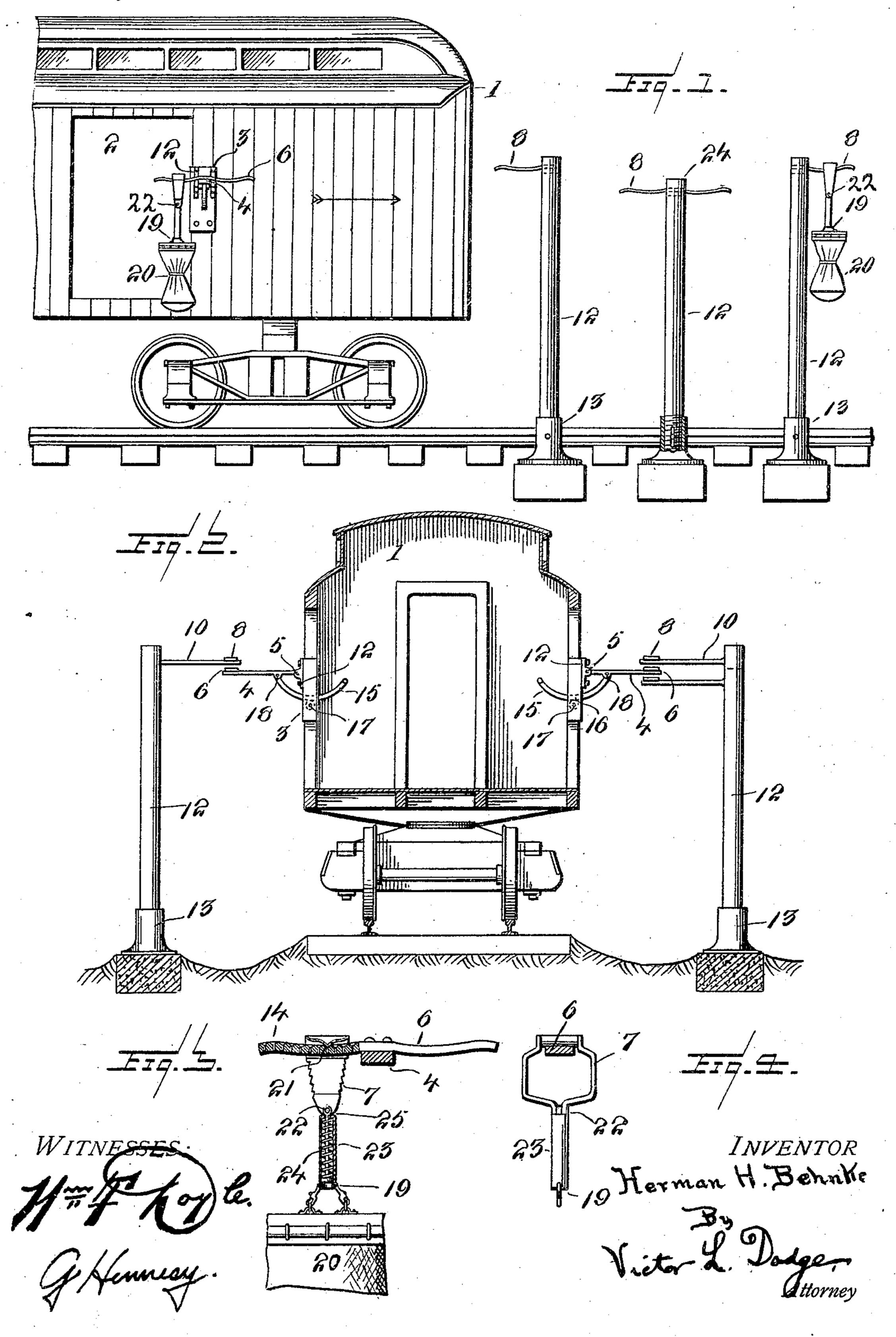
H. H. BEHNKE. DEVICE FOR RECEIVING AND DELIVERING MAIL BAGS.

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UNITED STATES PATENT OFFICE.

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DEVICE FOR RECEIVING AND DELIVERING MAIL-BAGS.

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Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed March 30, 1908. Serial No. 424,056.

To all whom it may concern:

Be it known that I, Herman H. Behnke, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Devices for Receiving and Delivering Mail-Bags, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to improvement in mail bag catchers and its novelty will be fully understood from the following description and is more particularly set forth

15 in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a car having the device attached, also the vertical posts at the side of the track with brackets and delivery arms attached. Fig. 2 is a transverse section of a car and the posts at side of track also showing the receiving arms on the car and the delivery arms on the posts, Fig. 3 is a side view of a receiving arm, with loop supporting mail bag thereto attached and Fig. 4 is a detail view of one of the loops.

