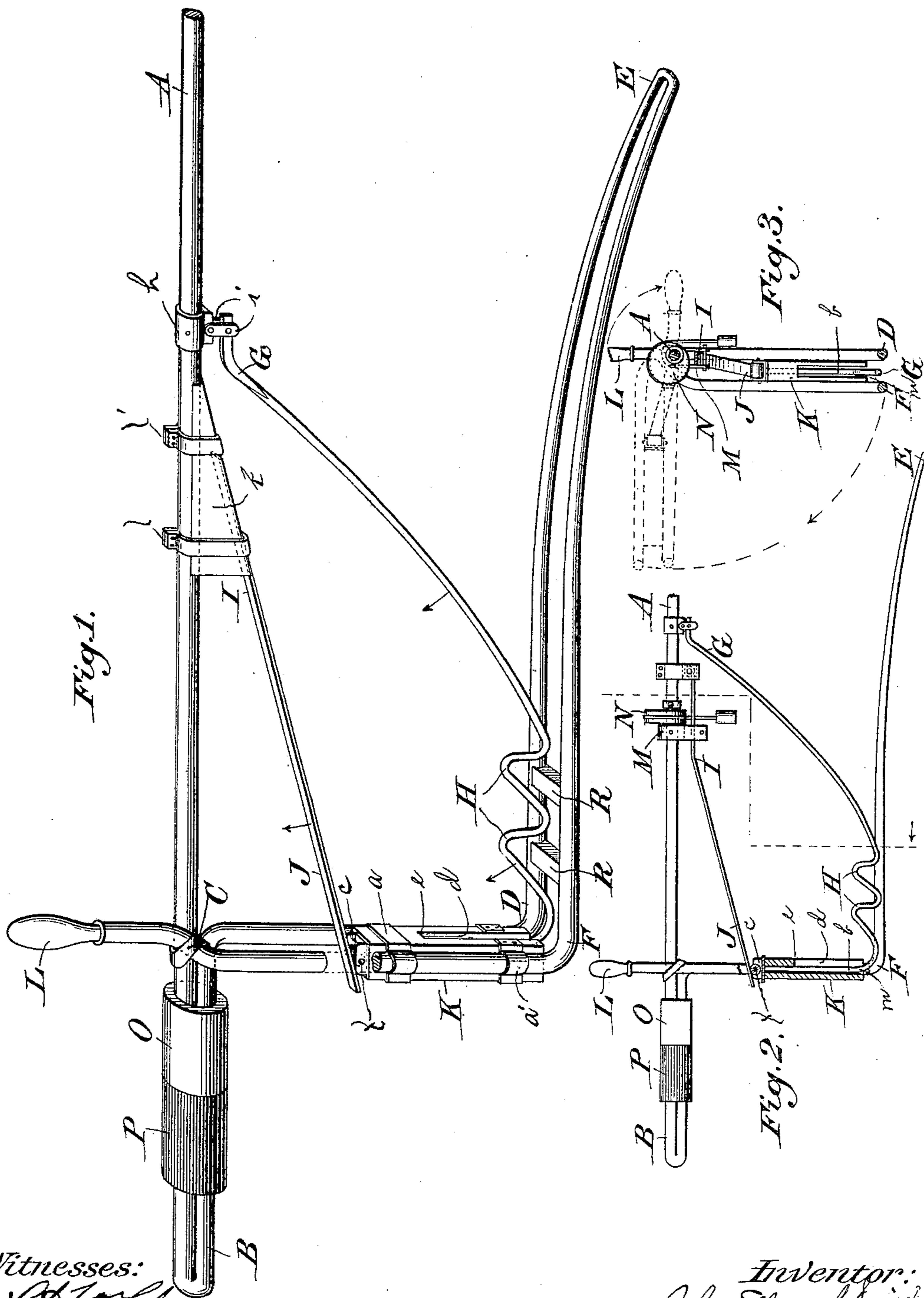


No. 824,388.

PATENTED JUNE 26, 1906.

J. E. SMITH.
MAIL POUCH CATCHER.
APPLICATION FILED JULY 20, 1905.



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JOHN E. SMITH, OF KANSAS CITY, KANSAS.

MAIL-POUCH CATCHER.

No. 824,388.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed July 20, 1905. Serial No. 270,586.

To all whom it may concern:

Be it known that I, JOHN ELLSWORTH SMITH, a citizen of the United States, residing at No. 65 South Valley street, Kansas City, in the county of Wyandotte and State of Kansas, have invented a new and useful Mail-Pouch-Catching Device, of which the following is a specification.

This invention relates to substantial and desirable improvements in railway mail-pouch catchers.

The primary objects of my improvements are, first, to provide an absolutely sure and certain means of taking pouch from the crane as hung adjacent to the track; second, to make absolutely sure and certain provisions for holding such pouch in catching device until properly released, and, third, to provide a mechanism that will not crush buckles and tear straps of the pouches used in such service nor damage contents of such pouches by any wedging process whatsoever.

Figure 1 shows a general view of this catcher as it appears when suspended by its supporting-brackets at rest. The brackets now in use on mail-cars can be used for this catcher.

Similar letters refer to similar parts throughout the different views.

Fig. 2 represents catcher in same position as Fig. 1, but with another manner of attaching I J to the supporting-rod A B. An eccentric drum N is shown, which coöperates with I J in said attachment. A vertical section of boxing K is also shown, and the relative position of lever G H with reference to the catcher-arm D E F, and the vertical portion *m* of G H in boxing K are likewise shown.

