W. A. BROWN.

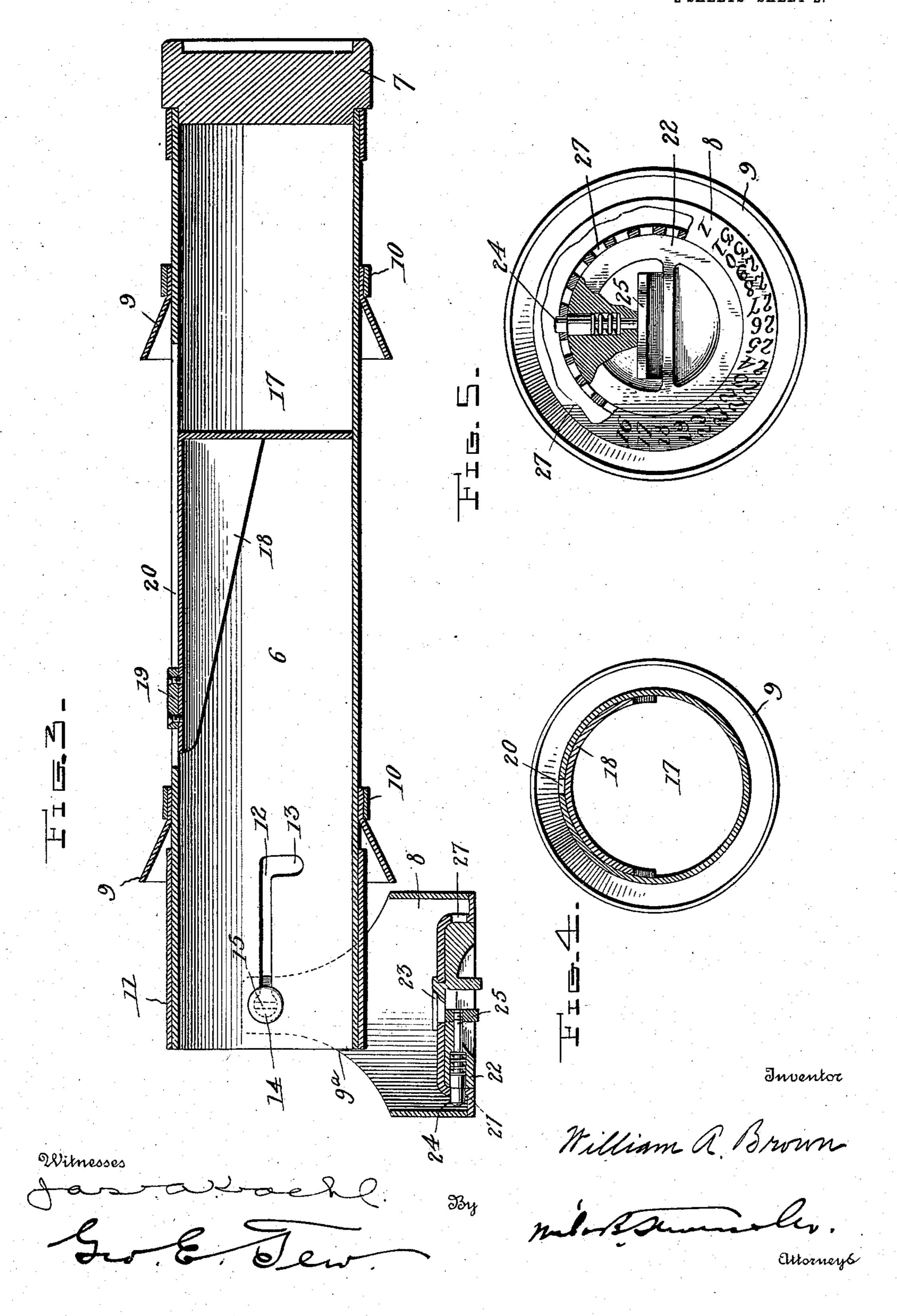
CARRIER FOR PNEUMATIC TUBE APPARATUS.

APPLICATION FILED JAN. 28, 1907.

2 SHEETS—SHEET 1 William a. Brown. Witnesses

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2 SHEETS-SHEET 2



UNITED STATES PATENT OFFICE.

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CARRIER FOR PNEUMATIC-TUBE APPARATUS.

No. 867,225.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed January 28, 1907. Serial No. 354,434.

To all whom it may concern:

Be it known that I, William A. Brown, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Carriers for Pneumatic-Tube Apparatus, of which the following is a specification.

This invention relates to carriers used in pneumatic tube apparatus for the transportation of papers or other articles.

The object of the invention is to provide a carrier improved with respect to the location or position of the skirts of the carrier, so that it is not so apt to stop or stick at the curves in the tube. In existing carriers the skirts are usually placed at or close to the ends of the carrier, and when passing a curve in the tube the skirts tend to lift from the inner wall of the curve, allowing air to get by around the carrier, which thus stops or sticks at the curve. In the construction disclosed herein the skirts are placed nearer to the middle of the carrier. This causes them to stay in contact with the walls of the tube at all times, and also enables a longer carrier to be used than would otherwise be the case.

A further object of the invention is to provide an improved indicator for the carrier, to indicate the station where the carrier belongs or where it is to be sent.

