(No Model.)

H. R. & D. D. SCHURTER.

MAIL BAG CRANE ATTACHMENT.

No. 590,025. Patented Sept. 14, 1897.

Fig. 1.

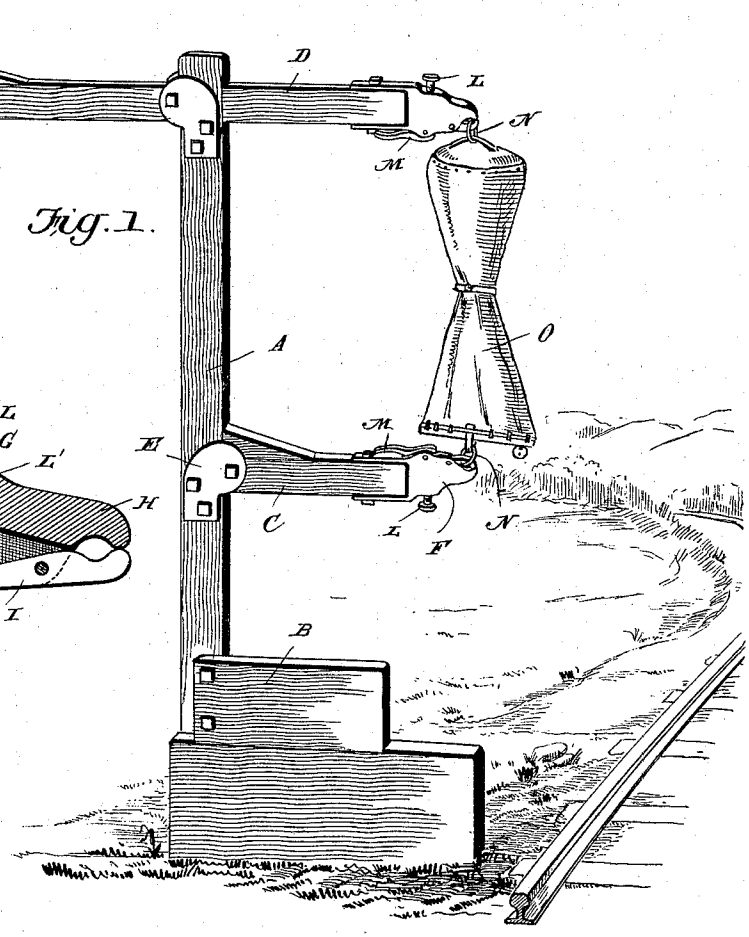


Fig. 2.

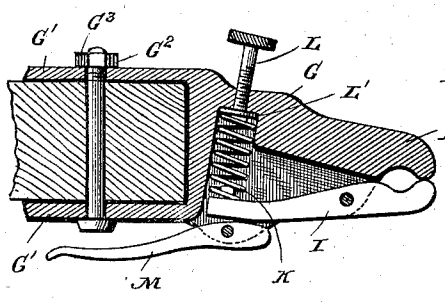
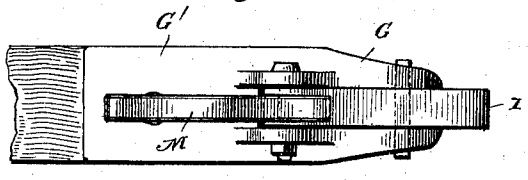


Fig. 3.



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UNITED STATES PATENT OFFICE.

HENRY R. SCHURTER AND DANIEL D. SCHURTER, OF NORTH DECATUR, GEORGIA.

MAIL-BAG-CRANE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 590,025, dated September 14, 1897.

Application filed November 18, 1896. Serial No. 612,616. (No model.)

To all whom it may concern:

Be it known that we, HENRY R. SCHURTER and DANIEL D. SCHURTER, residing at North Decatur, in the county of Dekalb and State of Georgia, have invented a new and useful Mail-Bag-Crane Attachment, of which the following is a specification.

This invention is a new and useful construction of mail-bag crane for the purpose of supporting or holding the mail-bag, so that it can be readily taken up by the mail-bag catcher carried by the railroad mail-car.

Heretofore great difficulties have been experienced in attaching the mail-bag to the crane. In windy or stormy weather the mail pouch or bag has been blown off and, furthermore, it has been extremely difficult to keep the irons of the cranes now in use in the proper shape, and to overcome this defect the mail-pouch has frequently been tied on and in grabbing the same from the crane the shape of the irons has been rendered worse and worse.

The object of our invention, therefore, is to provide a gripping attachment at the end of each supporting-arm of the crane, said gripping-arm attachment consisting of a fixed jaw, a spring-actuated movable jaw coacting with the fixed jaw, and a lever for opening the spring-jaw when it is desired to introduce the ring of the mail bag or pouch.

