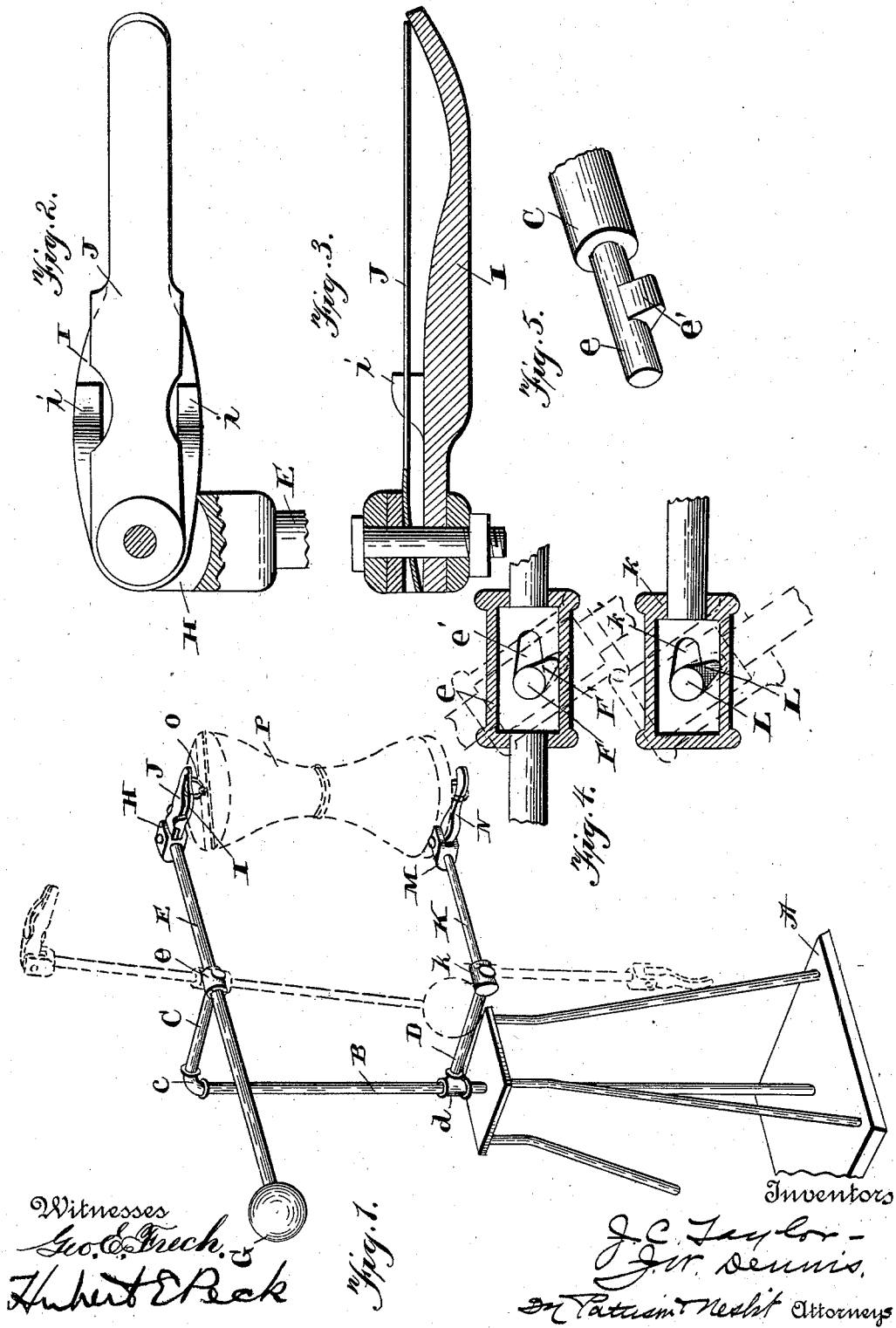


(No Model.)

J. C. TAYLOR & J. W. DENNIS.
MAIL CRANE.

No. 590,172.

Patented Sept. 14, 1897.



UNITED STATES PATENT OFFICE.

JOHN C. TAYLOR AND JEREMIAH W. DENNIS, OF FINDLAY, OHIO.

MAIL-CRANE.

SPECIFICATION forming part of Letters Patent No. 590,172, dated September 14, 1897.

