No. 800,876. PATENTED OCT. 3, 1905.

D. PATERSON.

CARRIER FOR MAIL BOXES.

APPLICATION FILED JAN. 16, 1905.

Fig. 4.

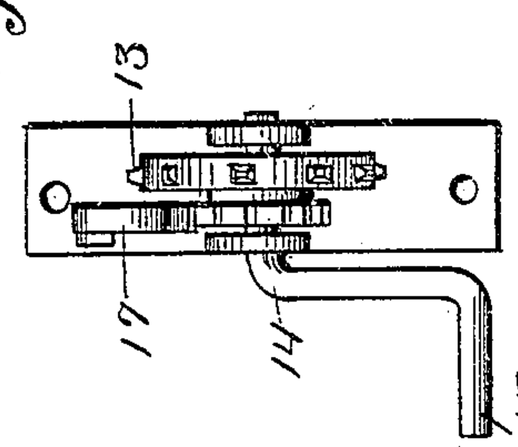


Fig. 3.

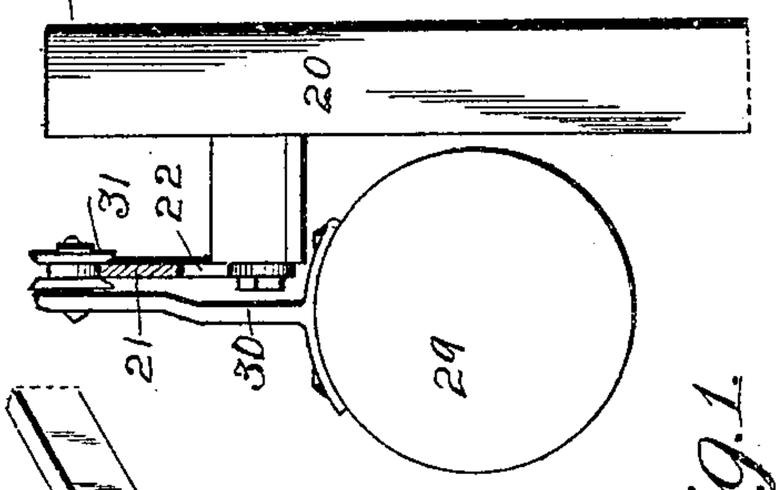


Fig. 2.

