(No Model.)

# H. & C. SOGGS.

## MAIL BAG CATCHER.

No. 454,387. Patented June 16, 1891.

Fig. 1.

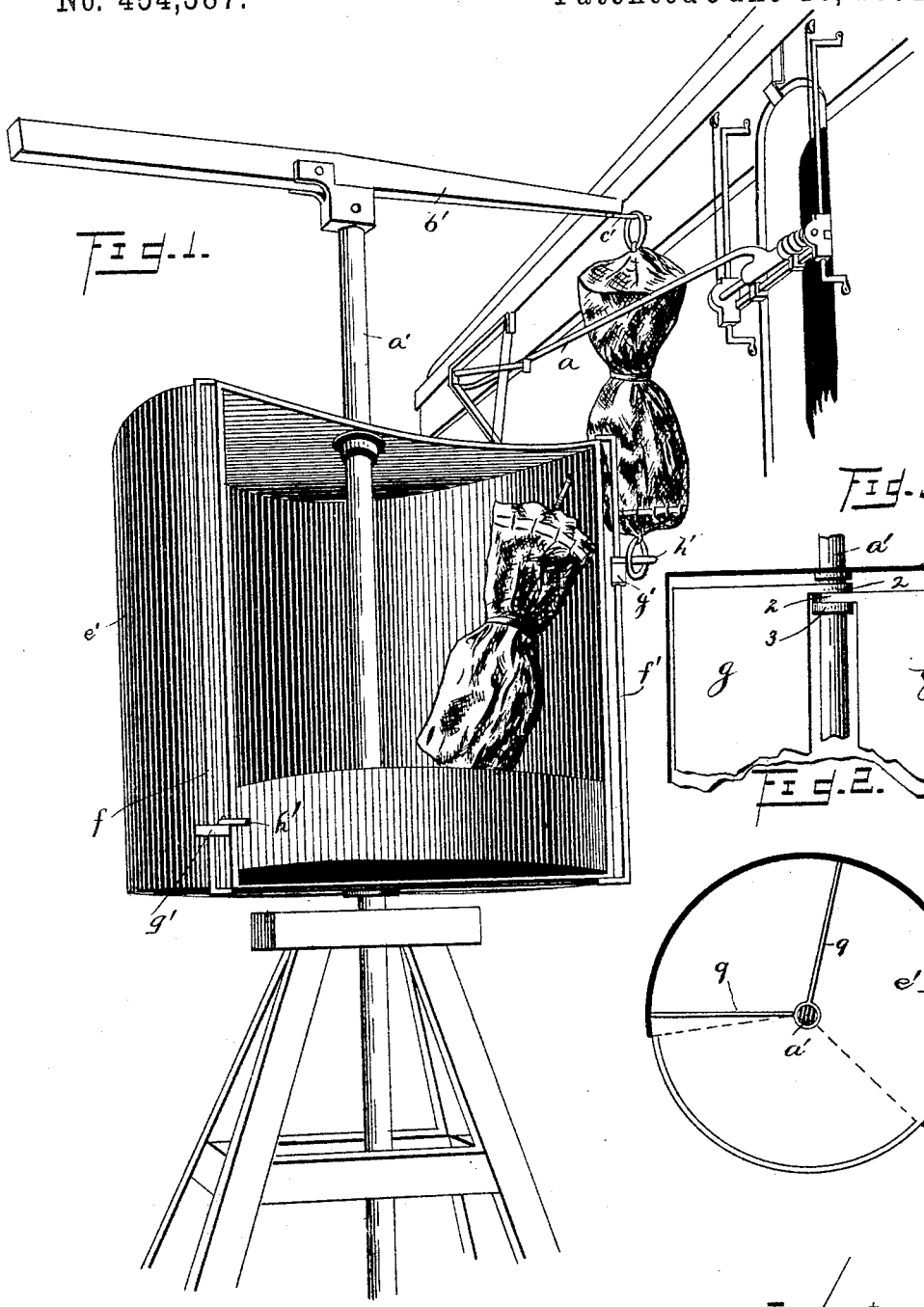



Fig. 3.

