

H. PEARSON.
MAIL CARRYING DEVICE.
APPLICATION FILED APR. 9, 1906.

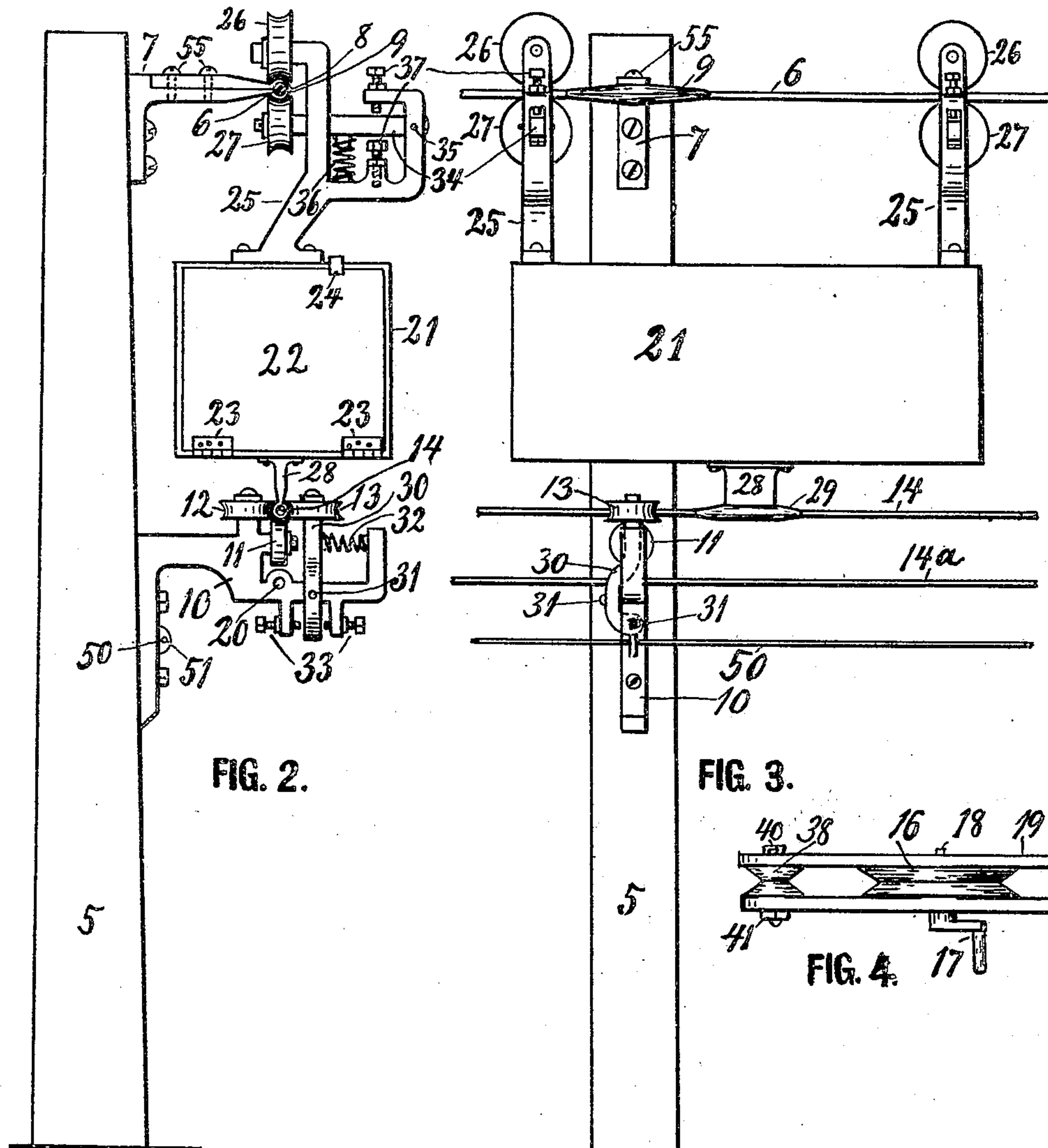
