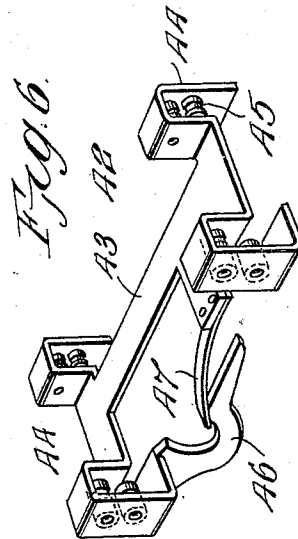
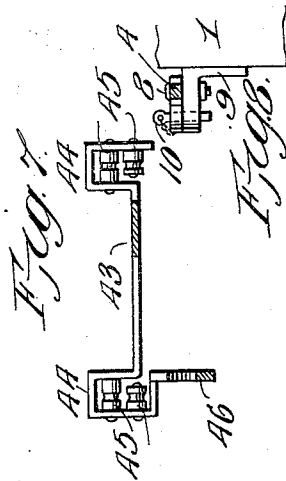
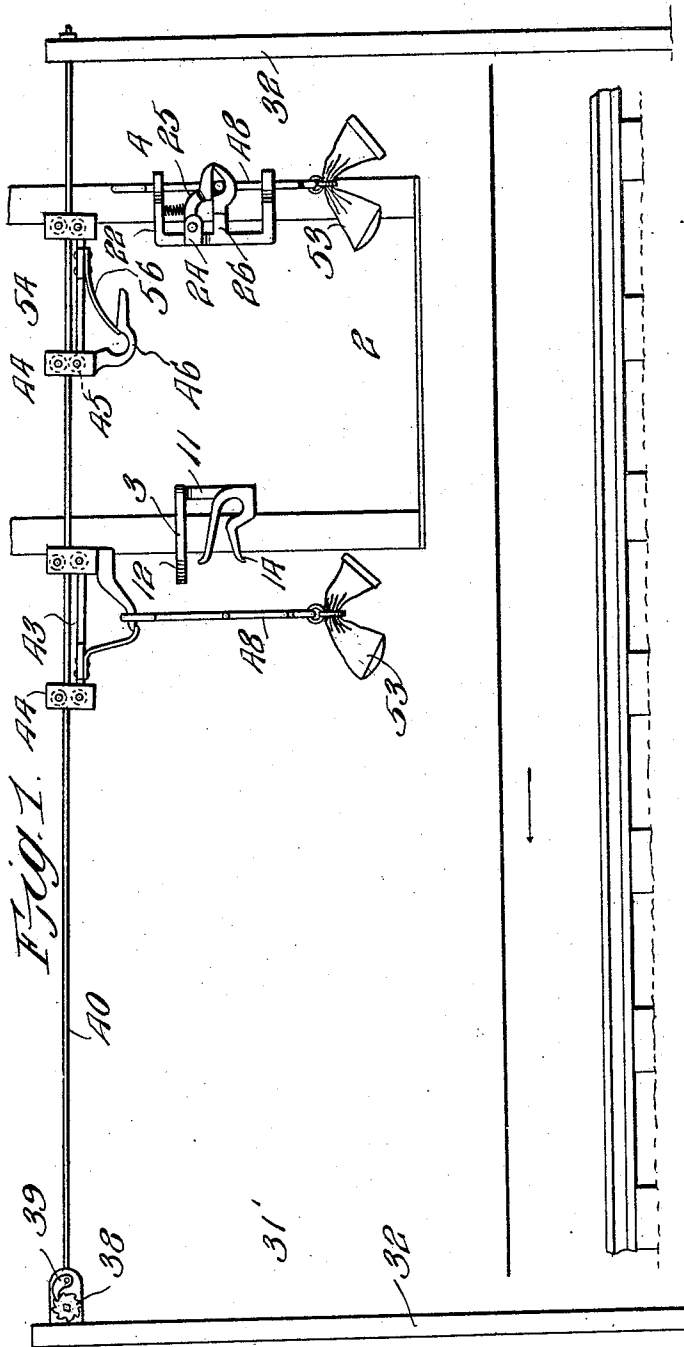


929,472.