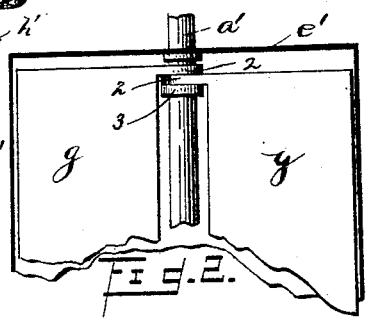
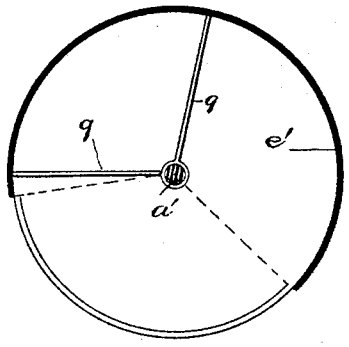



Fig. 2.

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# UNITED STATES PATENT OFFICE.

HENRY SOGGS AND CLAYTON SOGGS, OF JAMESTOWN, NEW YORK, ASSIGNORS OF TWO-THIRDS TO W. S. CAMERON AND C. E. WEEKS, OF SAME PLACE.

## MAIL-BAG CATCHER.

SPECIFICATION forming part of Letters Patent No. 454,387, dated June 16, 1891.

Application filed November 11, 1890. Serial No. 371,080. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY SOGGS and CLAYTON SOGGS, of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Mail-Bag Catchers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in mail-bag catchers.

In the accompanying drawings, Figure 1 is a perspective view showing the receiving-receptacle and its support beside the track, also the catching and delivering apparatus. Fig. 2 is a horizontal section of the receiving-receptacle. Fig. 3 is a detail sectional elevation of the upper portion of the receiving-drum, looking into the opening thereof and illustrating a mode of loosely and independently mounting the swinging doors on the central shaft.

The car is provided with a catcher-arm *a*, preferably such as described and claimed in our application, Serial No. 348,776, filed April 21, 1890, having an end extended back to receive the upper eye or loop of the bag to be delivered, and with a gravity-catch pivotally mounted on said arm to extend over said end and prevent the loop of the bag slipping off the end, except when the catch is lifted by means of a downwardly-extending lower arm of said catch.

At the proper location beside the track a suitable and rigidly supported and mounted vertical shaft *a'* is secured, and at its upper end is provided with a vertically-swinging mast *b'*, pivoted within its length to a plate or casting on the upper end of said shaft, so that its lighter end will be normally held up by the opposite end and can swing into a horizontal position extending toward the track. The outer free end of this swinging arm is provided with a pivoted finger *c'*, projecting beyond the end of the arm and capable of swinging horizontally, so as to extend either up or down the track. Upon this shaft and a suitable base a rotary receiving receptacle or drum *e'* is centered and mounted. This drum is closed on all sides except one, on which side it is open, and is closed at the bottom, and is partially open at the top, in continuation of the side opening forming two substantially radial edges to engage and raise the releasing-catch of the catcher-arm carried by a passing car. This top opening allows the bag-carrier by the catcher-arm of a moving car to enter the receiving drum or cylinder before it is dropped. The exterior of the drum at the longitudinal edges of the opening is provided with a pair of rigid guide-rods *f' f'*, extending parallel with said vertical edges, and upon which rods vertically-movable slide-blocks *g' g'* are located and provided with horizontal pivoted fingers *h'*.

The proportions of the drum and supporting-shaft are such that the outer end of the swinging arm when in a horizontal position will be in a horizontal plane above the catcher-arm of the car, and the top of the drum will be in a horizontal plane to be cut by the said lower arm of the releasing-catch as the train passes the drum.

As a train passes a station provided with this device, a mail-bag is automatically delivered from the car into the rotary receptacle and a mail-bag is caught from the swinging arm and delivered into the car.