A further object of the invention is to provide an improved cover for the carrier, which may be easily 30 and quickly opened to permit the insertion or removal of papers or other articles to be carried.

A further object of the invention is to provide an improved ejector for discharging papers or the like from the open end of the carrier, or for bringing such papers to position where they may be easily grasped.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is a perspective view of the carrier, closed. Fig. 2 is a side elevation with the cover open. Fig. 3 40 is a central longitudinal section. Fig. 4 is a cross section on the line 5—5 of Fig. 2. Fig. 5 is a detail in section of the indicator.

Referring specifically to the drawings, the tubular body of the carrier is indicated at 6, made of fiber or similar stiff material and having a cushion head 7 at the front end, and a removable cap 8 at the rear end.

Located at a considerable distance from each end of the tube are skirts 9 made of leather or the like and extending around the tube, and fastened in place by 50 bands 10 which clamp the front edge of the skirts. The rear edges or parts of the skirts are shaped to expand to fill the tube through which the carrier is designed to travel. By having two of the skirts

placed some distance from each end of the carrier there is no danger of an air space or passage being 55 formed on curves or otherwise through which air can escape or pass the carrier and so allow the same to stall or stop.

The rear end of the fiber tube is preferably covered with a metal cuff or sleeve 11, to stand the wear occa- 60 sioned by opening and closing the cap. This sleeve, and the fiber thereunder, have bayonet slots 12 having in addition to the usual offset portion 13 at the front end a round hole or enlargement 14 at the rear end. The cap 8 is cupped to fit over the end of the tube, and 65 has forwardly extending arms 9^a on opposite sides, at the end of which are studs 15 which project through the slots 12. The studs are headed on the inside so that they will not spring or slip out of the slots. The cap is held closed by sliding the same inwardly or for- 70 wardly over the open end of the tube and then turning the same to bring the studs within the offset parts of the bayonet slots. The parts are made to work with some friction so that the cap will stay closed when so set. To open the cap, it is turned and pulled out or rear- 75 wardly until the studs 15 reach the enlargement 14 at the outer ends of the slots; then the cap may be turned upon said studs as a pivot to swing the same laterally around beside the tube, as shown in Fig. 2, thereby uncovering the mouth of the tube and allowing free access 80 thereto.

To deliver the contents of the carrier, or allow the same to be easily released, I provide an ejector consisting of a disk 17, connected to an arm 18 which is provided with a finger piece 19 extending through a longitudinal slot 20 formed in the wall of the carrier shell 6. The disk is located or extends across the bore of the carrier, and by pushing the finger piece 19 toward the rear end of the slot 20 the disk will push against the papers or other articles in the carrier and act to eject the 90 same therefrom or to bring them close to the open end of the carrier where they can be readily reached by the fingers. The segmental shape of the arm 18 serves to hold the disk in proper crosswise position with respect to the interior of the carrier.

Each carrier has marked thereon the number of its home station, conveniently upon the sleeve 11, as indicated at 21. To indicate other destinations I provide a settable indicator on the end of the cap 8. This consists of a circular piece 22 set in a circular depression or seat in the end of the cap and pivoted by a rivet 23 at the center. The piece or disk 22 has a spring pin 24 which works radially in a recess therein and is provided with a finger piece 25 whereby it may be retracted. The outer end of the spring pin is arranged 105 to engage in one of a series of holes 27 formed in the

edge of the circular seat or depression in which the rotary piece fits, and the rim of the cap has a series of numbers corresponding to the holes referred to. The rotary piece 22 also has an index 28, to indicate any one of the numbers.

To set the carrier for a special station the spring latch pin 24 is retracted and the rotary piece 22 is turned until the index 28 is pointed to the number of the station desired. The latch is then released and engages

in the corresponding hole, thereby retaining the indicator at the number set. The carrier is then sent to central station and from there it is forwarded to its destination. On the return, the indicator is set for the home station and dispatched thereto through the central station as usual.

The scope of the invention is not limited to the exact embodiment shown or described, but may be modified in construction in various ways without departing from the spirit of the invention nor from the scope of the following claims.

I claim:

1. A carrier having a slotted tube, and an ejector movable back and forth in the tube and having a finger piece extending through the slot.

25-2. A carrier tube having a longitudinal slot therein, and a disk extending across the tube and movable back and

forth therein and having a finger piece connected thereto and extending through the slot.

3. A carrier comprising a tube open at one end, and a cap slidable on and off said open end and pivotally connect 30 ed to the tube, to swing laterally beside said end.

4. A carrier comprising a tube open at one end and having bayonet slots in the walls thereof, and a swinging cap slidable on and off said end and having arms with pivot studs extending into the slots and slidable therein to close 35 or open the cap.

5. A carrier comprising a tube open at one end and having bayonet slots in opposite sides, said slots having enlargements in their outer ends, and a cap having arms on opposite sides of the tube with stude extending through 40 the slots and slidable therein to allow the cap to be slid on or off the end of the tube, the stude acting as pivots when in the enlargements, to allow the cap to swing around laterally beside the tube.

6. The combination with a carrier cap having a depressed circular seat therein and a series of holes and marks around the edge of said seat, of a turning member in said seat, having an index for said marks and a latch pin engageable in any of said holes and a finger piece projecting rearwardly from the pin and through said member. 50

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM A. BROWN.

Witnesses:

C. H. SMITH,

H. G. BATCHELOR.