Inventor

Filiberto Nicola,

Witnesses
Frank Hough
K. Allen

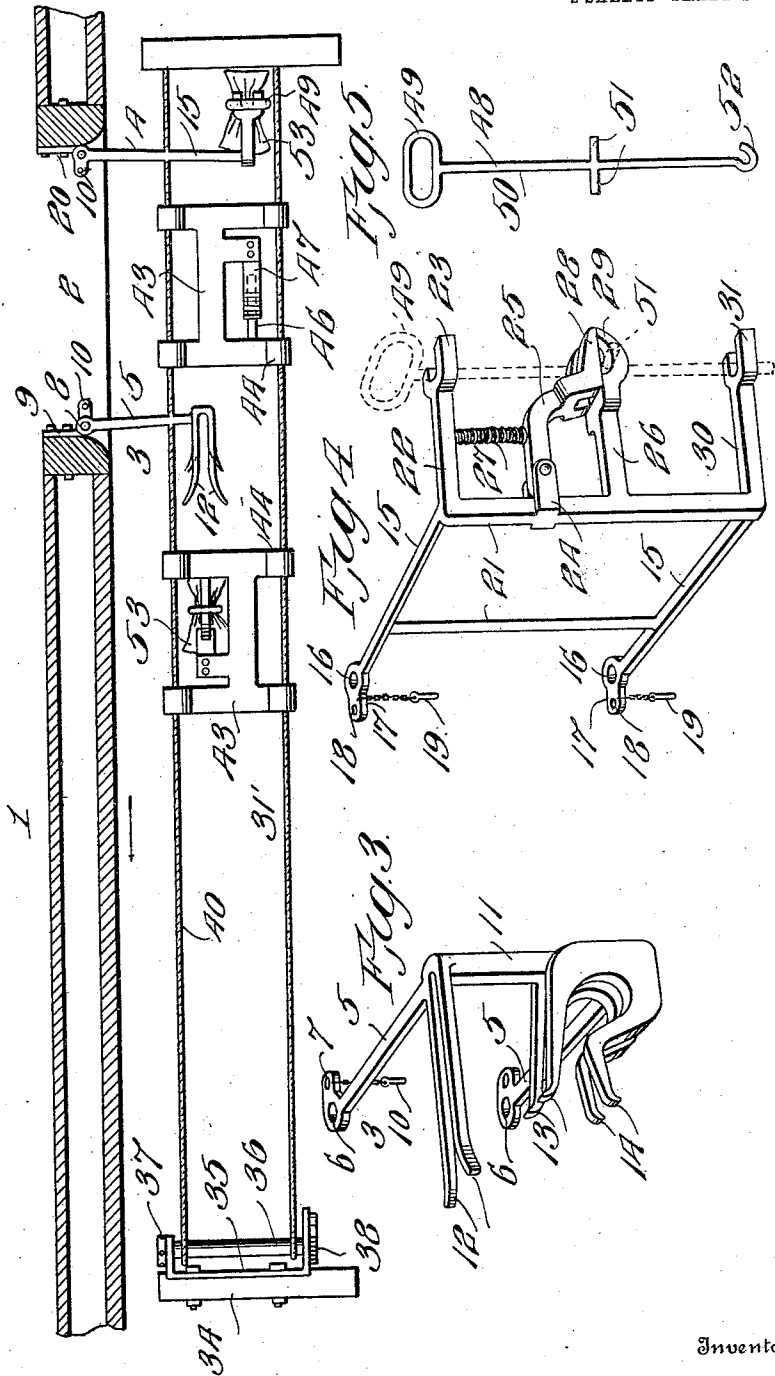
By Victor J. Evans
Attorney

F. NICOLA.
MAIL BAG CATCHER.
APPLICATION FILED MAR. 30, 1909.

929,472.

Patented July 27, 1909.
2 SHEETS—SHEET 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

FILIBERTO NICOLA, OF BROOKLYN, NEW YORK.

MAIL-BAG CATCHER.

No. 929,472.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed March 30, 1909. Serial No. 486,841.

To all whom it may concern:

Be it known that I, FILIBERTO NICOLA, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

This invention relates to improvements in devices for transferring mail sacks from a holding device at a station to a moving car, or from a moving car to a station, or for simultaneously transferring one device to the other.