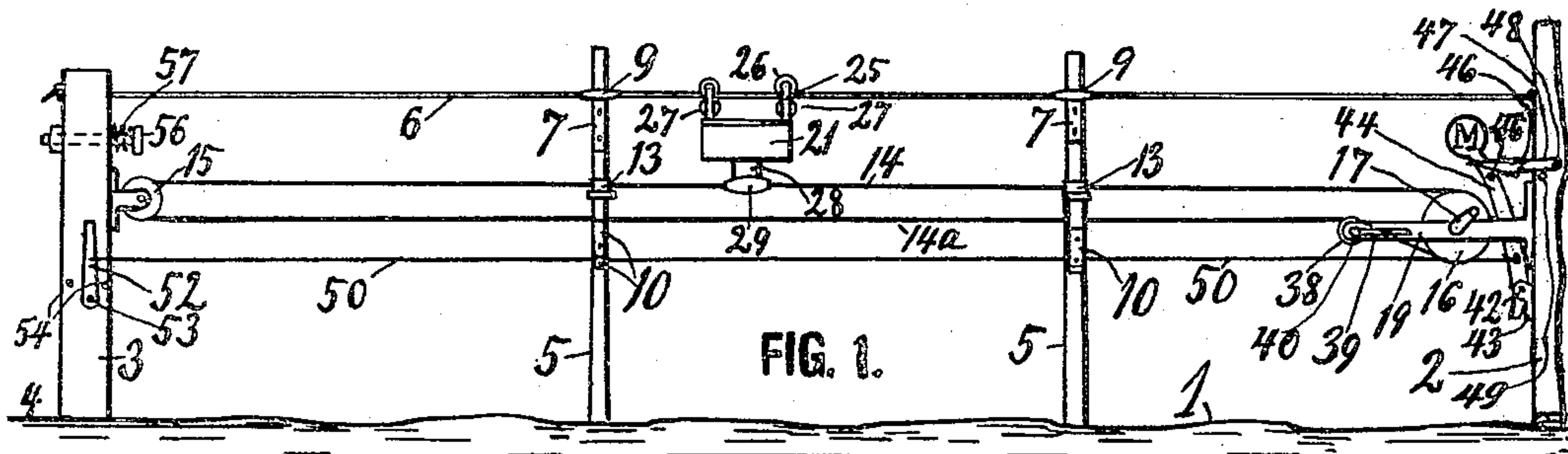
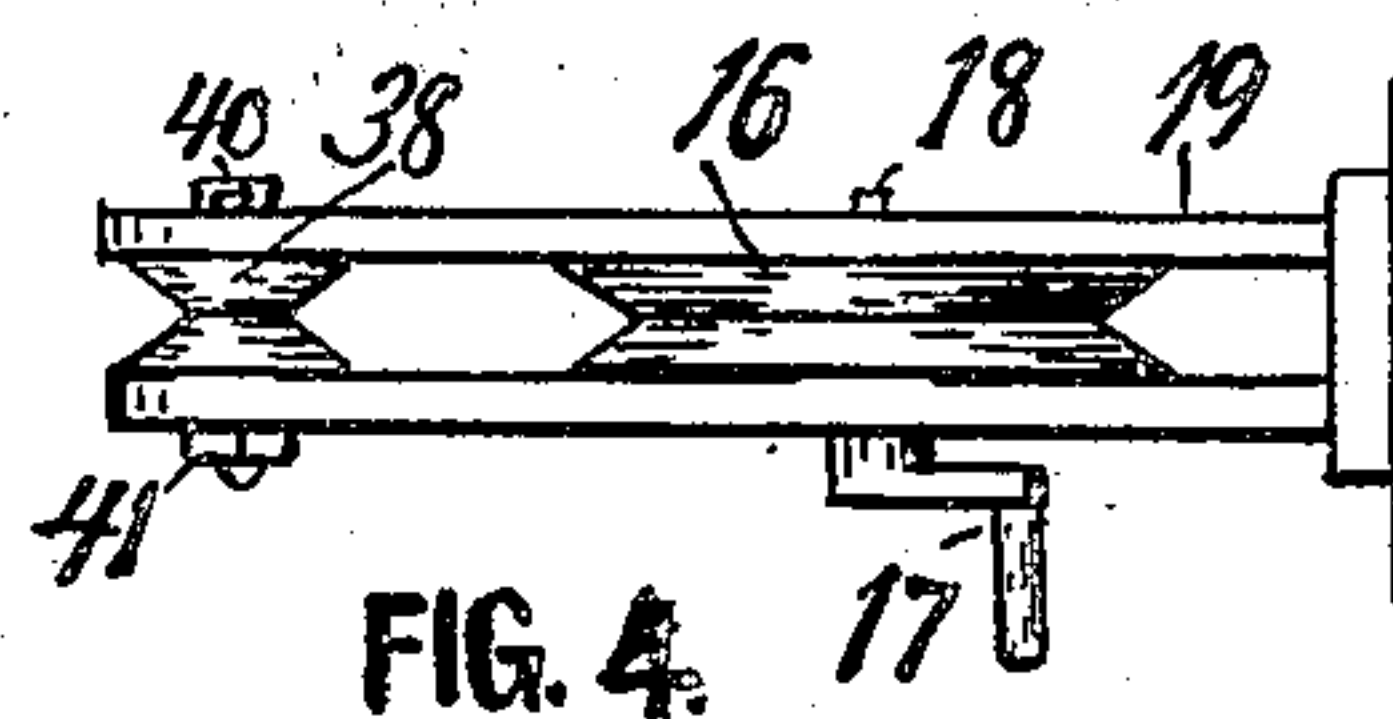


