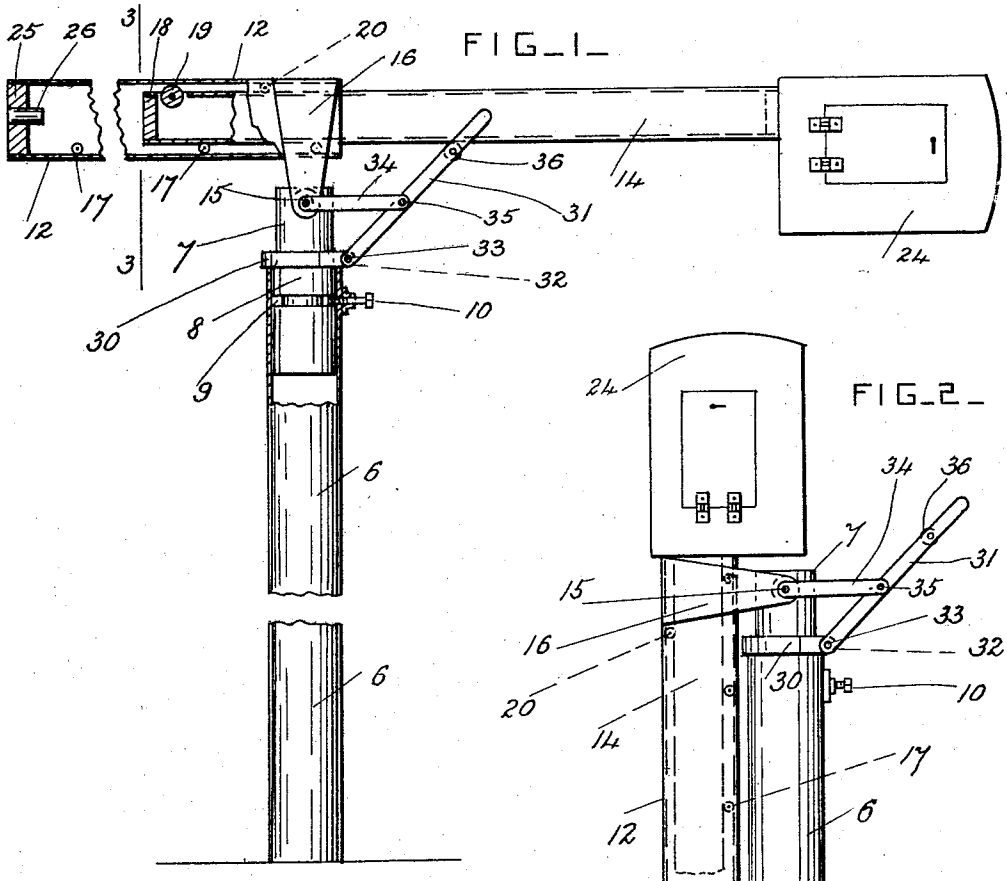


FIG_2_

FIG_3_

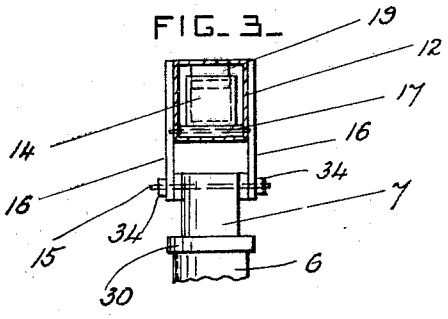
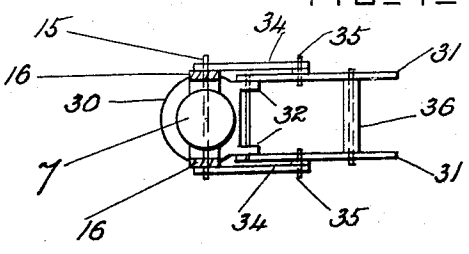


FIG_4_



Inventor
William J. Miller
by Herbert W. Jenner
Attorney.

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UNITED STATES PATENT OFFICE.

WILLIAM J. MILLER, OF DELAWARE, OHIO.

SUPPORT FOR MAIL BOXES.

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To all whom it may concern:

Be it known that I, WILLIAM J. MILLER, a citizen of the United States, residing at Delaware, in the county of Delaware and State of Ohio, have invented certain new and useful Improvements in Supports for Mail Boxes, of which the following is a specification.

This invention relates to supports for mail boxes used on rural routes; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed whereby the mail box can be drawn towards the mail cart usually used for delivery on such routes, and can be restored to its normal position after being either filled or emptied.

In the drawings, Figure 1 is a side view of a support constructed according to this invention, partially in section, and showing the crane arm extended. Fig. 2 is a side view showing the crane arm in its normal position. Fig. 3 is a cross-section through the crane arm, taken on the line 3—3 in Fig. 1, and showing a portion of the post. Fig. 4 is a plan view of the top of the crane post showing the brackets in section.