With the above and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the invention; and in which:—

Figure 1 is a side elevation of a device, constructed in accordance with the present invention, showing the mail car in a position to receive a mail bag from a station and to deliver a mail bag to the station. Fig. 2 is a horizontal sectional view taken through the upper part of a mail car, and illustrating the station apparatus in plan. Fig. 3 is a perspective view of the mail receiving apparatus carried by the car. Fig. 4 is a similar view of the delivering apparatus. Fig. 5 is an elevation of the mail bag suspending member. Fig. 6 is a perspective view of one of the travelers connected with the station. Fig. 7 is a transverse sectional view of the device illustrated in Fig. 6. Fig. 8 is a detail view illustrating the manner of locking a receiving and delivering apparatus to and within the car.

Referring particularly to the accompanying drawings, the numeral 1 designates an ordinary mail car being provided with the usual door opening 2. Pivotally secured upon the vertical sides of the doorway is a mail receiving apparatus 3 and a mail delivering apparatus 4. The receiving apparatus, illustrated most clearly in Fig. 3 of the drawings, comprises a member having a plurality of, preferably integrally formed, elements now to be described. The said member 3 comprises essentially a pair of spaced arms 5, provided with eyes 6 and offset members having smaller eyes or openings 7. The eyes 6 and 7 provided upon both of the members 5 are adapted to be arranged in

vertical alinement with each other, and the eyes 6 are pivotally connected upon suitable pintles 8 provided upon bracket members 9 secured to one of the vertical walls of the doorway 2. These brackets 9 are also provided with offsets which have openings alining with the opening 7 when the member 3 is swung outwardly, as illustrated in Figs. 1 and 2 of the drawings.

The eyes 7 of the arms 5 are each adapted to aline with eyes or recessed portions of the bracket 9 and these alining eyes are adapted to receive a suitable pin or pintle, preferably connected with the arms 5 of the members 3 and whereby the said member 3 is securely connected with the brackets 9, in order to withstand the shock incidental to its contact with a mail sack, in a manner hereinafter to be described.

The arms 5 of the member 3 are connected by a vertical member 11, and this member 11 is provided at its point of connection with the uppermost arm 5 with offset bifurcated arms 12 which have their extremities spread away from each other so as to form a widened portion or mouth, as clearly illustrated in Fig. 3 of the drawings. The lower portion of the member 11 is also provided with a pair of bifurcated extensions 13 and 14. The extensions 14 are substantially L-shaped, as clearly shown in Fig. 3 of the drawings, while the extensions 13 are raised at a slightly upward inclination.

The delivering apparatus, designated by the numeral 4 and illustrated in detail in Fig. 4 of the drawings, also comprises a pair of spaced arms 15, having their inner extremities provided with suitable eyes 16 from which are extended offset portions 17 having openings 18 and loosely connected pins 19. This receiving member is adapted to be secured upon suitable brackets having offset pintles positioned upon the opposite vertical wall or side of the doorway 2 of the car 1, and these brackets are of a similar construction to those illustrated in Fig. 8 of the drawings and described in connection with the mail receiving apparatus 3. The delivering member 4 has its arms 15 connected through the medium of spaced vertical rods 21 and the outermost arm 21 is provided with a plurality of preferably integrally formed right angular offset members, now to be described.

The uppermost angular arm 22 has its extremity provided with a U-shaped or bifur-

cated portion 23, while positioned below this arm 22 are a pair of offset fingers 24 between which is secured a latch member 25. This latch member 25 is of a substantially L-shaped formation and has its free extremity offset to provide a pair of arms or fingers 28, integrally connected with the said member 21. Directly below the fingers 24 is an offset arm 26 which has its outer or free extremity substantially U-shaped and bifurcated to provide a pair of arms 29. The bifurcated portion 28 of the member 25 is normally adapted to contact the enlarged bifurcated extension of the arm 26 through the medium of a resilient member 27 which is positioned between the said arm 25 and the upper arm 22. The lowermost portion of the said member 21, adjacent its connection with the arm 15, is provided with an offset arm 30 arranged in direct alinement with the arms 22 and 26, and the said arm 30 has its free extremity bifurcated or otherwise provided with a pair of spaced arms 31.