The operation of the device is as follows: The mail-bag from the station has its upper loop hung on the fingers *c'* of the swinging arm, said arm being swung into its horizontal position and its lower loop caught under the finger *h'* of the block *g'* at the edge of the receiving-opening next the railroad-track, the receiving-drum being swung so that its open side will face toward the direction from which the train will approach. The mail-bag is now in position to be caught and delivered into the car. While approaching the station the upper loop of the mail-bag to be left at the station is caught on the rearward extension of the catcher-arm by lifting the upper arm of the catch so that the loop can be placed thereon. The catch will then drop to its normal position by gravity and the end of its upper arm will extend down over the rear

end of said extension and hold the bag thereon. The bag hangs vertically from said extension a distance from the car. The bag is thus in position to be delivered into the revolving receptacle and the catcher rod or arm is in position to receive the bag from the station. When the train reaches the revolving drum, the bag on the end of the catcher-arm passes into the opening of the revolving drum and the front edge of the top engages the lower arm of the releasing-catch, thereby swinging up the other arm and its end from the end of the rearward extension of the catcher-arm, and the loop of the mail-bag is pushed from said extension by engaging the top of the drum and falls into the receptacle, and as the car proceeds the catcher-arm catches the bag to be taken from the station and draws it from the fingers $c'$ and $h'$. The straight pivoted fingers $c'$ and $h'$ firmly hold the bag and yet quickly and easily releases it when the catcher-arm engages it. The rotary drum can be turned to receive a bag from a train approaching in either direction, and by reason of its capacity of rotation it breaks the force of the bag delivered from the train as it is whirled around when the bag strikes its inner side, thereby preventing all injury to the bag and drum.

The revolving receptacle may be provided with a pair of internal swinging leaves, doors, or partitions 9 9, as shown by the cross-sectional view. These doors are hung loosely on the central shaft $a'$ at their inner edges, so that they can be independently swung to close the opening into the receptacle, and thereby keep out snow, ice, dirt, &c. The detail view, Fig. 3, illustrates how these doors are independently hinged to the main shaft so as to freely swing thereon independently of each other, each door having one or more collars 2 rigid with its inner edge and loosely embracing the central shaft and resting on a collar 3, rigid on such shaft, whereby the doors are loosely supported, so that they can be easily and freely swung to close or open the receiving-opening of the cylinder or drum.

The receiving-receptacle can be provided with a suitable light or other visual signal at night.

It is evident that various changes might be made in the form and arrangement of the parts described without departing from the spirit and scope of our invention. Hence we do not wish to limit ourselves to the precise construction herein set forth.

What we claim is—

1. In combination, in a mail-bag receiver, the rigid vertical shaft and the horizontally-rotatable receiving-receptacle centered on and mounted to rotate around said shaft, said receptacle being closed at the bottom and having a side opening and a radial top opening in continuation thereof, for the purpose set forth.

2. In combination, the vertical rigid shaft having the vertically-swinging arm at its upper end provided with a finger at its outer end, and the hollow horizontally-rotatable receiving-receptacle centered and rotatable around said shaft and having the side opening with vertical rods on each side thereof, and fingers vertically slidable on said rods.

3. In combination, the rigid shaft, the vertical bag-receiving drum mounted on said shaft to freely rotate with the shaft passing centrally through the drum, said drum having a longitudinal bag-receiving opening in one side, and the two freely-swinging doors or partitions longitudinally located within the drum, as set forth, for the purpose described, and at their inner edges loosely and independently mounted on said shaft.

4. In a mail-bag receiver, the combination of the rigid vertical shaft, the vertically-swinging arm on the upper end thereof to hold the bag to be delivered, and the vertical rotary drum mounted and centered on said shaft to freely rotate, said drum being hollow and having a bag-receiving vertical opening in one side, as set forth, said drum having means to detachably hold the lower end of the bag to be delivered to the car.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

HENRY SOGGS.
CLAYTON SOGGS.

Witnesses for Henry Soggs:
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