Similar reference characters designate corresponding parts in all the drawings.

corresponding parts in all the drawings. So much of the ordinary postal car as is 30 necessary to illustrate the application of my invention thereto is shown at 1, 2 indicating the side opening or doorway of the car. To the side jamb of this doorway is secured the plate 3, to which is pivoted at 5 the adjust-35 able deliverer bracket 4, bearing the receiving rod 6, adapted to receive the loop 7, securely attached to a mail bag 20 at 19. At the station, two or more cranes 12 are supported in bases 13 and are provided with de-40 livery brackets 10, bearing delivery arms 8, so placed as to be adapted to coöperate with receiving arms 6 on the car and to enter the loops 7 at the time of the passing of the 45 have a wave like curvature, and they are provided with corrugations 14 adapted to engage the lug 21 of the loop 7. At the lower end of the loop is placed a hinge 22 to which is linked a stem 25 about which is coiled a 50 helical spring 24, the whole inclosed within a shell 23. A clasp 19 is adapted to grasp the handle of the mail bag 22 and hold the same securely to the loop. The bracket 4 is hingedly attached at 5 to the plate 3. A

55 handle 15 formed in the arc of a circle passes

through a slot 16 in plate 3 and moves upon

a friction roller 17. It is pivotally attached to the bracket 4 at 18.

The operation of my device is as follows: As the car approaches the station, the arms 4 60 lie against the side of the car and while lying in this position, the mail bag to be delivered is attached to the loop 7 by means of the clasp 19, and is hung from the arm 6, when the arm attached to the bracket 4 is elevated 65 by means of the handle 15. The arm to which the bag to be delivered is attached is free at that extremity which is directed toward the rear of the train. As the car passes the first receiving post, the loop is en- 70 gaged by the receiving arm 8 supported on bracket 10, dragging the bag from the corrugations 14 with which it is held in engagement by the lug 21. The force of the impact is reduced by the hinge 22, which gives 75 slightly at the time of the impact. The arms 8 are provided with corrugations similar to those upon the arms 6, and as the train passes the station, the bag passes from the arm on the train to the corresponding arm 80 on the crane. Furthermore as the train leaves the first crane, it approaches a second crane, also in line with the bracket 4 and upon the delivery rod supported by this crane and having its free extremity toward 85 the direction in which the train is moving, is placed the mail bag to be delivered to the train, supported on the delivery arm, by means of the loop, the lug resting in one of the corrugations, on the delivery arm which 90 is somewhat less elevated than in the case of the first crane passed as is shown at 8. That end of the receiving rod on the train having its free extremity toward the direction in which the train is moving, engages the loop 95 of the bag to be received on the train, which is transferred from the crane to the train in the manner above described.

loops 7 at the time of the passing of the train. The arms 6 and 8 are curvilinear and have a wave like curvature, and they are provided with corrugations 14 adapted to ensure of the time of the passing of the train. Each side of the car is provided with plates bearing the mechanism described, as 100 the stations are not uniformly placed on one side of the track.

Having thus fully described my invention what I claim as new and desire to have secured by Letters Patent is the following: 105

1. In a mail bag catcher, a bail in loop shape provided with a clamp for holding the mail bag, a lug adapted to hold the loop in position, an arm adapted to support the lug and disposed at right angles to a bracket, 110 a bracket, a plate hingedly attached to the bracket, a handle pivotally attached to the

bracket, a crane, a bracket rigidly attached to a crane, an arm disposed at right angles to this bracket and adapted to coöperate with a similar device borne by a moving 5 train.

2. In a mail bag catcher a slotted plate, a lug on the plate a bracket hingedly attached to the lug, a curved handle passing through the slot and pivotally attached to the bracket, a friction roller in the slot, delivery rods at the extremity of the brackets and at right angles thereto, loops adapted for attachment to mail bags and for hanging on the delivery rods, stationary mechanism at stations adapted to coöperate with the device on the cars and accomplish the delivery of mail bags.

3. In a mail bag catcher a delivery rod parallel with the track, a bracket attached to the rod in the middle part thereof and at right angles thereto, means for attaching the bracket to a mail car means for operating and adjusting the bracket, cranes stationary beside the track, brackets rigidly attached to the cranes, rods attached to the brackets at right angles thereto and in the middle

part thereof means for hanging mail bags on one rod and transferring it to the other through the agency of a moving train, and coöperative relation between the rod sup- 30 ported by the crane and the rod borne on the car.

4. In a mail bag catcher, a loop, a lug formed with the loop, a stem hingedly attached to the loop, a shell surrounding the 35 stem, a helical spring coöperating with the stem and shell to produce an elastic joint between the loop and the stem, a catch formed on the stem on the end thereof opposite to the hinge, adapted to secure the loop 40 to a mail bag, rods on a mail car adapted to receive the loop, rods on fixtures at stations adapted to coöperate with rods on car and accomplish the transfer of mail between station and car.

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

HERMAN H. BEHNKE.

Witnesses:

WM. Hoersch, Alex Froeschie. 45