The numeral 31' designates the station apparatus. This apparatus is constructed of suitable vertically arranged standards 32, arranged in pairs, positioned a suitable distance away from each other, and each pair of standards being connected by a suitable cross-beam 34. One or both of the cross-beams 34 may be provided with a U-shaped bracket 35, which has its offset arms provided with openings adapted for the reception of a shaft 36. The shaft 36 has one of its ends, extending through the offset arm of the member 35, enlarged and provided with suitable openings, as designated by the numeral 37, the said openings being adapted for the reception of a suitable bar or rod whereby the shaft may be readily rotated when desired. The opposite end of the shaft, extending through the opposite arm of the member 35 is provided with a suitable ratchet-wheel 38, and the said arm is provided with a weighted pawl 39 adapted to engage between the teeth of the ratchet-wheel, so as to provide for the movement of the shaft in only one direction.

The numeral 40 designates a pair of spaced cables connecting the standards 32 of the station apparatus. These members 40 may be connected with one of the cross-beams 34 and have their opposite ends secured upon the shaft 36 and by the mechanism, hereinafter described, it will be noted that the said cables 40 may be sustained in taut position between the standards 32 and in proper relation with each other.

The numeral 42 designates a receiving apparatus adapted to be positioned upon the station device. This apparatus 42 comprises a carrier consisting of a body 43 having its ends extended in opposite directions to provide substantially L-shaped offsets between which are pivotally connected suitable rollers

45 which are adapted to be positioned upon the cables 40 of the station device 31. By reference to Fig. 6 of the drawings it will be noted that these arms are arranged within spaced relation to each other at opposite ends of the carrier 42, and that when the rollers are positioned upon the cables 40 the said carrier is prevented from lateral movement when engaging a mail bag, in a manner now to be described. The carrier 42 has one of its L-shaped ends provided with a substantially U-shaped lip or extension 46, and this lip is normally closed through the medium of a flat resilient member 46 connected to the body 43 at the end of the device opposite to that upon which the lip 46 is formed.

It is to be understood that the delivering apparatus 4 and the receiving apparatus or traveler 42 carried by the station device 31 are arranged in a direct vertical alinement with each other, and the receiving apparatus as well as the delivering apparatus of the station are each provided with suitable mail bag sustaining members 48. These members 48 are each constructed of a single strip of suitable material, and comprise an eye portion 49, through which extends a body portion 50 having oppositely disposed offset portions 51 and having its extremity provided with a hook 52. The hook 52 is adapted for the reception of a mail sack 53 and when receiving mail from a moving car the suspending member 48 has its offset portions 51 positioned within the bifurcated lip 29 of the arm 26 of the receiving device 3 carried by the car 1, while the spring pressed member 25 has its bifurcated portion 28 extending over the tops of the offsets 51, while the body 48 has its upper portion positioned within the bifurcated extension 23 and its lower portion positioned within the bifurcated portion 31 which is provided upon the arms 22 and 30 of the delivering apparatus 4. The eye 49 of the member 48 is adapted to project a suitable distance so as to bring itself into perfect alinement with the offset lip 55 of the station receiving traveler 54. This traveler 54 is of a structure substantially similar to that of the member 42, hereinafter described, being provided with a body portion having spaced L-shaped extensions provided with rollers mounted upon cables 40, but the lip 55 of the said member 54 is arranged in an opposite direction from the lip 46 of the said member 42. This lip or offset projecting portion 55 is normally closed through the medium of a flat resilient member 56 and it will be noted that as the car 1 moves in the direction of the arrow the lip 55 will engage with the eye 49 and cause the traveler 54 to travel upwardly upon the inclined cables 40 until the locking arm 25 is raised sufficiently, against the pressure of the spring 27, to allow the offsets of the mail suspending member 48 to be with-

drawn from the delivering apparatus 4. When this is accomplished, it will be readily understood that the pintles 19 may be withdrawn from their engagement with the openings of the brackets 9 and that the receiving apparatus 3 may be readily and easily swung within the car.