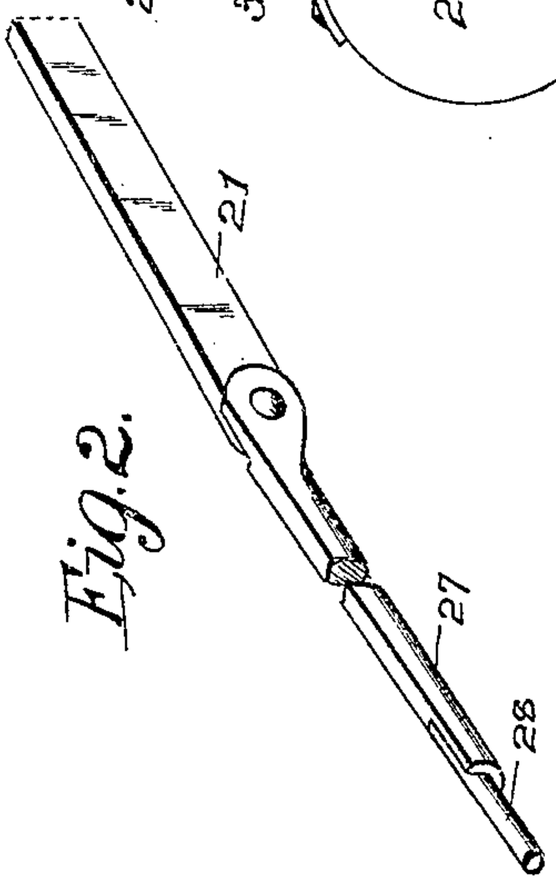
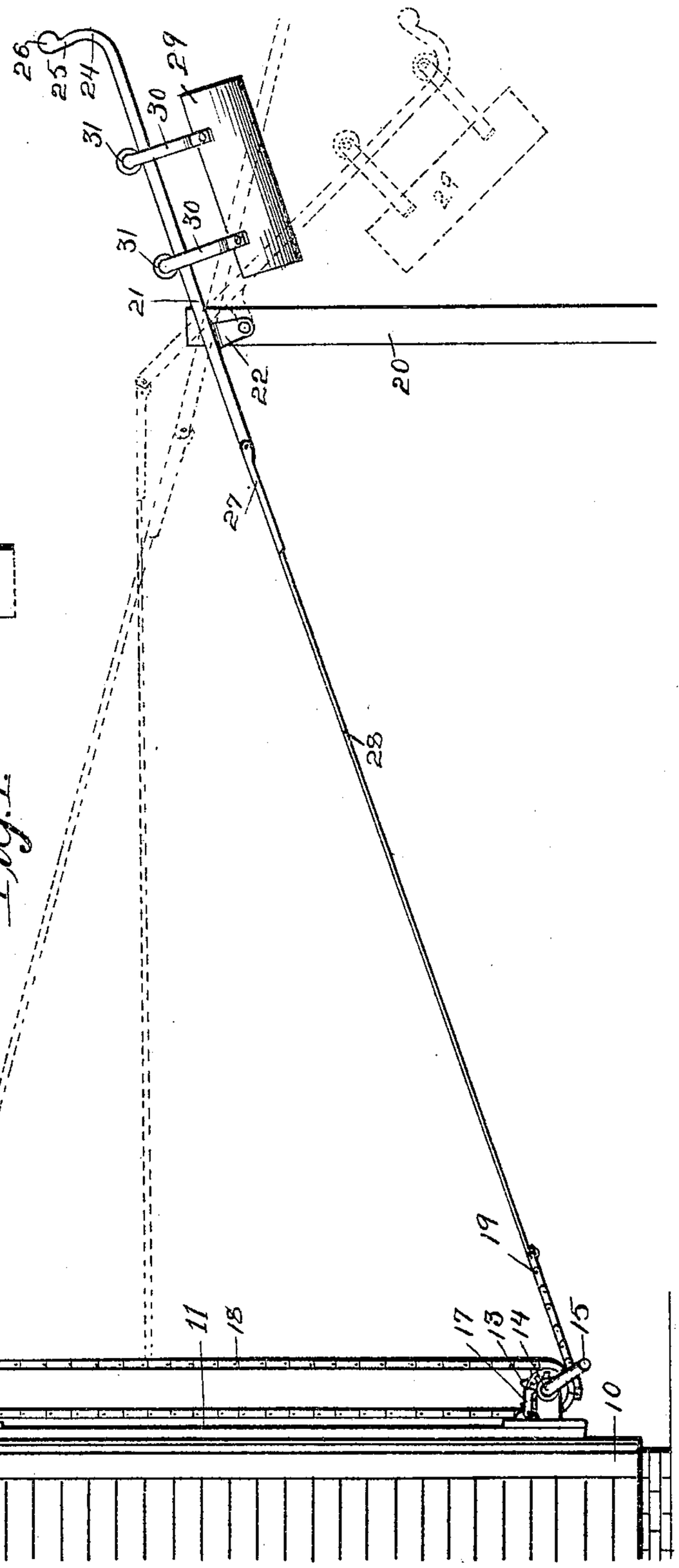


Fig. 1.



Witnesses
A. G. Hague
S. F. Christy.

Inventor: David Paterson
By Quigg & Lane Attys

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID PATERSON, OF TAMA, IOWA.

CARRIER FOR MAIL-BOXES.

No. 800,876. Specification of Letters Patent. Patented Oct. 3, 1905.

Application filed January 16, 1905. Serial No. 241,226.

To all whom it may concern:

Be it known that I, DAVID PATERSON, a citizen of the United States, residing at Tama, in the county of Tama and State of Iowa, have invented a certain new and useful Carrier for Mail-Boxes, of which the following is a specification.

