UNITED STATES PATENT OFFICE.

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PNEUMATIC-DESPATCH-TUBE CARRIER.

SPECIFICATION forming part of Letters Patent No. 678,728, dated May 7, 1901.
Application filed February 21, 1901. Serial No. 46,836. (No model.)

To all whom it may concern:

Be it known that I, ALBERT W. PEARSDALL, a citizen of the United States, residing at
Mount Vernon, in the county of Westchester
and State of New York, have invented new and useful Improvements in Pneumatic-De-
spatch-Tube Carriers, of which the following is a specification.

This invention relates to carriers or receptacles adapted for use in pneumatic-despatch
tubes, and the invention resides in the novel features of construction set forth in the fol-
lowing specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of the carrier closed. Fig. 2 is a section along x x, showing the
cover closed. Fig. 3 is a like section showing the cover open. Fig. 4 is an end view of
the carrier open. Fig. 5 is an end view showing the cover in the act of being closed. Fig.
6 is an end view of the cover closed. Fig. 7 is a section along x x, Fig. 1. Fig. 8 is a sec-
ton along y y, Fig. 1.

In the drawings the letter a indicates a shell or carrier, and b is a cover mounted on a sup-
port or strap c. When the cover is swung or moved away from the carrier, so as to be
clear of the peripheral edge of the carrier entrance or mouth. The cover is then
thus out of the way, so as not to interfere with or obstruct the entry or exit of matter to and from the tube. The strap c is hinged at d at the edge or outside of the carrier-mouth, so that no obstruction is formed by or at said
hinge in matter entering and leaving the carrier. This cover is eccentrically movable for
a purpose presently explained. This eccentric pivot or support e connects the cover to the
strap, and an stop or pin f has been found practical, said stop when striking the strap
or arresting the cover holding the latter in position for its segmental flange g to swing or
come about the carrier when the cover is moved to closing position. On then rotating
the cover in the proper direction, or so as to carry stop f away from the strap, the flange
or catch h is made to engage a projection or rib k on the carrier or body a and lock the
cover. The open end of the carrier is thus securely closed and when fitted or slipped into the
conveyer tube, the cover and carrier being in concentric position, the cover is locked and
is prevented from opening or from rotating about pivot e at least to such a degree as
is required to free the cover. Spilling or injury of the carrier contents is thus avoided.
The rib h can be formed as a head about the mouth to strengthen the shell.

A head is shown secured to or forming the closed end of the carrier. This head can be
practically formed by plates or disks k, Fig. 8, which, sitting against opposite faces of
flange or flanged end I of shell a, can be held together by a screw or bolt m. While capable
of rotating with respect to shell a, the head-pieces l k are prevented from rotating with
respect to one another by an eccentric-pin or, better, two pins o, secured to or extending
from one piece and engaging the other. This rotary head is provided with an indicator,
which at the same time releasably locks the head against accidental rotation. The lock is
formed by an eye or perforation p in the shell, which when engaged by one of the plungers q
locks the head. The seats for the plungers are mounted on or formed in head-plate k, and
the springs s impel the plungers outward or cause a plunger to snap into the eye p when
registering therewith. These plungers carry designations such, for example, as letters or
numbers or other defined mark and a plunger sitting in eye p will of course expose the
respective mark on its outer end, so that, for example, the destination or station or other
desired information regarding the carrier or its contents can be noted. The spring-im-
pelled plungers should be made non-rotatable to avoid confusion or error as, for example,
by the number "6" becoming reversed and reading "9" or the like. By making the plun-
ger-seats and the plungers q seated or fitted therein non-circular or with a flat or angular
part rotation is prevented, while the longitudinal or spring motion caused by spring s is
free to take place as required. To free the head, it is only necessary to press a finger or
thumb through eye p to depress the respective plunger within the wall of shell a, and the
head can then be turned until another plunger is allowed to snap to locking position or
engage the perforated shell.

The packing, such as felt or other suitable
material used in pneumatic carriers, is shown at t. The nut or screw m above mentioned secures the packing or disk k to the head i, and the eccentric-pins v, extending into such felt or disk k, prevent rotation of the packing. The nut m, seated in the packing, can be covered by a suitable plug u, glued or secured in place.

At the cover b are shown eccentric-studs v' and nut or bolt m', acting like the corresponding parts v and m to secure the packing at the cover. The screw m' at the cover is of course so flattened or countersunk at its inner end as not to interfere with the cover rotating about pivot e or gliding on the strap c. The packing has been removed from the cover in Figs. 5 and 6 for clearness in illustration; but in Fig. 2 the packing is shown at the cover. The eccentric-pins v can be located at some distance from the center or axis, so as to effectively prevent the felt working loose or rotating about the central screw or bolt m. The eccentric-studs need not extend through the packing, but only pierce into the same sufficiently to secure firm hold or lock against rotation.

By having designations on the plungers and making the latter removable and replaceable or exchangeable other plungers could be substituted or designations changed as called for.

What I claim as new, and desire to secure by Letters Patent, is—

1. A carrier having a rotary head provided with a series of radially-arranged seats, indicator-plungers mounted in the seats and made to lock the head against rotation, and springs in the bottom parts of the seats and made to act against the tails of the plungers, substantially as described.

2. A carrier having a cover and a rotary head, and an indicator made to lock the head against rotation substantially as described.

3. A carrier having an eye or perforation, a rotary head provided with a seat, and a spring-impelled plunger mounted in the seat and made to engage the eye substantially as described.

4. A carrier having a perforated shell, a rotary head having a seat, and a spring-impelled plunger in the seat made to engage the perforated shell and provided with a designation to act as an indicator showing through said perforation substantially as described.

5. A carrier having a perforated shell, a rotary head having a seat, a longitudinally-movable plunger non-rotatably mounted in the seat, and a designation at the end of the plunger, the latter being made to engage the shell for locking the head and exposing the designation substantially as described.

6. A carrier having a rotary head composed of disks or sections secured together so as to be non-rotatable with respect to one another, eccentric-pins secured to the outer section so as to be clear from or unattached to the inner section, a packing engaged by said pins, and a central screw or bolt for securing the packing substantially as described.

7. A carrier provided with a head composed of sections central screw or bolt and eccentric-studs riveted to the outer section and clear of the inner section, a packing disk engaged by the studs and secured by the screw, and a covering-plug for the screw substantially as described.

9. A carrier having a rotary head with a spring-propelled locking-plunger, the latter being provided with a designation and made removable whereby the designation can be changed substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALBERT W. PEARSALL.

Witnesses:

W. C. HAUFF,
CHAS. E. POENSGEN.