

No. 726,030.

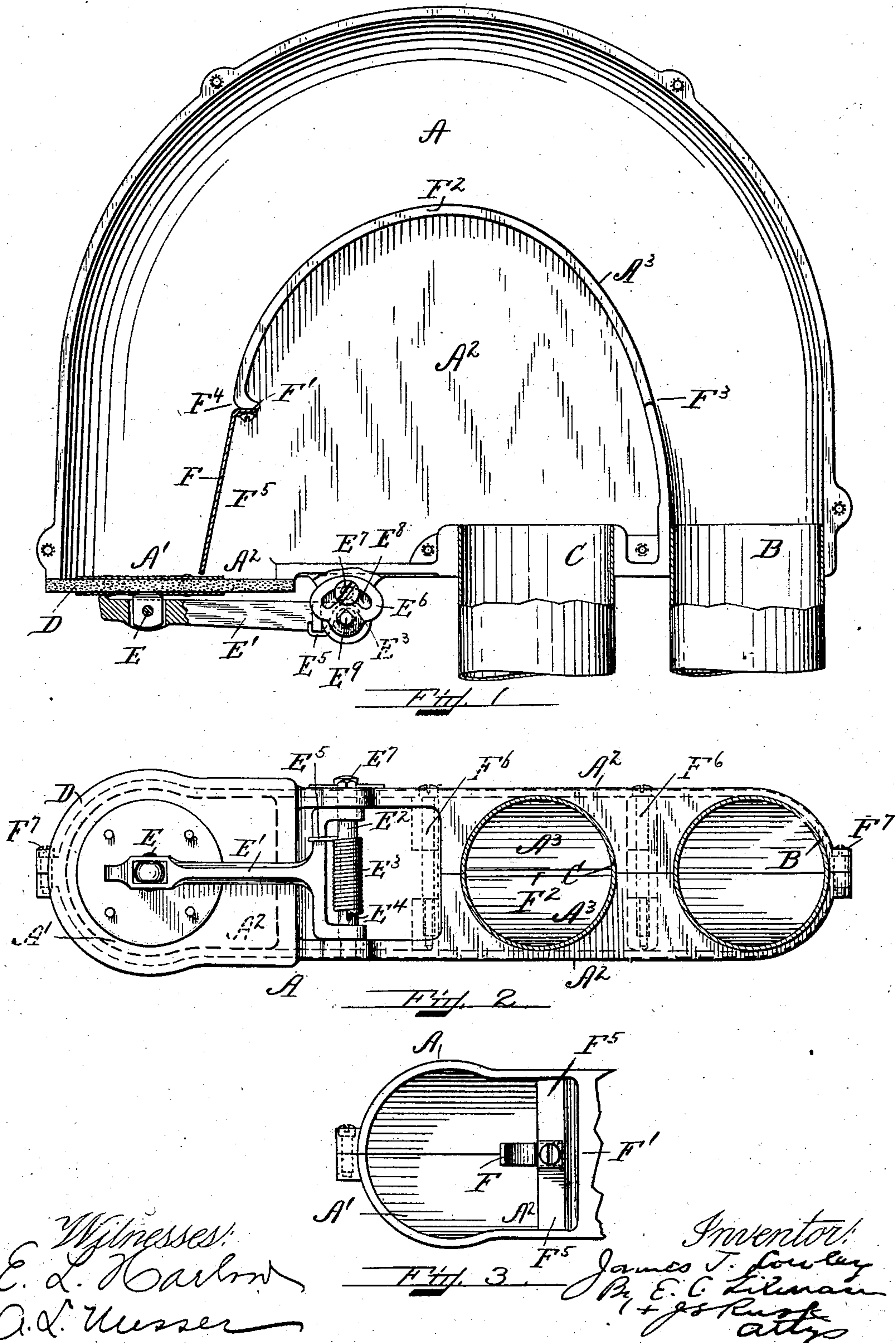
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J. T. COWLEY.

TERMINAL FOR PNEUMATIC TUBE APPARATUS.

APPLICATION FILED JAN. 16, 1902.

NO MODEL.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JAMES T. COWLEY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## TERMINAL FOR PNEUMATIC-TUBE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 726,030, dated April 21, 1903.