Fig. 3 gives an end view of this catcher in two positions. The complete lines represent it at rest and show the position of the boxing K with its open groove *d* and a view of the vertical portion *m* of G H in such groove. The dotted lines show it in working position. In this position the object and office of N are clearly shown.

The scale represented by Fig. 1, in connection with the measurements hereinafter given, will furnish reliable data for the construction and accurate attachment of all parts.

The frame A B C D E F L is made from a continuous piece of one-inch steel, except as follows: From D to E the diameter is diminished, so that part at E will not be more than one-half inch thick. From F to E the

same change is made. The handle portion L will be furnished a turned wood covering, practically as represented. A B is approximately four feet long. The part B C is made by doubling rod back from end B to C or about one and one-half feet. The material in B C should be shown as merged, round, and symmetrical. The parts at C will be bound together by a steel strap or casting.

O is a shoulder cast on part B C, and P is a removable coiled steel or rubber buffer.

The distance from C to D will be approximately fourteen inches and from D to E three and one-half feet. The spread in the arms at E will be slight. At D F it will not be less than three inches. This spread will be maintained until necessary bend at C.

K is brass or malleable-iron boxing three by three by eight inches, set and secured, as indicated, by clamping steel bands *a a'*. As represented on the exposed face, there is an open groove *d* of five-eighths by six inches. In Fig. 2 a vertical section of K is shown, with its open groove *d* and continuous vertical opening *b*.

R R are simply supporting-spreaders, set as indicated.

G H represent a fashioned adjustable steel lever one-half inch thick. It is attached to the supporting-rod A B, as indicated at *h*, and is provided with a stirrup (*i*) motion A to B. The perpendicular portion *m* of G H is confined by the boxing K. This is shown by the vertical section of K in Fig. 2. To the end of the vertical part *m* of G H is attached a plate *c*. The sides of this plate adjacent to the parts C D and C F are raised. Into the sides of this plate the ends of an antifriction-roller *f* are fitted.

I J represent a simple leaf-spring two inches wide, set in a triangular-shaped cast pocket *k* and attached to the supporting-bar A B, as represented at *l l'*. The J end rests firmly on the antifriction-roller *f*, already noted.

In Fig. 2 another manner of attaching I J to the supporting-bar A B is shown. In this case the I end is looped on a pin and attached, as indicated, to A B, leaving two inches of space between the straight part of I J and A B. The necessary bend is made in spring to bring the J end to rest normally on antifriction-roller.

N is an eccentric cast-steel drum three by five inches, with the necessary tail-weight to hold in desired position on bar A B. The supporting-bar revolves freely in N, the drum

being confined by M and shoulder, as represented. M is composed of two properly-fashioned pieces of casting immovably fastened on A B and arranged to allow I J to
 5 move freely to and from A B to the extent of about three inches, but confines I J laterally and reduces such motion to the minimum. The communicating attachment for I is solidly fastened on A B. As previously stated,
 10 Fig. 2 represents the catcher at rest, and it will be observed that N does not bear on I J in this position. Hence the spring I J exerts no pressure on vertical part *m* of G H.

The catching position of this device is outlined by the dotted lines in Fig. 3. As the
 15 catcher is turned into position to receive a pouch the straight end I is forced up on the eccentric diameter of N, and the free end J is pressed firmly against the antifriction-roller
 20 *f*, already named and located. By this arrangement a release is provided for I J and the required pressure furnished for the control of G H.

The working possibilities of this catcher
 25 should now be readily understood. By the projected arrangement of C D E F a pouch when properly hung on a crane for despatch will enter the catcher immediately between G H and D E F. The adjustable G H readily
 30 allows such pouch to pass behind the shoulders at H, and the action of the spring I J promptly prevents it from rebounding. The six inches of spread to *e* provided for G H is about three times the space necessary to receive a regulation catcher-pouch and about
 35 two inches more than that required for an ordinary pouch should such a pouch have to be hung in an emergency. With the arrangements provided and noted in this catcher the
 40 breaking and tearing of equipment used in catcher service and the crushing of the contents of such pouches by the "wedging" process now in use will be completely and effectually prevented.

45 What I claim and desire to protect by Letters Patent is—

1. The combination in a mail-bag-catching

device of a supporting-rod, the material in said supporting-rod, being continued and projected as a double catcher-arm, as heretofore set forth and described. 50

2. The combination in a mail-bag-catching device of a supporting-rod, a double catcher-arm, said arm being a continuation of the supporting-rod and an adjustable lever attached to the supporting-rod by a band and a stirrup. 55

3. The combination in a mail-bag-catching device of a supporting-rod, a double catcher-arm, said arm being a continuation of the supporting-rod, an adjustable lever attached to said supporting-rod by a band and a stirrup, and a boxing rigidly attached to said catcher-arm at right angles to said supporting-rod. 60

4. The combination in a mail-bag-catching device of a supporting-rod, a double catcher-arm, said arm being a continuation of the supporting-rod, an adjustable lever attached to the supporting-rod by a band and a stirrup, a triangular cast pocket attached to said supporting-rod, a leaf-spring set in said pocket. 65

5. The combination in a mail-bag-catching device, of a supporting-rod, and an adjustable lever attached at one end to said supporting-rod, the other end slidably connected to a double catcher-arm, by boxing rigidly attached to said arm, a plate fixed on slidable end of said lever, said plate carrying an antifriction-roller. 70

6. The combination in a mail-bag-catching device of a supporting-rod, a double catcher-arm, said arm being a continuation of the supporting-rod, an adjustable lever attached to the supporting-rod, a boxing for the support and guidance of said lever, a leaf-spring, and an eccentric device cooperating with said spring. 75

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Witnesses:

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