

No. 894,639.

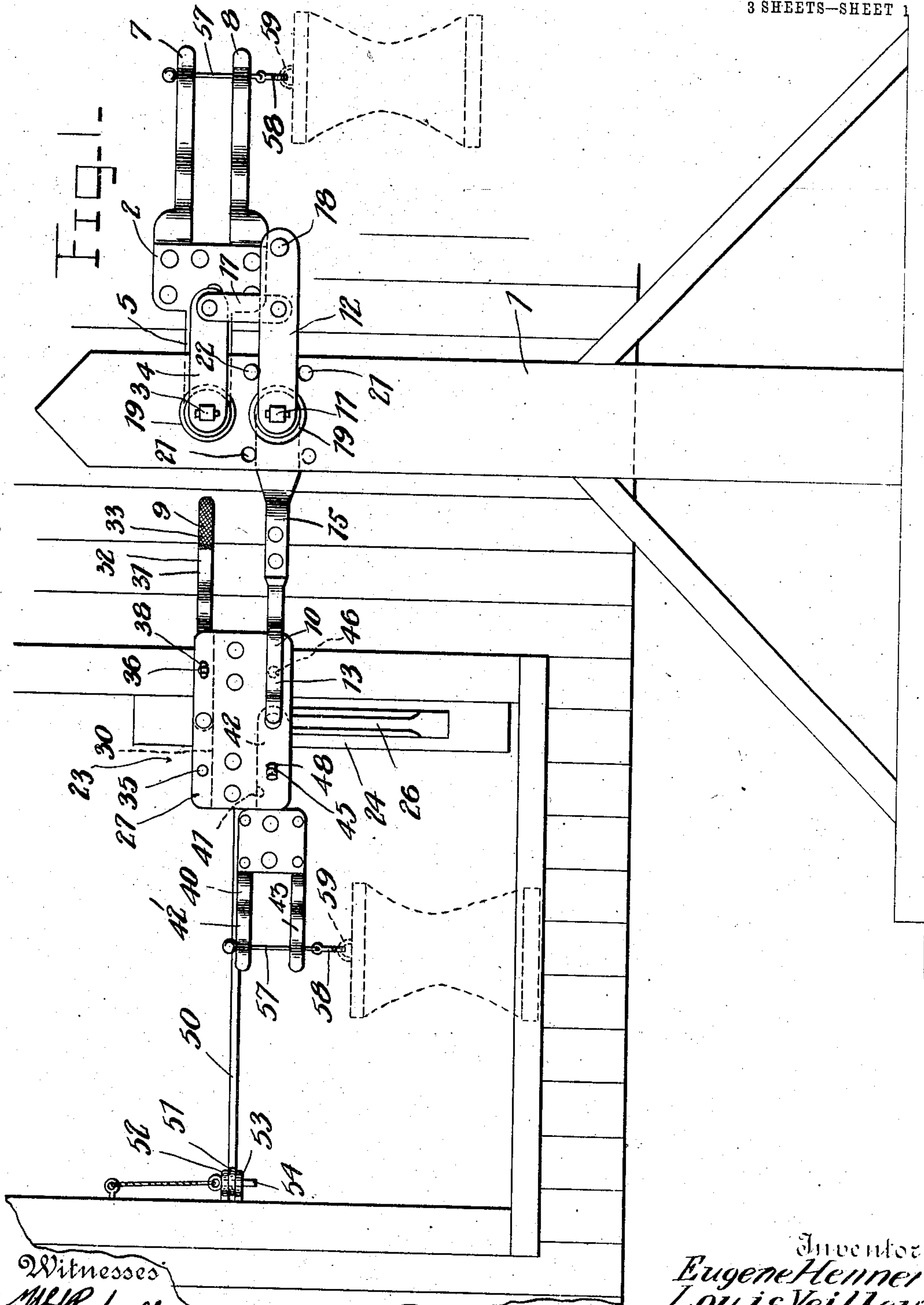
PATENTED JULY 28, 1908.