The objects of my invention are to provide a device for transmitting mail from a roadway where it is deposited by a rural mail carrier to a house adjacent to the roadway or for transmitting the mail from the house to the roadway, where it can be gathered by a rural mail carrier.

A further object is to provide a delivery mechanism for mail or rural routes of simple, durable, and inexpensive construction which is controlled by mechanism mounted near the house which will not be affected to any great extent in its operation by the inclemencies of the weather.

A further object is to provide a carrier which forms a portion of my mail-delivery mechanism which is designed to take the place of the ordinary mail-box used on rural delivery-routes—that is, when this carrier is in position at the side of the road the mail carrier delivers the mail into the carrier and also collects the mail from this carrier.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the complete mechanism, showing in dotted lines the various positions of the device. Fig. 2 is a detail perspective view of the means for attaching the wire of my mechanism to the lever upon which the carrier stands when in a position at the side of the road. Fig. 3 is an end view of the carrier and shows in section the lever upon which it is mounted when at its outer limit of movement, and Fig. 4 is a front view of the crank and sprocket-wheel attached to it for swinging the inner end of the wire upwardly and downwardly.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the side of the house where a post is, as the case may be. In the present drawings it refers to a side of a house. Firmly attached to the side of the house 10 is a timber 11, which stands in a vertical position. At the upper end of this timber 11 I have mounted a sprocket-wheel 12. At the lower end of the timber 11 I have rotatably mounted a sprocket-wheel 13 on the crank-shaft 14, which has the crank 15 at its outer end. Mounted on the crank-shaft and adjacent to the sprocket-wheel 13 is a ratchet-wheel 16. Mounted adjacent to the ratchet-wheel 16 is a bolt 17, designed to normally hold the ratchet-wheel 16, and consequently the crank-shaft 14, against rotary movement when this bolt is in engagement with the ratchet-wheel and to lock the shaft against rotary movement when it is desirable to do so. Passing around the sprocket-wheels 12 and 13 is a sprocket-chain 18, which is operated by the crank 15. Pivotally attached to the sprocket-chain 18 is a short sprocket-chain 19, to which the wire or cable for operating the lever, hereinafter described, is designed to be attached. At the side of the roadway I have set a post 20, to which I have pivotally attached a lever 21 by means of the depending lug 22 and the pivot 23. The lug 22 is firmly attached to the lever 21 at a point between the ends of it, and the outer end of the lever, or that end which is nearest the roadway, is bent upwardly at 24 to form the hook 25 thereon. The outer end of this hook is enlarged at 26 to prevent the carrier, hereinafter described, from slipping off the outer end of the lever.

Pivotally attached to the extreme inner end of the lever 21 is a link 27. Firmly attached to the inner end of the link 27 and attached at its other end to the sprocket-chain 19 is a wire or cable 28, over which the carrier travels in transmitting the mail from the house to the roadway. I have provided a carrier which is designed to transmit mail or packages from the roadway to the house, or vice versa, which consists of a body portion 29, from which a number of roller-bearing members 30 extend upwardly, each having a grooved roller 31 rotatably mounted at its upper end. The groove in it is designed to receive a portion of the lever 21, or the link 27, or the cable 28. In transmitting the mail from the roadway to the house or from the house to the roadway the carrier may be made of any desirable size or shape and may be so secured to the machine and the operative parts connected with it that it cannot be easily romoved, and this carrier may be provided with a lock, so as to prevent its being easily opened.

