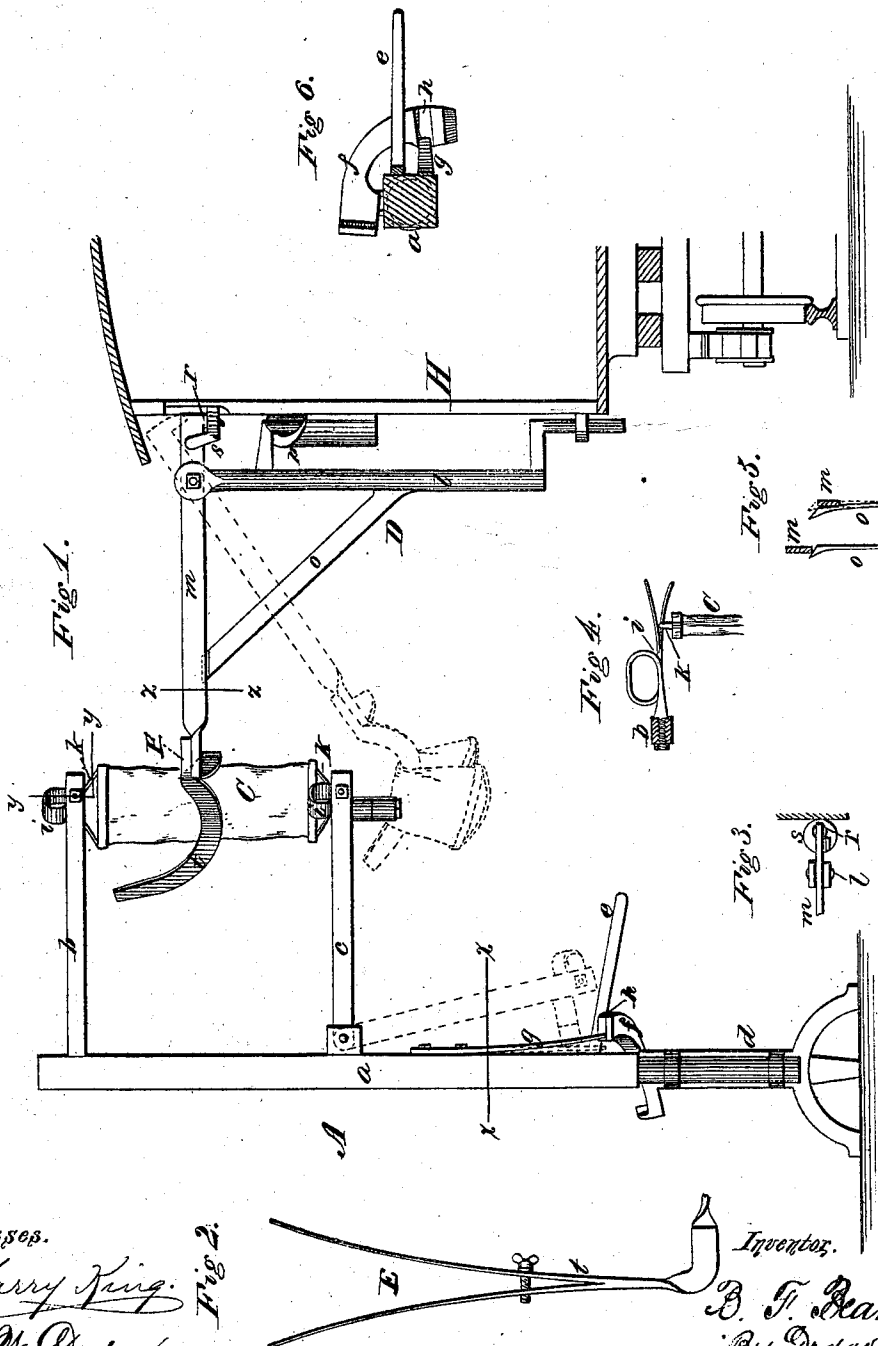


B. F. BEAN.

Mail-Pouch Holders and Catchers for Railroads.

No. 143,657.

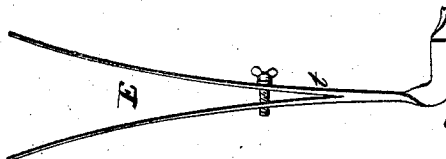
Patented Oct. 14, 1873.



Witnesses.

Harry King.
H. W. Dodge.

Fig. 2.



Inventor.

B. F. Bean!
By Dodge & Son
His atty

UNITED STATES PATENT OFFICE.

BENJAMIN F. BEAN, OF PAWLING, PENNSYLVANIA.

IMPROVEMENT IN MAIL-POUCH HOLDERS AND CATCHERS FOR RAILROADS.

Specification forming part of Letters Patent No. **143,657**, dated October 14, 1873; application filed May 16, 1873.

