(No Model.)

A. B. CAMPBELL.

TERMINAL FOR PNEUMATIC DESPATCH TUBES.

No. 563,359. Patented July 7, 1896.

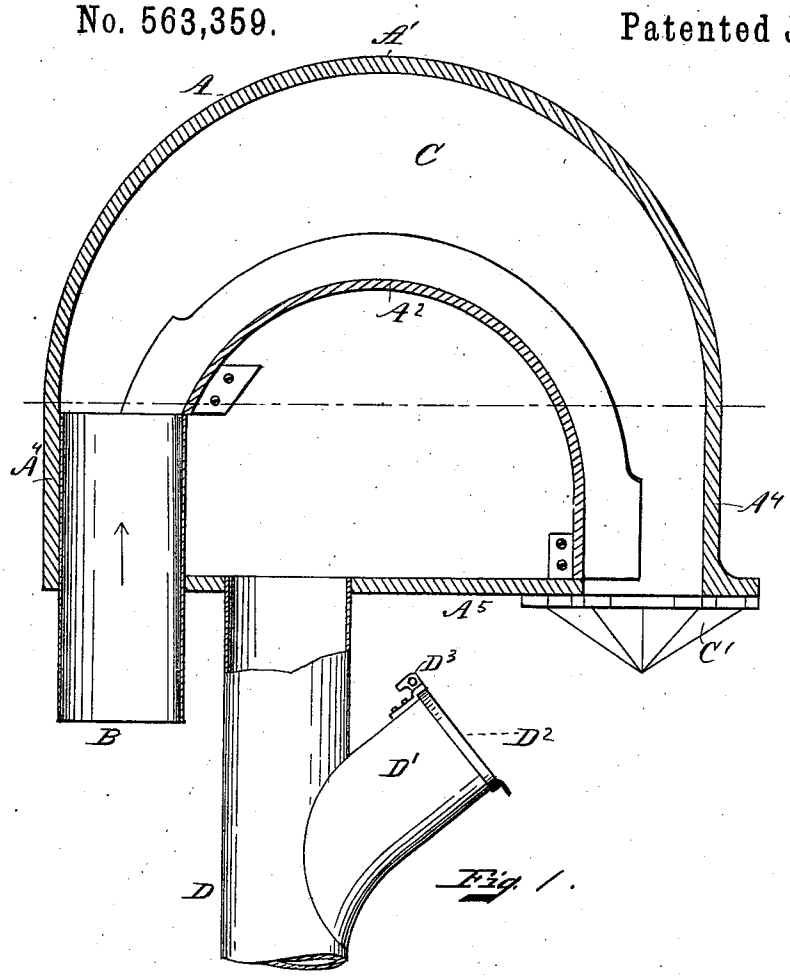

Fig. 1.

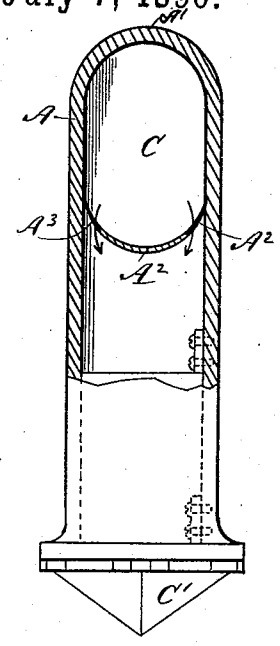

Fig. 2.

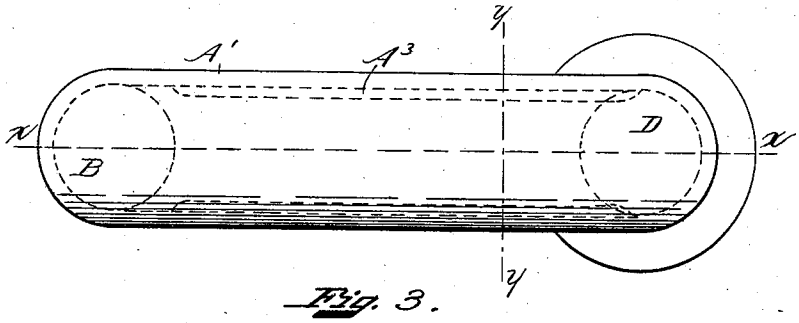

Fig. 3.

