B. FARLING.

MAIL CARRIER.

APPLICATION FILED JULY 20, 1917.

1,251,001. Patented Dec. 25, 1917.

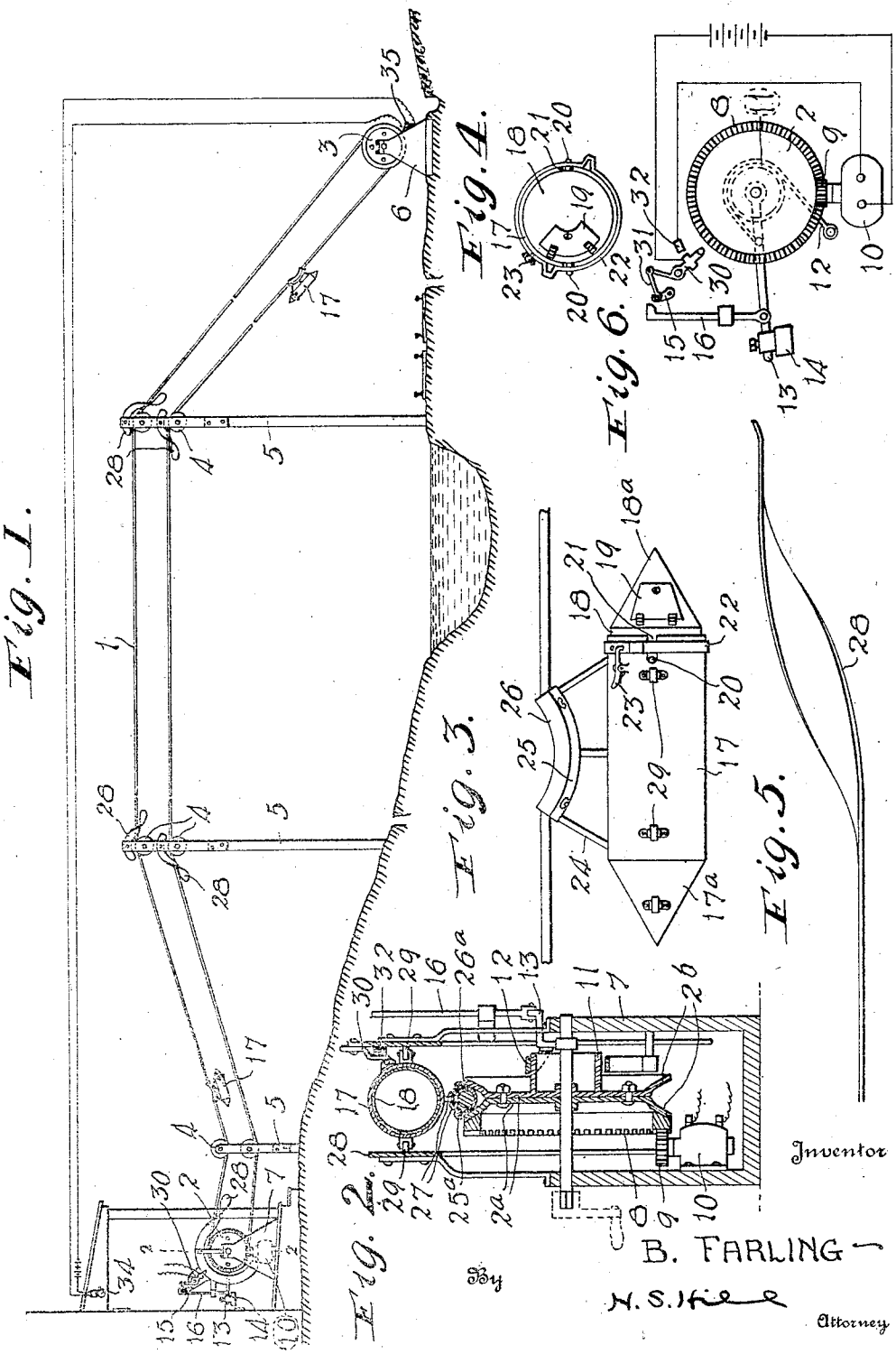


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Inventor

B. FARLING

By

H. S. Hill

Attorney

UNITED STATES PATENT OFFICE.

BURT FARLING, OF COALTON, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO A. A. SMITH, OF COALTON, WEST VIRGINIA.

MAIL-CARRIER.

1,251,001. Specification of Letters Patent. Patented Dec. 25, 1917.