FIG. 3.



WITNESSES:

C. C. Carlsen
I. C. Carlsen.

INVENTOR:

Hans Pearson.
BY HIS ATTORNEY:
A. M. Carlsen.

UNITED STATES PATENT OFFICE.

HANS PEARSON, OF ALCESTER, SOUTH DAKOTA.

MAIL-CARRYING DEVICE.

No. 838,746.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HANS PEARSON, a citizen of the United States, residing at Alcester, in the county of Union and State of South Dakota, have invented certain new and useful Improvements in Mail-Carrying Devices; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to rural-mail-delivering devices; and the object is to provide means whereby farmers and others who get their mail deposited in a box at the roadside, which is often hundreds up to thousands of feet away from the residence, may have the mail brought home to the house without walking to the roadside for it, which trip is often neglected, especially where the mail-box is so located that a signal on it cannot be seen from the residence. It also takes more time than it ought to for the often busy farmer to attend to the fetching and delivering of his mail in that way, and the trip is especially objectionable in the winter season when the climate is cold and the snow is deep to wade through. This and other objects I attain by the novel construction and arrangements of parts illustrated in the accompanying drawings, and which consists of a certain arrangement of posts and lines or wires supported thereon and serving to transfer the mail-box between the roadside and the house or residence.

In the drawings, Figure 1 is a side elevation of such transferring-line with the mail-box shown as on its way between the ends of the line. Fig. 2 is an enlarged end elevation of the line at a point intermediate its real ends. Fig. 3 is a side elevation of Fig. 2. Fig. 4 is an enlarged top view of the bracket, crank-operated pulley, and guiding-sheave seen at the right-hand end of Fig. 1.

Referring to the drawings by reference-numerals, 1 designates the ground, 2 the farmer's house or building or post near the residence, and 3 is a post near the roadside 4, where the rural-mail-delivering wagon passes along and deposits the mail into the mail-box 21 when the latter is near the post 3. Between 2 and 3 are fixed in the ground a se-

ries of posts 5, the number and height of which depends on the topography and distance the house is located from the road 4. In some cases the posts of a yard-fence or other fence may serve for the posts 5.