To all whom it may concern:

Be it known that I, BENJAMIN F. BEAN, of Pawling, in the county of Chester and State of Pennsylvania, have invented certain Improvements in United States Mail-Pouch Holders and Catchers for Railroads, &c., of which the following is a specification:

My invention relates to an improved apparatus for delivering mail-bags to railroad-cars in motion; and consists in arranging the crane or support by which the bag is suspended to swing back automatically out of the way after the bag is removed; in providing said crane with springs to hold the bag; in a peculiar manner of arranging the arm on the car by which the bag is caught, so that it swings in automatically out of the way, and delivers the bag into the car; and in other details, as hereinafter fully explained.

Figure 1 is an elevation, showing my entire apparatus at the instant when the bag is being seized; Fig. 2, a plan view of the spring arm or jaw by which the bag is seized; Fig. 3, a top-plan view, showing the manner in which the arm on the car is locked outward; Fig. 4, a plan view of one of the springs by which the bag is suspended by the roadside; Fig. 5, views showing the manner in which the arm on the car is supported; and Fig. 6, a cross-section of the crane for holding the bag, taken on the line *x x*.

In carrying out my invention, I erect, by the side of the track, at each station where the bags are to be taken up, a crane, A, consisting of an upright post, *a*, provided with two lateral arms, *b* and *c*, to support the bag. I mount the post in a socket or support, *d*, of any suitable construction, in such manner that it can both revolve and slide up and down therein. I provide the post with a lateral arm or handle, *e*, by which to turn it around, and provide the socket or base *d* with an inclined arm or cam, *f*, upon which the handle *e* bears, as shown in Figs. 1 and 6. The handle, resting on the cam, supports the post, so that the weight tends to cause the arm to slide down on the cam, and thereby turn the post around until the arms *b c* stand parallel with the track. In order to lock the post, when the arms are turned forward at right angles to the track, to hold the bag, I provide the post with a spring,

g, to lock into a notch, *h*, in the cam, as shown in Figs. 1 and 6. The arms *b c* are provided at their outer ends with split or forked springs *i* to hold the bag. The bag C is provided, on each end, with a handle or strap, K, and these handles are slipped, one into the spring of the upper arm *b*, and the other into the spring of the lower arm *c*, so that the bag is held in an upright position, as shown in Fig. 1. The springs *i* are arranged on the sides of the arms in such manner that their split or open ends face in the direction in which the train moves, so that the handles of the bag can be readily forced or carried out of them. They are made of a considerable length, and are coiled or curved between the split end and the arm, in order that they may spring freely in all directions. The lower arm *c* is hinged to the post *a*, and is held up, when in use, by the bag. When the bag is removed, the arm falls, and, striking the spring *g*, throws it out of the notch in the cam *f*, and thereby releases the post, which immediately turns around, so that the arms swing back out of the way. To the car I attach a swinging frame or crane, D, provided with a large forked or V-shaped jaw, E, to catch and hold the bag. This frame or crane consists of a vertical bar, *l*, hinged to the side of the car H, a horizontal arm, *n*, pivoted to the bar *l*, and provided at its outer end with the jaw E, and of a spring arm or brace, *o*, secured to the bar *l*, and arranged to bear under and support the arm *m*. One of the hinges *p* of the frame is made with a cam or incline, as shown in Fig. 1, which causes the frame, when free, to swing around until the jaw E reaches the side of the car. The frame is fastened out at right angles to the car, when the bag is to be caught, by a hook, *r*, on the inner end of the arm *m*, which hook locks into a plate, *s*, on the side of the car, as shown in Figs. 1 and 3. The end of the spring arm or brace *o* which rests under the arm *m* is beveled, as shown in Figs. 1 and 5. When the car reaches the station, the jaw E runs astride of the suspended bag, and carries it off from the springs *i*, so that it doubles over or across one of the arms of the jaw E, and hangs suspended thereon. The weight of the bag causes the end of the spring-brace to slip laterally from under the arm *m*, and forces the end of

the arm down, thereby unlocking the inner end of the arm from the plate *s*, and releasing the frame, which swings around and carries the bag inward to the car-door. The jaw *E* may be provided with a thumb-screw, *t*, by which the two arms may be drawn together, or released, in case the bag becomes wedged tightly between them. Instead of bending or twisting the springs *i* between their forked ends and the arms to which they are attached, the forked portions may be attached to the end of a spiral spring secured to the arm of the crane, the object being, in either case, to allow the forked ends to play or yield in all directions.

Having thus described my invention, what I claim is—

1. The crane *A*, provided with the hinged

arm *c*, handle *e*, and spring *g*, in combination with the support or socket having the notched cam *f*, when arranged to operate substantially as herein shown and described.

2. In combination with the crane *A*, provided with the arms *b c*, the springs *i*, having their ends forked, and so constructed that said ends can play freely in all directions, as set forth.

3. The swinging frame *D*, consisting of the rod *l*, bar *m*, jaw *E*, and brace *o*, when attached to the side of a car in the manner shown, and for the purpose set forth.

BENJAMIN F. BEAN.

Witnesses:

ALBERT MILLER,
ANDREW DUNN.