Application filed July 20, 1917. Serial No. 181,774.

To all whom it may concern:

Be it known that I, BURT FARLING, a citizen of the United States, residing at Coalton, in the county of Randolph, State of West Virginia, have invented a new and useful Mail-Carrier; and I do hereby 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.

The present invention relates to a device for carrying mail and small packages back and forth between the house and the road where the house is located at a distance from the road, and has for its object to provide a device of this character which embodies novel features of construction whereby the mail can be safely and expeditiously carried in safety, even though a stream, ravine, or hill may intervene between the house and the road in such a manner as to make a direct route impossible, or even to make one terminal of the carrier invisible from the other terminal.

Further objects of the invention are to provide a mail carrier which is comparatively simple and inexpensive in its construction, which can be installed without difficulty, which will carry the mail without danger of injury or loss, and which provides for automatically guiding the carriage over the idlers and guide wheels, as well as for automatically stopping the carriage at the terminal of the carrier.

With these and other objects in view, the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a side elevation of a mail conveyer constructed in accordance with the invention.

Fig. 2 is an enlarged transverse vertical sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a detail side elevation of one of the conveyer carriages.

Fig. 4 is an end elevation thereof.

Fig. 5 is a top plan view of one of the guide plates for guiding the carriages over the guide pulleys.

Fig. 6 is a diagrammatic view of the electric wiring.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, which illustrate one embodiment of the invention, the numeral 1 designates an endless cable which passes around a main guide and drive wheel 2 arranged at the house in some convenient location, and also around a guide wheel 3 arranged at one side of the road. At suitable intervals between the road and the house the upper and lower reaches of the endless cable 1 are engaged by idlers or guide pulleys 4 which are supported by the standards 5, and arranged in such a manner as to carry the endless cable across a stream or ravine, or over a hill, as may be necessary. The guide wheel 3 at the road terminal of the carrier is suitably grooved to receive the cable, being journaled upon a supporting frame 6 which is firmly anchored in position. The guide wheel 2 at the house terminal of the mail carrier is mounted upon a frame 7 which is rigidly secured in position upon the porch or in some other convenient location.

The guide wheel 2 may be conveniently formed from two complemental plates 2^a which are provided at their peripheries with corresponding outwardly curved flanges 2^b adapted to coöperate with each other when the plates are fastened together to provide a peripheral groove for the cable 1. One side of the guide wheel 2 has a circular rack 8 applied thereto, said rack being engaged by a pinion 9 on the shaft of an electric motor 10 which provides a means for rotating the wheel and operating the carrier. The opposite side of the guide wheel is provided with a brake drum 11 which is engaged by a brake band 12, one end of which is suitably anchored, while the opposite end thereof is connected to a brake lever 13. This brake lever 13 may have weights 14 applied to the end thereof, although it is normally held in an inoperative position by a detent 15 which engages a plunger 16 projecting upwardly from the lever and loosely connected thereto.

The carriages each include an elongated cylindrical shell 17 having one end thereof pointed at 17ª, while the opposite end thereof is opened to receive a correspondingly shaped mail receiving container 18. This container 18 is designed to telescope into the shell 17 and be detachably fastened in position therein, the rear end 18ª of the container projecting from the shell and being pointed in a manner similar to the forward end 17ª of the shell. A suitable door 19 may be formed in the container 18 for obtaining access to the interior thereof, and there would be a secure lock for fastening the door in a closed position. Any suitable means may be provided for detachably securing the container 18 in position within the outer shell 17, and for this purpose the container is shown as provided with lugs 20 adapted to enter slots 21 in the end of the shell and to be secured in position within the slots by a locking ring 22 which is rotatable upon the shell. A spring latch 23 may be provided for holding the ring 22 in position, said latch being easily released when it is desired to rotate the ring to remove the container 18 from the shell 17 or place it in position therein.

Projecting from the top of the shell 17 of each of the carriages is a longitudinally extending skeleton frame 24, said frame carrying a segmental cable clamp which is arranged with the convex side thereof facing toward the shell, and which is divided longitudinally into the two complemental halves 25 and 26. The member 25 of the cable clamp is rigid with the skeleton frame or flange 24 which projects longitudinally from the top of the shell 17 and is provided at its edges with flanges 25ª which are slidably engaged by channels 26ª at the edges of the complemental clamping member 26. This movable member 26 of the segmental cable clamp is intended to be slipped into engagement with the flanged edges of the member 25 with the cable positioned between the two members, after which clamping screws 27 may be tightened to securely grip the cable and cause it to bind against the outer member 26 of the clamp so that there will be no danger of the latter working out of position. This cable clamp has a curvature corresponding to the periphery of the main guide wheels 2 and 3 and is adapted to be received in the guide grooves of the said wheels when the carriages pass around these wheels.