E. HENNER & L. VEILLEUX.

MAIL BAG CATCHING AND DELIVERING MECHANISM.

APPLICATION FILED MAR. 30, 1908.

3 SHEETS—SHEET 1



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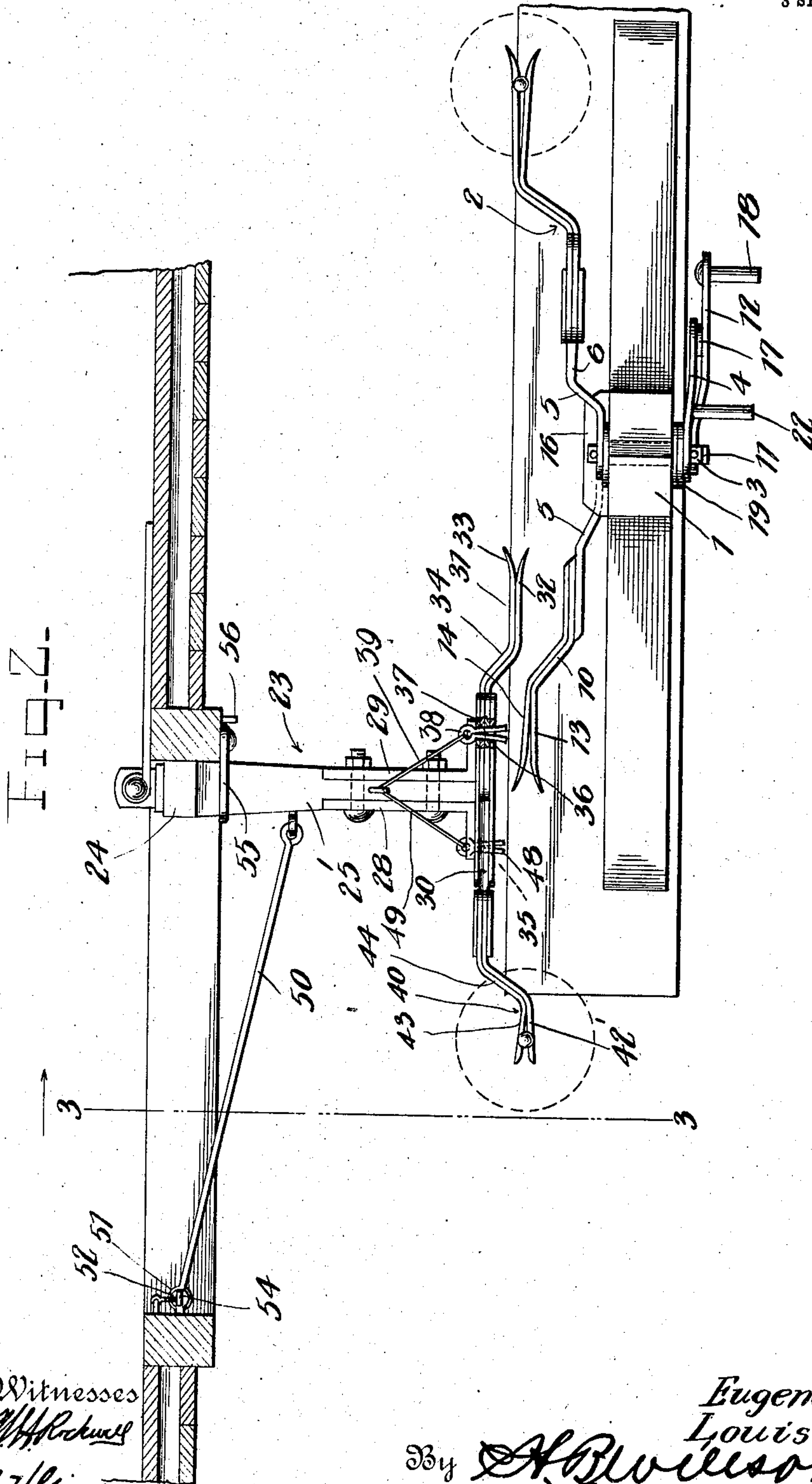
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