The invention consists also in pivotally connecting the gripping attachment, whereby it can swing freely upon the pivot as the bag is grabbed, thereby avoiding any undue strain upon the gripping attachment or the supporting-arm.

The invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view showing the practical application of our invention. Fig. 2 is a vertical longitudinal sectional view of the gripping attachment, the coil-spring, movable jaw, and operating-lever being shown in elevation. Fig. 3 is a plan view showing the relative position of the gripping-jaw and operating-lever.

In the practical application of our invention we employ a crane which comprises, as usual, a standard A and suitable platform B, the lower supporting-arm C and the other supporting-arm D, said upper and lower supporting-arms being pivoted upon opposite sides of the standard between the bearing-plates E, the rear end of the upper arm D being weighted, as shown at D′, whereby said arm will swing to a vertical position the moment the mail-bag is released.

Upon the outer or forward ends of the arms C and D are secured the gripping attachment F, said attachment comprising the casting G, formed with the rearwardly-projecting portion G′, by means of which the attachment is pivotally connected to the end of the supporting-arm by means of the bolt G^2 and nut G^3.

The casting G has a fixed jaw *h* at the outer end and is recessed or slotted centrally along the bottom of the forward portion, and pivoted within the said recessed or slotted portion is the movable jaw I, pivoted near the forward end and adapted to coact with the fixed jaw H, as most clearly shown in Fig. 2, and between the rear end of said lever and the top of the recess or slot is a coil-spring K, the tension of which is regulated through the medium of a regulating-screw L, carrying the disk or plate L′. By bearing upon the end of the coil-spring, said screw *l* passes through the body of the casting, as most clearly shown in Fig. 2.

An operating-lever M is pivoted at the extreme edge of the slot, the forward end of said lever being adapted to engage with the rear end of the movable edge whenever the operating-lever is thrown away from the supporting-arm, thereby opening the movable jaw for the purpose of receiving the ring N, carried at the end of the mail pouch or bag O.

The manner of operating the device herein shown and described is as follows: Each supporting-arm is brought to a horizontal position, the rear end of the operating-lever pulled away from the casting or supporting-arm, which movement of the lever forces the inner end of the movable jaw inward and opens the outer end, thereby permitting the ring upon the mail-bag to be inserted between the fixed and movable jaws. The lever is then released and the spring immediately re-

turns the fixed jaw to its proper position, thus securely holding the mail bag or pouch in place, and in practice we have found that this attachment is sufficient to hold the mail bag or pouch during the windiest weather. Should the mail be extra heavy the tension of the spring can be increased, thereby binding the movable jaw tighter in its locked position. A mail-bag supported in this manner can be quickly and easily taken up by the mail-bag catcher, inasmuch as the rings can be easily pulled from between the jaws, and, furthermore, the attachment, being pivoted upon the ends of the supporting-arms, will swing around in the direction of the moving train, and consequently the pull will be in direct line with the jaws and not transverse thereto. As soon as the mail-bag has been removed from the crane the supporting-arms will drop to their vertical positions, from which they will of course be lifted when it is desired to attach another mail-bag.

It will thus be seen that we provide an exceedingly cheap and simple construction of mail-bag-crane attachment, one which will remedy all of the defects of the crane attachment now in use, one which is thoroughly efficient in the performance of all its functions, and one which is not likely to be broken or get out of order.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a mail-bag-crane attachment, the combination with a supporting-arm, of a fixed jaw pivoted on said arm to swing, a pivoted and spring-actuated jaw carried by the fixed jaw, and an operating-lever engaging the inner end of the movable jaw, substantially as and for the purpose set forth.

2. In a mail-bag attachment, the combination of a fixed and recessed jaw, a movable jaw, a spring bearing upon the inner end of the movable jaw, and a lever pivoted to the fixed jaw and engaging the movable jaw, substantially as and for the purpose set forth.

3. In a mail-bag-crane attachment, the combination with the casting having a fixed jaw, of the movable jaw pivoted within the casting and coacting with the fixed jaw, the coil-spring arranged within the casting and bearing upon the inner end of the movable jaw and the regulating-screw and plate, substantially as shown and described.

4. In a mail-bag-crane attachment, the combination with the supporting-arm, of the casting pivotally attached to the outer end thereof, the fixed jaw integral with the said casting, the movable jaw pivoted to the said casting and coacting with the fixed jaw, the coil-spring and regulating-screw and the operating-lever pivoted also to the casting and adapted to operate upon the inner end of the movable jaw for the purpose of opening the same, substantially as shown and described.

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