In practical operation and assuming that a carrier is at its inner limit of movement—that

is, at a point adjacent to the house—and the cable and lever are in the position shown in full lines in Fig. 1—that is, the inner end of the cable 28 is at its lowest point and the outer end of the lever is at its highest point—the operator places the mail that he wishes to transmit to the side of the road in the carrier and then operates the crank to raise the inner end of the cable 28 to its upper limit of movement, as shown by the upper dotted lines in Fig. 1. It will be seen that when the inner end of the cable 28 is raised the carrier will be correspondingly raised to its upper position, and when it reaches this position the carrier will automatically move outwardly to the curved portion 24 of the lever 21, where it will remain, and the operator then draws the inner end of the cable downwardly a slight distance, where he holds it in position in which it stands when the mail carrier collects the mail from it or into which he places the mail. Assuming that the carrier is in the position in which it normally stands when at its outer limit of movement and it is desired to transmit the carrier from its outer limit of movement to its inner limit of movement, the inner end of the cable 28 is moved to its lower limit of movement, and this will correspondingly raise the outer end of the lever 21 to its upper limit of movement and will cause the carrier to move to a position adjacent to the house.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. In a pivotally-mounted lever, a cable connected with the rear end of the lever, a carrier capable of longitudinal movement on the lever, and means for swinging the lever on its pivot and for inclining the cable.

2. In a pivotally-mounted lever, a cable connected with the rear end of the lever, a carrier capable of longitudinal movement on the lever, means for swinging the lever on its pivot and for inclining the cable and means for maintaining the lever in various positions of its pivotal movement.

3. In a pivotally-mounted lever, a cable connected with the rear end of the lever, a carrier capable of longitudinal movement on the lever, means for swinging the lever on its pivot and for inclining the cable, means for maintaining the lever in various positions of its pivotal movement, and means for limiting the forward and rearward movement of the carrier.

4. A post, a lever pivotally attached to the post, having its outer end bent upwardly, a cable connected with the inner end of the lever, a carrier capable of longitudinal movement on the lever and cable, a sprocket-chain connected with the inner end of the cable, and means for operating the sprocket-chain for raising and lowering the inner end of the cable, for the purposes stated.

5. A post, a lever pivotally attached to the post, having its outer end bent upwardly, a cable connected with the inner end of the lever, a carrier capable of longitudinal movement on the lever and cable, a sprocket-chain connected with the inner end of the cable, sprocket-wheels around which the sprocket-chain passes and a crank for operating one of the sprocket-wheels for operating the sprocket-chain and raising and lowering the inner end of the cable to swing the lever on its pivot.

6. A post, a lever pivotally attached to the post, having its outer end bent upwardly, a cable connected with the inner end of the lever, a carrier capable of longitudinal movement on the lever and cable, a sprocket-chain connected with the inner end of the cable, sprocket-wheels around which the sprocket-chain passes, a crank for operating one of the sprocket-wheels for operating the sprocket-chain and raising and lowering the inner end of the cable to swing the lever on its pivot, and means for locking the lower sprocket-wheel against rotary movement.

7. A pivotally-mounted lever, a cable connected with the inner end of the lever, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously.

8. A pivotally-mounted lever, a cable connected with the inner end of the lever, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously, and a carrier capable of longitudinal movement on the lever and cable.

9. A pivotally-mounted lever, a cable connected with the inner end of the lever, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously, a carrier capable of longitudinal movement on the lever and cable, and means for limiting the outward movement of the carrier.

10. A pivotally-mounted lever, a cable connected with the inner end of the lever, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously, a carrier capable of longitudinal movement on the lever and cable, and means for maintaining the lever and cable at various inclinations.

11. A pivotally-mounted lever, a cable connected with the inner end of the lever, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever

simultaneously, a carrier capable of longitudinal movement on the lever and cable, means for limiting the outward movement of the carrier, and means for maintaining the lever and cable at various inclinations.

12. A pivotally-mounted lever, a cable connected with the inner end of the lever, a link pivotally attached to the inner end of the lever and firmly attached to the cable, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously.

13. A pivotally-mounted lever, a cable connected with the inner end of the lever, a link pivotally attached to the inner end of the lever and firmly attached to the cable, means for lowering the inner end of the cable and raising the outer end of the lever simultaneously and for raising the inner end of the cable and lowering the outer end of the lever simultaneously, and a carrier capable of longitudinal movement on the lever and cable.

DAVID PATERSON.

Witnesses:
A. E. JACKSON,
L. I. CARSON.