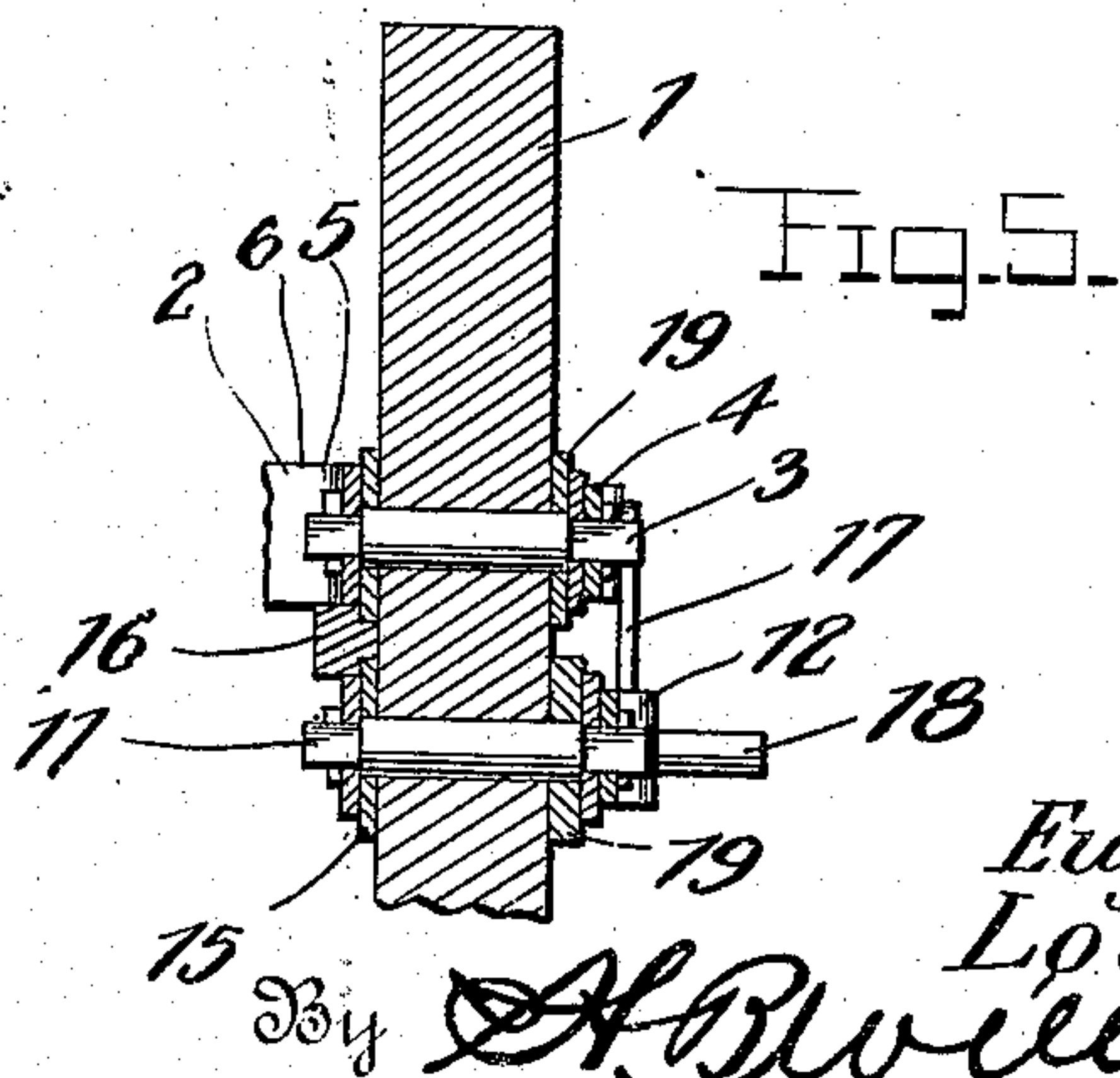
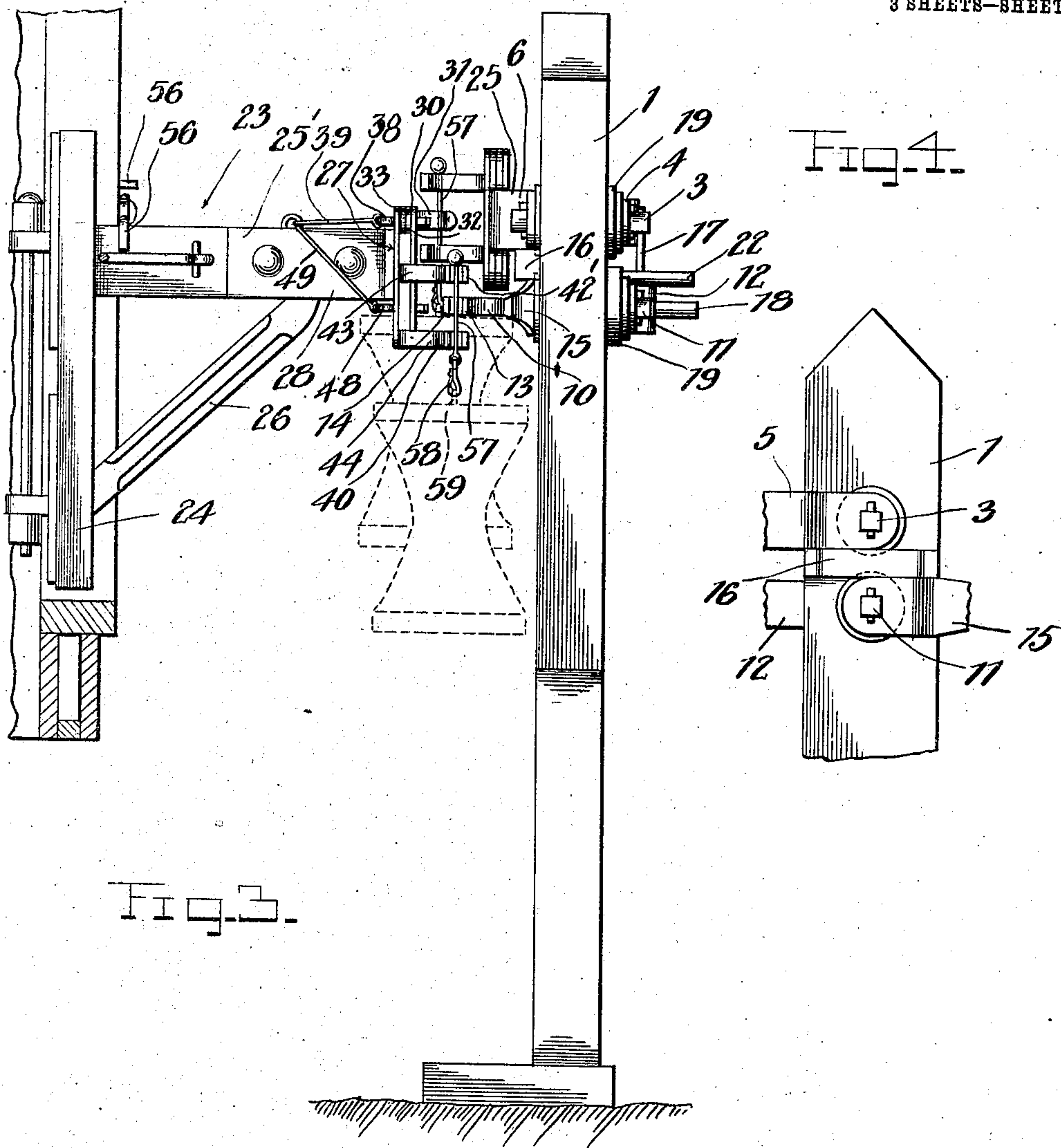
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