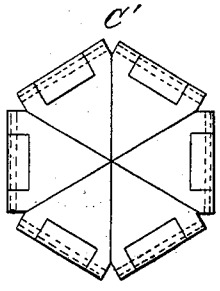

Fig. 4.

Witnesses.
L. H. Trow
E. L. Harlow

Inventor.
Annie B. Campbell
By J. Stewart Rust
and
Edwin C. Gilman, Attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AMMI B. CAMPBELL, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE METEOR DESPATCH COMPANY, OF BOSTON, MASSACHUSETTS.

TERMINAL FOR PNEUMATIC-DESPATCH TUBES.

SPECIFICATION forming part of Letters Patent No. 563,359, dated July 7, 1896.

Application filed July 28, 1893. Serial No. 481,793. (No model.)

To all whom it may concern:

Be it known that I, AMMI B. CAMPBELL, of Lowell, county of Middlesex, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Terminals for Pneumatic-Despatch Tubes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in terminals for pneumatic-despatch tubes; and it consists of certain novel features, arrangements, and combinations hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 represents a central longitudinal section through the terminal on the line *x x*, Fig. 3. Fig. 2 is a cross-section on the line *y y*, Fig. 3. Fig. 3 is a plan view of the terminal. Fig. 4 is an inverted plan view of the valve.

In the drawings like letters of reference refer to like parts throughout the several views.

The terminal A is provided with an inlet-tube B, leading to the center of the diameter of the case, as indicated by the broken line 1 2. This tube is carried to this point, so that the pressure therein will give sufficient momentum to the carrier that it will continue through the passage C to the valve C′, and if the current of air should be broken before the carrier passes beyond the center of the passage C the carrier will fall back into the inlet-tube B, where it will rest until the current of air is again restored, when it will at once resume its travel to the outlet-valve C′.

The terminal A consists of an outer curved guiding-plate A′ and an inner curved guiding-plate A^2, drawn on circles having different centers of curvature, so as to provide sufficient space in the upper part of the passage C that the carrier will not be obstructed. The ends A^4 of the outer plate A′ are brought down straight, as shown, after leaving the broken line 1 2, so that the carrier at the delivery end is delivered endwise to the valve C′, which is thereby opened by the impact of the carrier, after which the valve C′ closes by the pressure in the system.

In order to return the carrier to the station from which it is sent, the inner plate A^2 is perforated or cut away, as shown at A^3, so that the pressure will continue through the pipe D, secured to the base-plate A^5 of the terminal. The carrier to be returned is placed in the branch tube D′, covered by a self-closing clapper D^2, which has on the hinged side a projection D^3. This projection prevents the clapper being thrown back so far that it will not close by its own weight after the introduction of the carrier, which is necessary to keep up the current of air in the system for its proper working.

I do not limit myself to the exact arrangement and construction shown, as the same may be varied without departing from the spirit of my invention.

Having thus ascertained the nature and set forth the construction of my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A terminal for pneumatic-despatch-tube systems, having a base-plate provided with a discharge-outlet for the carriers and with openings in which are secured the inlet and return tubes, a curved inner plate having one end secured adjacent to the entrance of the inlet-tube and the other end secured adjacent to the base-plate and to the discharge-outlet, an outer curved guiding-plate which with the said curved inner plate forms a passage for the carriers through the terminal from the inlet-tube to the discharge-outlet, the said curved inner plate being cut away at its sides to provide an opening for establishing communication for the air-current between the said passage and the said return-tube, and a valve normally closing the said discharge-outlet in the base-plate.

2. A terminal for pneumatic-despatch-tube systems having a base-plate provided with a discharge-outlet for the carriers and with openings in which are secured the inlet and return tubes, curved inner and outer guiding-plates drawn on circles having different centers of curvature, the said curved inner plate having one end secured adjacent to the entrance of the inlet-tube and the other end secured adjacent to the base-plate and to the discharge-outlet and forming with the outer curved guiding-plate a passage for the car-

riers through the terminal from the inlet-tube to the discharge-outlet, the said curved inner plate being cut away at its sides to provide an opening for establishing communication for the air-current between the said passage and the said return-tube, and a valve normally closing the said discharge-outlet in the base-plate.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 14th day of July, 1893.

A. B. CAMPBELL.

Witnesses:
B. F. K. JENNINGS,
S. E. KIMBALL.