Application filed January 16, 1902. Serial No. 89,946. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES T. COWLEY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Terminals for Pneumatic-Tube Apparatus, of which the following is a specification.

My invention relates to new and useful improvements in terminals for pneumatic-tube apparatus; and its main object is to provide a terminal in which the carriers will readily drop through the outlet from the terminal and not be held in said outlet owing to suction. This and other objects are carried out by the construction illustrated in the drawings and hereinafter described.

My invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which illustrate a construction embodying my invention, Figure 1 is a view of the interior of an upward-discharge terminal with my improvement. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detail bottom plan view.

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

To the terminal A is connected a transmission-tube B, and to said terminal is also connected the return-tube C, through which the air passing from the tube around through the terminal A passes back. The outlet A' of the terminal A, through which the carriers are discharged, is closed by the valve D, pivoted at E to the forked lever E', mounted on the fixed shaft E<sup>2</sup>, and around said shaft is a spring E<sup>3</sup>, one end, E<sup>4</sup>, of which is connected to said shaft in a suitable slot and the other end, E<sup>5</sup>, of which bears against the forked lever E', so that the valve D is kept firmly in position. By means of the plate E<sup>6</sup>, held on the squared end of the shaft E<sup>2</sup> by the nut E<sup>9</sup> and provided with a slot E<sup>8</sup>, the tension of the spring can be regulated by moving the plate E<sup>6</sup> and tightening up the screw E<sup>7</sup> in order to return the valve D quickly to its closed position. In the interior of the terminal A is secured at F' the finger F, which extends downwardly, as shown, and guides the carrier outwardly and away from the interior of the ter-

terminal, and to the rear of said finger F there is an enlarged opening A<sup>2</sup>. (Shown in dotted lines, Fig. 2, and in full lines, Fig. 3.) By this arrangement when the carriers reach the outlet A' and strike the valve D the valve opens and the carrier readily and easily falls through the outlet as outside air passes through the enlarged opening A<sup>2</sup> and satisfies the vacuum and there is no suction or pull on the carrier discharging from the terminal.

Between the two sections of the terminal A, Fig. 1, is a slot F<sup>2</sup>, extending from F<sup>3</sup> to F<sup>4</sup>. This slot is formed between the two inwardly-projecting curved flanges A<sup>3</sup> on each section and is for the purpose of allowing a portion of the air to escape between the side walls A<sup>2</sup> of the terminal A into the return-tube C instead of compelling all the air to pass through the passage F<sup>5</sup> around the finger F to the suction-tube C, and thereby reduces the suction of the carriers as they pass the guiding-finger F.

The two half-sections composing the terminal A are united and held in position by suitable bolts F<sup>6</sup>, passing through suitable lugs in the inside of each section, and also by the bolts F<sup>7</sup> on the ends of the terminal and which are also secured in suitable lugs.

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

1. In an apparatus of the character described, a terminal composed of two sections and having a slot between its inwardly-curved flanges for the passage of air, a transmission-tube, a return-tube, an enlarged outlet from the terminal for the carriers, a valve closing said outlet, and means extending across the passage leading to the suction-tube for guiding the carriers to said outlet.

2. In an apparatus of the character described, a terminal composed of two sections and having a slot between its inwardly-curved flanges for the passage of air, a transmission-tube, a return-tube, an enlarged outlet from the terminal for the carriers, a valve closing said outlet, yielding means for returning the

valve to its closed position after the discharge of the carriers, and means extending across the passage leading to the suction-tube for guiding the carriers to said outlet.

- 5 3. In an apparatus of the character described, a terminal, a transmission-tube, a return-tube, an enlarged outlet from the terminal for the carriers, a valve closing said outlet, a spring for returning said valve to its  
10 closed position after the passage of the carriers, a shaft on which said spring is mounted, a plate mounted on said shaft and adapted to

be adjusted to vary the tension of said spring and provided with a slot, and a set-screw located in said slot for holding said plate in its  
15 adjusted position.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 13th day of January, A. D. 1902.

JAMES T. COWLEY.

Witnesses:

E. L. HARLOW,  
A. L. MESSER.