6 is the track-wire, secured with one end to the post 3 and the other end to the house or post 2, and intermediate its ends it is supported by brackets 7, fixed on the posts 5 and having a hole 8, embracing the wire. Said hole 8 is formed in a tubular bearing 9, which is externally tapering toward both ends. Lower down on the posts 5 are fixed brackets 10, carrying rollers 11, 12, and 13, by which is guided the upper strand of an endless cable 14, which is stretched over the grooved pulley 15 at the gate-post 3, and a much larger grooved pulley 16, turned by a hand-crank 17 and shaft 18, the latter being journaled in a bracket 19, secured to the object 2. The lower strand 14^a of this cable is guided by the holes 20 in the brackets.

The mail-box 21, which may have an end door 22, with hinges 23 and locking-catch 24, is suspended from the track-wire 6 by one or preferably two hangers 25 and rollers 26 27, and at the bottom of the box is a single broad arm 28, with a double tapering tube 29, fixed on the upper strand 14 of the endless cable.

The roller 13 revolves on an arm 30, pivoted at 31 and pressed by the spring 32 toward the roller 12, so that the wire or cable 14 is at all times held in the adjacent grooves of the rollers 12 and 13, and when the bracket 28 29 passes between the rollers the spring simply yields while it passes. To prevent accidental throwing of the arm too far away from the wire and from pressing on the wire, the arm is controlled by adjustment-screws 33. The sheave 11 is to help support the cable, so it will not work too hard down between the sheaves 12 and 13. The hangers 25 are each provided with a similar arm 34, pivoted at 35 and pressed by the spring 36 with the roller 27 up under the track-wire 6, the spring doing similar service to that of the spring 32, and the arm 34 is controlled by the screws 37, so as to barely let the rollers spread enough to pass the bearings 9 and to close to such a guiding position on the wire that the box cannot leave the track.

In the bracket 19 is a guiding-roller 38 for bringing the lower strand 14^a to a parallel with the upper strand. It also serves to stretch the endless cable if it gets slack, and,

further, it serves to bring the loop of the cable into frictional contact for a longer distance in the groove of the pulley 16. To these ends the bracket is slotted at 39 for the shaft 40, and the latter is held in any position in the slot by the head and the nut 41 at opposite side of the bracket, while the sheave 38 revolves on a sleeve (not shown) placed on the bolt between the arms of the bracket, where it is held tight by said arms when the nut 41 is drawn tight.

Upon the object 2 is pivoted at 42 to a bracket 43 an arm 44, having at its end a signal "M," (indicating mail.) This arm has a pin 45, adapted to engage the notch 46 of a weighted arm or dog 47, pivoted at 48 and resting normally upon a peg 49. From said signal-arm 44 extends the signal-wire 50, which is guided by the holes 51 in the lower brackets (see Fig. 2) and has its opposite end fixed to a lever 52, pivoted at 53 to the post 3 and having its stroke limited by the pegs 54. The brackets 7 may preferably have the bearing for the wire made in halves and secured together by screws or bolts 55. The same applies also to the guiding-arm 28 29, fixed to the bottom of the box. Not only does it save drilling or coring out a long hole, but it also facilitates the splicing of the wire or cable by securing the ends of the same within and between the semitubular jaws of the brackets. In the post 3 is arranged a slidable bolt 56, embraced by a spring 57.

The operation of the device is as follows: If the box is at the post 3, the mail-carrier places the letters in it and pulls the lever 52 outward, pulling on the wire 50, so that the signal "M" leans out from the wall or post 2, thereby indicating that there is mail in the box. The farmer or other owner of the mail now takes hold of the crank 17 and turns it until the mail-box touches the sign "M" and raises it against the house, where the hook 47 holds it yieldingly for the next pull by the mail-delivering teamster. When the farmer wishes to send mail, he places it in the box and turns the crank 17 in the reverse direction until he feels that the end of the mail-box strikes the cushion-bolt 56. If there is no mail to be sent, the box is still returned to the post 3 so as to be in readiness for further incoming mail. If so desired, a bell may be mounted so that the signal in falling out from the wall strikes it, and thus or in any other suitable manner causes the bell to sound, and thereby call the attention to the presence of mail in the box. Where the line makes a curve, the bearing 9 on the post at the curve may be curved some horizontally.