EUGENE HENNER AND LOUIS VEILLEUX, OF NEW BEDFORD, MASSACHUSETTS.

MAIL-BAG CATCHING AND DELIVERING MECHANISM.

No. 894,639.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed March 30, 1908. Serial No. 424,192.

To all whom it may concern:

Be it known that we, EUGENE HENNER and LOUIS VEILLEUX, citizens of the United States, residing at New Bedford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Mail-Bag Catching and Delivering Mechanism; and we 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.

This invention relates to mail bag catching and delivering mechanism, coöperating parts of which are mounted respectively on a station frame and on a mail car.

The object of the invention is to provide a strong and durable track crane and to improve the manner of pivotally associating the bag sustaining members therewith and provide means for reversing the catching and delivering mechanism, to receive and deliver mail from trains moving in opposite directions.

Another object is to render the parts strong for withstanding the severe shocks to which they are subjected and to improve the construction of the bag engaging forks on both the car and the station cranes.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangements of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents a front elevation of a station crane and a portion of a car showing this improved apparatus applied; Fig. 2 is a top plan view thereof showing the relation of the parts carried by a car with those carried by the station crane; Fig. 3 is a transverse vertical section taken on the line 3—3 of Fig. 2; Fig. 4 represents a rear elevation of the upper portion of the station crane; Fig. 5 is a vertical section taken through the upper end of the station crane.

In the embodiment herein illustrated this improved track crane comprises a suitable base frame having a suitably braced vertical standard 1 mounted thereon. Mounted near the upper end of this standard 1 is a bag delivering member 2 fixed on a rotatable shaft 3 which extends transversely through the standard 1 and is provided at the other

side thereof with an arm 4 for a purpose to be described. This delivering member 2 is preferably constructed in the form shown of an arm 5 having an off-set 6 and forked or bifurcated at its free end. The members of this bifurcated free end are preferably made in the form of clamping springs 7 and 8 having ribs or projections 9 formed on their inner adjacent faces to provide for the secure holding of the bag carrying cord hereinafter described. These springs have their ends outwardly flared in opposite directions to permit the ready insertion of the bag cord or supporting member.

A catching member 10 is fixed to one end of a shaft 11 which extends transversely through the standard 1 at a point below and in alinement with the shaft 3 of the delivering member and this shaft is provided at its other end with an off-set arm 12 for a purpose to be described. This catcher member 10 is preferably made in the form of two springs 13 and 14 secured at their inner end to an arm 15 which is fixed to the shaft 11. These spring members 13 and 14 have their inner faces normally in contact throughout the greater portion of their length and their outer ends are flared outwardly in opposite directions to adapt them to pass on opposite sides of the bag carrying cord as hereinafter described.

A cleat 16 extends transversely of the standard 1 between the delivering member 2 and the catcher 10 and is designed as a stop for limiting the movement of these members in upward and downward directions respectively and to hold them in operative position in either of their reversed positions. A link 17 is pivoted at its opposite ends to the arms 4 and 12 carried by the outer ends of the shafts 3 and 11 to adapt said arms to be moved in unison when it is desired to reverse the position of the catcher and delivering devices. The arm 12 extends beyond the arm 4 and is provided with a handle 18 for use in reversing the catcher and the delivering members.

Washers as 19 are preferably arranged between the inner faces of the arms 4 and 12 and the standard 1 to prevent wear of the standard. This standard 1 has sockets as 20 and 21 arranged in alinement on a line extending between the shafts 3 and 11 which are adapted to receive a pin 22 which when inserted in either of the sockets between the

arms 4 and 12 locks the delivering member and catching member against accidental turning.