The carriages are normally pendent from the reaches of the cable 1, although guide plates 28 are provided for automatically swinging the carriages upwardly from a pendent position into a substantially upright position as they approach the guide wheel 2 or any of the idlers or pulleys 5 which must be passed over. These guides 28 may be in the form of spirally twisted plates which engage the pointed ends 17ª of the shells 17 and gradually swing the shells laterally and upwardly until they reach a substantially vertical position preparatory to passing over one of the pulleys 4, or around the main guide wheel 2. The pointed end 17ª of the shell 17, as well as the sides of the shell may be provided with rollers or small wheels 29 for engagement with the twisted guide plates 28 for the purpose of preventing wear and tear upon the parts and bringing about a smooth action.

A trip lever 30 may be arranged to project into the path of each of the carriages as they pass around the main guide wheel 3, said trip lever being operatively connected by a link 31 to the before mentioned detent 15 of the brake, and controlling a switch 32 in the circuit of the motor 10. Engagement of either one of the carriages with this trip lever 30 will swing the same to open the switch 32 and release the detent 15, thereby cutting off power from the motor 10 and applying the brake so that the carrier will be brought to a stop with the carriage in position to have the mail container removed therefrom.

If it is desired to operate the carrier by hand, a crank handle 33 may be substituted for the motor 10, as indicated by Fig. 2. It is preferred that some means be provided whereby the postman can operate a signal at the house when mail is deposited in the container at the road. For this purpose an electric bell 34 may be provided at the house and the circuit of the bell arranged to be controlled by a button or switch 35 at the road. This bell will be sounded by the postman when mail is placed in the container, and the occupant of the house can then start the motor. When the carriage reaches the house, the motor will be automatically stopped and the brake applied, as previously indicated.

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

1. A mail carrier including a guide wheel, a cable passing around the guide wheel, a carriage having a segmental cable clamp projecting from one side thereof and constructed to fit the periphery of the guide wheel, and means for automatically swinging the carriage upwardly from a pendent position as it approaches the guide wheel to pass over the same.

2. A mail carrier including a guide wheel, a cable passing around the guide wheel, an elongated carriage, a longitudinally extending flange projecting upwardly from the carriage, a segmental cable clamp carried by the flange and arranged with the convex side thereof facing the carriage, and means for swinging the carriage from a pendent

position into a substantially upright position as it approaches the guide wheel to pass over the same.

3. A mail carrier including a guide wheel, a cable passing around the guide wheel, a carriage having a pointed end, a longitudinally extending segmental cable clamp arranged at the top of the carriage with the convex side thereof facing the carriage, and a twisted guide plate arranged for coöperation with the pointed end of the carriage to swing the carriage from a pendent position into a substantially upright position as it approaches the guide wheel to pass over the same.

4. A mail carrier including a guide wheel, a cable passing around the guide wheel, a carriage having a pointed end and provided with a longitudinally extending upwardly projecting flange, a cable clamp carried by the flange and arranged with the convex side thereof facing the carriage, a twisted guide plate arranged for coöperation with the pointed end of the carriage to swing the carriage upwardly from a pendent position into a substantially upright position as it approaches the guide wheel to pass over the same, and rollers on the pointed end and sides of the carriage for engagement with the twisted guide plate.

5. A mail carrier including a guide wheel, a cable passing around the guide wheel, a carriage formed with a longitudinally extending flange projecting upwardly therefrom, a segmental cable clamp carried by the flange and divided longitudinally into complemental sections having the respective edges thereof flanged and channeled for a sliding engagement with each other, and guide means for swinging the carriage upwardly from a pendent into a substantially vertical position as it approaches the guide wheel to pass over the same.

6. A mail carrier including a guide wheel, a cable passing around the guide wheel, a tubular shell having the forward end thereof pointed and the rear end thereof open, a container telescoped removably within the open rear end of the shell, means for locking the container in position, a longitudinally extending flange projecting from the top of the elongated shell, a cable clamp carried by the flange, and guide means cooperating with the pointed end of the shell to swing the same into proper position as it approaches the guide wheel to pass over the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BURT FARLING.

Witnesses:
ED. MARTENS,
L. F. VALENTINE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."