It is obvious that this device may also be used for carrying mail directly between post-office and residences or business places so near located and so situated that the device may be operated and will give satisfaction.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. A mail-carrying device comprising a track-wire stretched between the delivering and receiving points, a mail-box having grooved pulleys traveling on the wire and grooved pulleys below the wire to help keep the upper pulleys down, a pulley at each end of the line, an endless wire or cable stretched over said pulleys and having the mail-box secured to it, and a crank arranged for turning one of said pulleys, a signal at the receiving end of the line and a wire extending therefrom to the delivering end of the line, and means for operating the wire and signal from the latter point, substantially as and for the purpose set forth.

2. A mail-carrying device comprising a track-wire stretched between the delivering and receiving points, a mail-box having grooved pulleys traveling on the wire and grooved pulleys below the wire to help keep the upper pulleys down, a pulley at each end of the line, an endless wire or cable stretched over said pulleys and having the mail-box secured to it, and a crank arranged for turning one of said pulleys, and yielding means for stopping the box at each end of the line.

3. A mail-carrying device comprising a track-wire stretched between the delivering and receiving points, a mail-box having grooved pulleys traveling on the wire and grooved pulleys below the wire to help keep the upper pulleys down, said lower pulleys being spring-held upward and limited in both upward and downward movement.

4. A mail-carrying device comprising a track-wire stretched between the delivering and receiving points, a mail-box having grooved pulleys traveling on the wire and grooved pulleys below the wire to help keep the upper pulleys down, a pulley at each end of the line, an endless wire or cable stretched over said pulleys and having the mail-box secured to it, and a crank arranged for turning one of said pulleys, posts intermediate the ends of the track-wire; brackets on the posts with bearings embracing the track-wire and tapering toward the wire so as to let the pulleys pass easily over them.

5. A mail-carrying device comprising a track-wire stretched between the delivering and receiving points, a mail-box having grooved pulleys traveling on the wire and grooved pulleys below the wire to help keep the upper pulleys down, a pulley at each end of the line, an endless wire or cable stretched over said pulleys and having the mail-box secured to it, and a crank arranged for turning one of said pulleys; posts intermediate the ends of the track-wire, brackets on the posts with bearings embracing the track-wire and tapering toward the wire so as to let the pulleys pass easily over them, brackets on the

posts below the mail-box, grooved pulleys or rollers thereon for guiding the lower part of the mail-box and the strand of the endless cable moving it, said mail-box having underneath it a flat bracket or arm secured to the cable and adapted to pass between the guiding-pulleys, one of said guiding-pulleys being yieldingly mounted; said lower bracket having apertures supporting the other strand of the endless cable.

6. In a mail-carrying device, the combination with a track-wire and a mail-box having pulleys rolling on the wire, of posts and brackets on same for supporting the wire, said brackets having elongated tubular bearings embracing the wire and thin broad necks adjacent the bearings, said bearings and necks and part of the bracket being split into opposite jaws adapted to be opened or closed upon the wire as may be desired.

7. In a mail-carrying device, the combination with a track-wire and a mail-box having pulleys rolling on the wire, of posts and brackets on same for supporting the wire said brackets having elongated tubular bearings embracing the wire and thin broad necks adjacent the bearings, said bearings and necks

and part of the bracket being split into opposite jaws adapted to be opened or closed upon the wire as may be desired, and screws or bolts securing said jaws together.

8. In a mail-carrying device of the class described, the combination with an endless cable and pulleys stretching the same, of the bracket 19 holding the shaft of one of the pulleys and having the slot 39 with a bolt therein and the sheave 38 on the bolt, for the purpose set forth.

9. In a mail-carrying device, the combination with a track and mail-box adapted to move thereon, of a signal at one end of the track and a wire or line extending from the signal to the other end of the track, whereby to operate the signal in one direction; said signal being arranged in the path of the mail-box so as to be operated by the box in the other direction, and yieldable means for holding the signal in the idle position.

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

HANS PEARSON.

Witnesses:

CHAS. J. PETERSON,
H. H. SEDGWICK.