A car carried crane 23 is preferably constructed in the form shown and comprises a standard 24 hinged to swing laterally at one side of the car door opening. An arm 25' extends laterally from the standard 24 and a brace 26 is arranged diagonally between said arm 25' and the lower end of the standard 24 whereby said arm is strengthened and adapted to withstand the strain to which it is subjected. Mounted on the free end of an arm 25 is the head 27 preferably secured to said arm by means of L shaped plates 28 and 29. This arm 25 is extensibly connected with the arm 25' to provide for the use of the device in doors of varying widths. This head 27 extends on opposite sides of the arm 25 and is provided at its upper end with a deep groove or socket 30 which extends the entire length thereof, and in which is pivoted at a point about the center thereof a bag receiving or catching member 31. This member 31 is preferably made of two plate springs 32 and 33 having an off-set 34 formed intermedially of their ends and are arranged to lie in close contact throughout the greater portion of their length to form clamping members for securely holding the mail bag between them. The outer ends of these springs 32 and 33 are flared outwardly in opposite directions similar to the catching member of the station crane. This bag receiving member 31 is adapted to be swung in opposite directions in the head 27 and is limited in its downward movement by means of the lower wall of the socket 30. Apertures 35 and 36 extend transversely through the socket walls at opposite ends thereof and are adapted to register with an aperture 37 formed in the member 31 when it is swung into either of its two positions. A locking member 38 preferably in the form of a cotter pin is adapted to pass through the aperture in said member 31 and those in the socket walls to lock the arm in its adjusted position to prevent accidental turning thereof. This cotter pin 38 is preferably attached to the arm 25 by means of a flexible element 39.

A bag delivering member 40 is pivoted at one end in a socket 41 which extends longitudinally across the head 27 at its lower end, the upper end or wall of this slot being designed to limit the upward movement of the member 40 in either of its two positions. This delivering member 40 is preferably made in the form of an arm 42 having vertically spaced clamping members 42' and 43 secured to its free end and having an offset as 44 formed therein. These members 42' and 43 are each preferably formed of two spring metal plates arranged with their faces in contact throughout the greater portion of their length and having their outer ends flared

outwardly in opposite directions to permit the ready insertion of a bag supporting cord.

The head 27 is provided at its lower edge at opposite ends thereof with apertures 45 and 46 which are adapted to register with an aperture (not shown) in the arm of the bag delivering member 40 and through which a locking device, preferably made in the form of a cotter pin 48, is designed to pass. This cotter pin 48 is secured to the arm 25 by a flexible element 49 in a manner similar to the member 38. A rod 50 is pivotally connected at one end to the arm 25 and is provided at its other end with an eye 51 adapted to extend between two vertically spaced eyes 52 and 53 fixed to the car door at the side opposite that with which the standard 24 is connected.

A locking pin 54 is connected with the car door frame and is designed to be passed through the eyes 51, 52 and 53 for locking the rod 50 in operative position for holding the arm 25 in out-swung operative position.

A hook member 55 is pivotally connected to the car door frame at the same side as the standard 24 and on the outer face thereof and is adapted to hook over the arm 25 and form an auxiliary fastening device for holding it in out-swung position. A stud 56 limits the backward swinging of this hook shaped member 55.

Bag carrying members 57 are each preferably made in the form of a wire cable having a knot at one end to prevent the accidental disengagement thereof from the catching and delivering members. The other ends of these cables as 57 are provided with snap hooks as 58 which are designed to be engaged with a loop or other suitable device of a mail bag as 59. The catcher and delivering members of the car crane are supported in position for cooperation with the similar members carried by the station crane as is clearly shown in Fig. 2, the catcher member of the station crane being arranged to pass between spaced clamping members of the delivering member of the car crane and the catcher member of the car crane to pass between the spaced clamping members of the station delivering member to provide for the simultaneous catching and delivering of a mail bag by the car-carried crane when the car passes the station. This catcher and delivering member are adapted to be swung into reversed position to adapt the device for use when the train is passing in the opposite direction.