The lower or main part 6 of the crane post is arranged vertically, and is secured in the ground in any approved way, and position, and it is of any approved height. When the crane arm is mounted to swing around the post, the upper part 7 or cap of the post is provided with a stem 8 which is journaled in the main part of the post, and is provided with a circumferential groove 9. A screw 10 is screwed into the outer part of the post and engages with the groove 9 so that the parts of the post are held in engagement. When the part 7 is not intended to rotate, the screw 10 can be used to hold it stationary.

A telescopic crane arm comprising an outer tubular part 12, and an inner tubular part 14, is pivoted by a horizontal pivot pin 15 to the upper end portion of the crane post, brackets 16 being secured to the outer part 12 of the crane arm and pivoted on the pin 15.

The brackets 16 are secured to the outer end portion of the outer and non-slidable part 12, but they need not be arranged at its extreme end. The position of these brackets is adjusted so that when the arm is tilted horizontal and extended the outer part 12 will counterbalance the inner part 14 and the mail box to a predetermined extent. The brackets 16 project laterally of the crane arm, and their pivot pin 15 is arranged crosswise of and over the axis of the vertical crane post 6.

Both tubular parts are rectangular in cross-section, and the inner part is arranged to slide freely in the outer part upon small rollers 17 arranged along one side of the outer part at suitable intervals. The inner end of the inner part 14 is closed by a plug 18, and a small roller 19 is journaled on the other side of it from the rollers 17, and projects partway through a slot in its side so that it runs on the opposite side of the outer part of the arm from the rollers 17. A small roller or stop 20 is also mounted at the open end portion of the outer part in the path of the roller 19 to prevent the inner part from being wholly withdrawn from the outer part and to assist it in sliding.

The mail box 24 is secured to one end of the inner part 14 of the crane arm, and is of any approved construction, and has one or more doors of letter openings at any suitable points or locations.

The other end of the outer part 12 of the crane arm is closed by a plug 25 provided with a buffer 26, which may be of India rubber. The plug 18 of the inner part strikes against the buffer when the arm is tilted to the position shown in Fig. 2.

A collar 30 is secured to the upper part of the crane post, and when the upper part is not rotative this collar can be secured to the main part of the post. Two inclined guide arms 31 are provided, and are connected to lugs 32 on the collar 30 at their lower ends by a pin 33. These guide arms are retained at an angle to the vertical by links 34 connected to their middle parts by pins 35, and to the post by the pivot pin 15 of the brackets.

A roller 36 is journaled between the upper end portions of the guide arms 31 for the inner part 14 of the crane arm to run on, and to take the weight of the mail box when loaded. This roller or rest is arranged above the level of the pivot 15 and the top of the crane post. The part 14 rests on the roller 36 and slides between the upper end portions of the guide arms which prevent it from moving laterally to an undesireable extent. The telescopic arm is shown horizontal, but it may be inclined in either direction by varying the length of the links 34. The normal position of the support is that shown in

Fig. 2. When the mail carrier comes along in his cart, he catches hold of the mail box with a long hook, and tilts it over and draws it towards him on the cart. Having removed or deposited the mail, he pushes in the telescopic arm and tilts it back from the position shown in Fig. 1 to the normal position shown in Fig. 2.

What I claim is:

1. A vertical crane post, a telescopic crane arm having the outer end portion of its non-slidable part pivoted to the crane post, said crane arm being arranged to tilt over the top of the crane post, a mail box carried by the slidable part of the crane arm, and a rest for the crane arm when tilted, said rest being supported by the crane post and arranged above the level of the pivot of the crane arm.

2. A support for a mail box as set forth in claim 1, the said crane arm being provided with antifriction bearing devices between its outer and inner parts to permit the slidable part to slide freely.

3. A vertical crane post provided with a rotary upper part, a telescopic crane arm pivoted to the said upper part and arranged to tilt over the top of the crane post, a mail box supported by the slidable part of the crane arm, a rest for supporting the crane arm when tilted, said rest being supported by the crane post and rotating with its upper part and arranged above the level of the pivot of the crane arm.

4. A vertical crane post, a telescopic crane arm, brackets secured to and projecting laterally of the non-slidable part of the crane arm and pivoted to the crane post, said crane arm being arranged to tilt over the top of the crane post, a mail box carried by the slidable part of the crane arm, and a rest for the crane arm when tilted, said rest being supported by the crane post and arranged above the level of the pivot of the crane arm.

5. A crane post, a telescopic crane arm comprising an outer tubular part pivoted to the said post and an inner part slidable in the outer part, rollers for the inner part of the crane arm to run on arranged at one side of the outer part, a roller carried by the said inner part and running on the opposite side of the outer part from the said rollers, a mail box secured to the said outer part, and a rest for supporting the crane arm when tilted carried by the said post.

6. A crane post, a telescopic crane arm comprising an outer tubular part pivoted to the said post and an inner part slidable in the outer part, a mail box secured to the said outer part, and a rest for supporting the crane arm when tilted carried by the said post, said rest comprising two upwardly and outwardly inclined guide arms, retaining links, and a roller journaled between the upper end portions of the guide arms.

In testimony whereof I have affixed my signature.

WILLIAM J. MILLER.