Application filed May 24, 1897. Serial No. 637,976. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. TAYLOR and JEREMIAH W. DENNIS, of Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Mail-Cranes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to mail-cranes; and the object thereof is to provide an improved apparatus of simple and cheap construction for supporting mail-bags in position for being taken by passing trains.

The invention consists in the novel features of construction and in the combination and arrangement of parts hereinafter fully described and claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the crane, the bag-supporting arms being shown in operative position in solid lines and out of operation in dotted lines. Figs. 2 and 3 are transverse and longitudinal sectional views, respectively, of the bag-supporting device of the upper arm. Figs. 4 and 5 are detail views illustrating the pivotal mounting of the swinging arms.

The supporting-frame A may be of the form here shown or any other preferred form, and extending vertically therefrom is post B, having laterally-extending arm C, connected to its upper end by elbow *c*, while extending laterally from the upright B and adjacent support A is arm D, united to the upright by connection or fitting *d*. These arms, as well as the upright and the skeleton work of the support, are preferably formed of gas-pipe, which is very strong and durable and at the same time is comparatively inexpensive.

The upper bag-supporting arm E is provided with coupling *e* between its ends, and this coupling is formed on its inner side with elongated slot or opening *e'*, which takes over lug *F'* on pin F, the latter being secured in the outer end of tubular arm C. This swinging arm carries at one end the counterweight G, and at its opposite end is bifurcated head H, and pivoted therein to swing in the plane

of the arm is tongue I, and secured on the same pivot within the bifurcation is elongated spring J, which extends out over the tongue between lugs *i* on the latter, which hold the spring with the tongue and cause the same to turn therewith. The inner end of the spring is bowed slightly within the bifurcated head, so as to cause the outer end of the spring to bear constantly on the outer end of the tongue, as shown, and thus normally close the space over the tongue. The lower arm K is provided with coupling *k* at its end, which is slotted at *k'* to extend over lug *L'* of bearing-pin L, projected from lower arm D, the pivotal mounting of this arm being exactly like that of the upper arm. In bifurcated head M at the end of arm K is pivoted tongue N.

The arrangement of the lugs on the bearing-pins is such that the arms are stopped from swinging past horizontal position when turning to operative position, and also hold the arms from detachment when in said position and when at rest in operative position, it being necessary to incline the arms, as shown in dotted lines in Fig. 4, to remove them, as may be necessary for repair or replacement.

In positioning the bag the upper arm is turned to horizontal position and the upper ring O of pouch P is slipped over tongue I beneath spring J, the latter closing down on the ring and holding the same securely, and the lower arm is raised and tongue N extended through the lower ring of the pouch. When the pouch is taken, the arms assume the inoperative position shown in dotted lines in Fig. 1, as will be understood. The swinging arms are also formed, preferably, of gas-pipe for the reasons mentioned of the other parts of the apparatus.

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

1. In a mail-crane, the combination of laterally-extending arms, bearings thereon provided with laterally-extending lugs, and pouch-supporting arms formed with elongated openings adapted to pass over the bearings and lugs when alined therewith, the lugs holding the pouch-supporting arms in position on the bearings, substantially as shown and described.

2. In a mail-crane, the combination with laterally-extending arms, and bearing-pins extended therefrom provided with lugs, of swinging pouch-supporting arms, and hollow
5 connections on said arms provided with elongated openings through which the bearing-pins and lugs extend, the connections inclosing the lugs and held from displacement thereby, substantially as shown and described.

10 3. In a mail-crane, the combination with a pouch-supporting arm, and the bifurcated head thereon, of the tongue pivoted in the head, the elongated spring also pivoted in the head and extended outward over the tongue
15 and adapted to turn therewith, the spring being bowed slightly within the head to engage the latter, whereby its outer end is held in constant engagement with the corresponding end of the tongue, substantially as shown
20 and described.

4. In a mail-crane, the combination with

a pouch-supporting arm, and the bifurcated head thereon, of the tongue and the spring pivoted in the head, the spring being over the tongue, and the lugs on the tongue between which the spring extends whereby the
25 spring is caused to turn with the tongue, substantially as shown and described.

5. The combination, in a mail-crane, with a pouch-supporting arm, of a tongue and a securing-spring pivoted thereto, the tongue being formed with lugs between which the spring
30 extends, whereby the spring is caused to turn with the tongue, substantially as shown and described.

35 In testimony whereof we affix our signatures in presence of two witnesses.

JOHN C. TAYLOR.

JEREMIAH W. DENNIS.

Witnesses:

MARION G. FOSTER,

FRANKLIN FRANKS.