We claim as our invention:—

1. In a mail bag catching and delivery apparatus, the combination of a supporting structure, catching and delivering members mounted thereon and adapted to extend normally in opposite directions, and each comprising spring metal plates fastened together and arranged with their inner faces in contact throughout a portion of their

length and having their free ends flared outwardly in opposite directions.

2. In a mail bag catching and delivering mechanism, the combination with a station crane having a catching member and a delivering member disposed in different vertical planes, of a car crane having a catching member and a delivering member disposed in different vertical planes, the catching member of the station crane being constructed to project into the path of the delivering member of the car crane, and the delivering member of the station crane into the path of the catching member of the car crane, and means for reversing the respective members of the car and station cranes to provide for their use when the train is moving in an opposite direction.

3. A crane for receiving and delivering mail bags comprising a standard, rotatable vertically spaced shafts mounted in said standard, a catching and a delivering member fixed to the inner ends of said shafts on one side of said standard, arms fixed to the outer ends of said shafts on the other side of said standard, a link pivotally connected with said arms and means for operating said arms to simultaneously turn said shafts to reverse the position of the members carried thereby.

4. A crane for receiving and delivering mail bags comprising a standard, rotatable vertically spaced shafts mounted in said standard, a catching and a delivering member fixed to the inner ends of said shafts on one side of said standard, arms fixed to the outer ends of said shafts on the other side of said standard, a link pivotally connected with said arms, means for operating said arms to simultaneously turn said shafts to reverse the position of the members carried thereby and a stop arranged between said catching and delivering members to limit the extent of their movement.

5. A crane for receiving and delivering mail bags, comprising a standard, rotatable vertically spaced shafts mounted in said standard, a catching and a delivering member fixed to the inner ends of said shafts on one side of said standard, arms fixed to the outer ends of said shafts on the other side of said standard, a link pivotally connected with said arms, means for operating said arms to simultaneously turn said shafts to reverse the position of the members carried thereby and means for locking said arms in adjusted position.

6. A crane for receiving and delivering mail bags comprising a standard, rotatable vertically spaced shafts mounted in said standard, a catching and a delivering member fixed to the inner ends of said shafts on one side of said standard, arms fixed to the outer ends of said shafts on the other side of

said standard, a link pivotally connected with said arms, means for operating said arms to simultaneously turn said shafts to reverse the position of the member carried thereby, sockets arranged in said standard on opposite sides of its vertical axis on a line drawn between said shafts and a pin for insertion in said sockets.

7. A crane for receiving and delivering mail bags comprising a standard, rotatable vertically spaced shafts mounted in said standard, a bag delivering member carried by one end of one of said shafts and comprising an arm having an off-set therein, spring metal plates fixed to the free end of said arm and arranged with their inner faces in contact throughout a portion of their length, and having their free ends flared outwardly in opposite directions and a catching member carried by the same end of the other shaft.

8. A mail bag receiving and delivery apparatus comprising a supporting structure, a delivery member mounted thereon and extending laterally in one direction, and a catching member extending in the opposite direction and composed of a plurality of vertically spaced clamping members.

9. A crane for receiving and delivering mail bags comprising a supporting structure, rotatable vertically spaced shafts mounted in said supporting structure, a bag delivering member carried by one end of one of said shafts, and a catching member carried by the corresponding end of the other shaft and comprising an arm fixed at one end to said shaft and two vertically spaced clamping members attached to the free end of said arm.

10. A crane for receiving and delivering mail bags comprising a supporting member, rotatable vertically spaced shafts mounted in said supporting member, a bag delivering member carried by one end of one of said shafts, and a catching member carried by the corresponding end of the other shaft and comprising an arm fixed at one end to said shaft, and two vertically spaced clamping members attached to the free end of said arm, each composed of spring metal plates secured at one end to the free end of said arm and having their inner faces in contact throughout a portion of their length and with their free ends flared in opposite directions.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

EUGENE HENNER.
LOUIS VEILLEUX.

Witnesses:

HENRY RICHER,
NOE HENNER.