In delivering a mail sack from the station to the car, the mail bag suspender has its eye positioned upon the lip 46 of the traveler 42 and the mail sack 53 positioned upon the hook or offset 52. The offsets 51 provided upon the member 48 are adapted to be positioned directly in a line with the center of the bifurcated offset extensions 13 and 14 of the member 3 carried by the car 1. The upper bifurcated arms 12 are positioned a suitable distance below the eye 49, and it will be noted that as the car is moved in the direction of the arrow the said bifurcated extensions will engage the body of the member 48 as well as the offsets 51 thereof, thus causing the traveler 42 to move upwardly upon the inclined cables 40 until the same reaches a height far enough away from the arms engaging the suspending member to detach the said member from the lip of the holder, thus readily stationing the bag and holder upon the catch 3 when the latter may be rotated upon its pivots so as to be swung within the car 1.

While I have illustrated and described the preferred embodiment of the invention as it now appears to me, it is to be understood that minor details, within the scope of the following claims, may be changed without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim, is:—

1. A combination with an inclined station member having travelers thereon, said travelers being provided with lips having resilient doors, sack supporting devices removably secured to the lips of the travelers, and a movable member provided with receiving and suspending apparatus arranged to travel in a relatively different plane and to contact and detach the mail suspending members from the travelers.

2. The combination with a station member, comprising spaced posts, inclined cables connecting the posts, means for tightening the cables, travelers upon the inclined cables, said travelers each comprising a body member having offset portions provided with rollers, offset fingers upon the travelers, resilient locking members contacting the fingers, receiving members upon the fingers, and a moving body arranged to travel in a relatively different plane to that of the inclined cables, and provided with delivering and receiving elements adapted to engage the bag suspending members, substantially as described.

3. In a device of the character described, a station member, comprising posts arranged in pairs and spaced away from each other, inclined cables upon the posts, a pair of traveling members upon the cables, said traveling members each being provided with oppositely disposed mouths or offsets, resilient closing members for these mouths, bag supporting elements upon these offsets or mouths, said supporting elements being each provided with oppositely disposed fingers, and a moving body arranged to travel at a relatively different plane to that of the cables, said moving member being provided with offsets and delivering apparatus, one of which is adapted to engage the offset fingers of one of the suspending members and the opposite member adapted to deliver a mail sack to the second traveling member.

4. In a device of the character described, a station member, said member comprising spaced posts arranged in pairs, a connection for each of the pairs of posts, an L-shaped bracket upon one of the connections, a shaft rotatably secured to the offset arms of the bracket, means for rotating the shaft in one direction, means for preventing the rotation in one direction, a pair of spaced cables connected with a shaft and with the opposite pair of posts, traveling members upon the cables, said traveling members being each provided with oppositely arranged offsets, and flexible members contacting said offsets, a mail bag suspending member upon the offset of one of the travelers, said member comprising an eye having its body portion provided with offsets and its lower extremity with a hook for the reception of a mail bag, a moving body, said body being provided with a receiving and delivering apparatus, the receiving apparatus comprising a pivoted frame having its upper portion provided with angular spaced arms and its lower portion provided with bifurcated substantially U-shaped arms arranged in a line with the offsets of the body portion of the suspending member carried by the traveler, the receiving apparatus comprising a member pivotally connected with the moving body and having a central off-set portion provided with a spring pressed closure, said offset portion being adapted to receive the offset arms of a mail bag suspending member and the eye of the said member being adapted to be positioned in the path of the lip carried by the receiving traveler of the station.

5. In combination with a station member having inclined cables and travelers thereon, a mail bag securing member having one of its ends provided with an eye, its body provided with offsets and its lower extremity provided with a hook adapted for the reception of a mail sack, of a mail car having its doorway provided with spaced brackets, a

mail bag receiving device pivotally connected with the brackets, said receiving device comprising a pair of upper bifurcated arms and lower bifurcated arms of a substantially U-shaped construction adapted to engage with the offsets of the mail suspending device, substantially as described.

6. The combination with a station apparatus having inclined cables and travelers positioned thereon, of a mail car having its doorway provided with brackets, a mail bag delivering device pivotally connected with the brackets, said delivering device comprising a frame provided with offset arms having bifurcated ends, a spring pressed latch

engaging one of the ends, a mail bag suspending member connected with the delivering device, and said suspending member being adapted to travel in the path of one of the travelers upon the inclined cables and to be contacted thereby to remove the same from the delivering apparatus, substantially as described.

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

FILIBERTO NICOLA.

Witnesses:

D'ANGIO GUISEPPE,
ALESSANDRO D. PIERO.