C. S. JENNINGS.

PNEUMATIC DESPATCH TUBE APPARATUS

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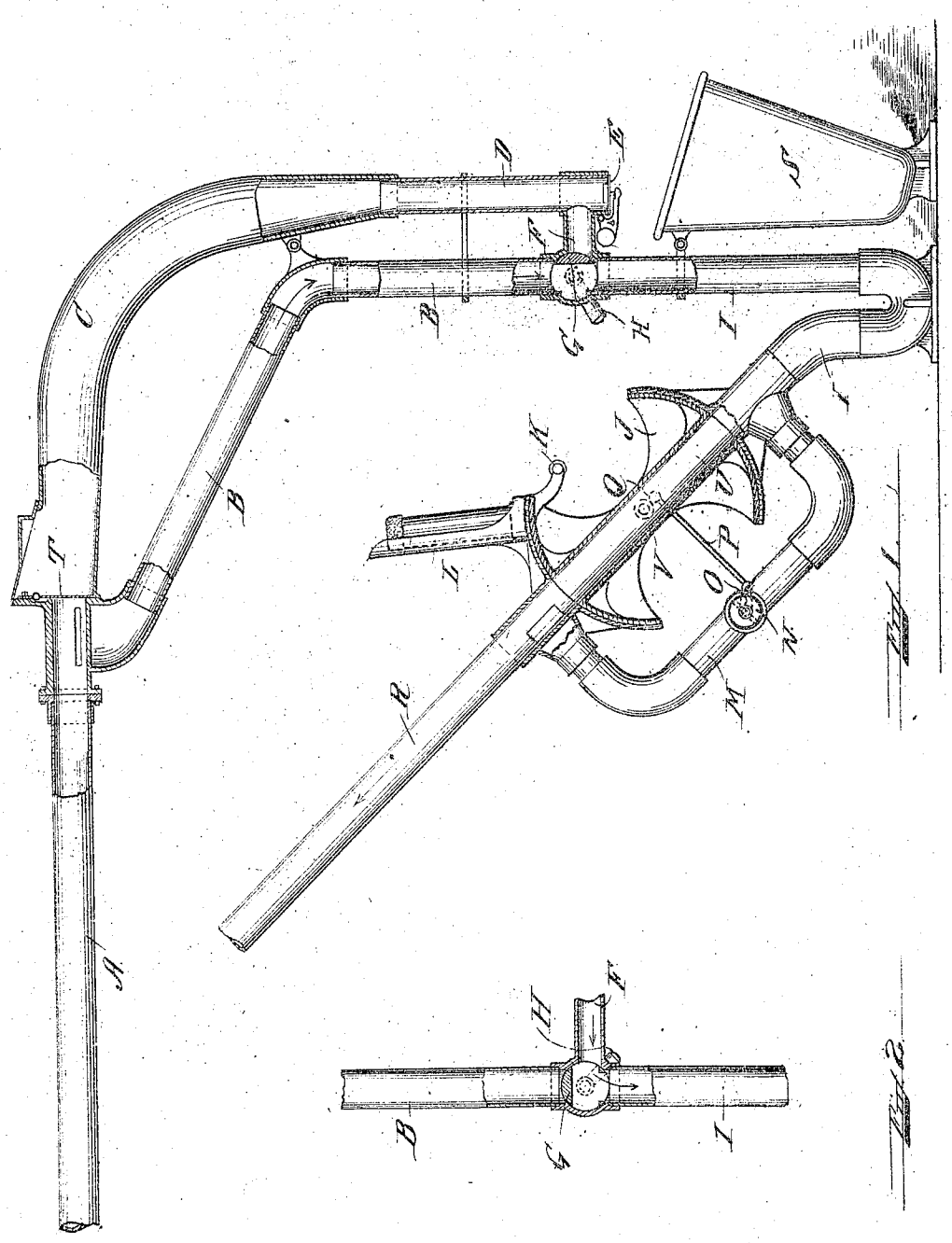
944,487. Patented Dec. 28, 1909.



Witnesses:
A. D. Wessen
G. R. Larrabee

Inventor:
Celestus S. Jennings
Edwin G. Siggers & Co.
By J. S. Reese Attys

UNITED STATES PATENT OFFICE.

CHESTER S. JENNINGS, OF BROOKLINE, MASSACHUSETTS, ASSIGNOR TO LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

PNEUMATIC-DESPATCH-TUBE APPARATUS.

944,487. Specification of Letters Patent. Patented Dec. 28, 1909.

Application filed January 6, 1906. Serial No. 294,884.

To all whom it may concern:

Be it known that I, CHESTER S. JENNINGS, of Brookline, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pneumatic-Despatch-Tube Apparatus, of which the following is a specification.

My invention relates to improvements in pneumatic despatch tube apparatus, and its principal objects are to enable a carrier to be despatched without breaking the air circuit; also to cushion and render noiseless the discharge of carriers from the terminals; also in the event of a carrier clogging in the terminal, to supply means whereby the air circuit may be switched to act directly upon the carrier in the terminal causing it to be properly discharged.

In the accompanying drawings which illustrate a construction embodying my invention, Figure 1 is a side elevation of the device partly in section shown in connection with a pneumatic despatch tube system. Fig. 2 is a sectional view showing the by-pass valve open and air circuit switched into the terminal.

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

The double valve terminal C is connected with the transmission tube A and is controlled by valves T and E. The suction tube B connects with the transmission tube A adjacent to the valve T and is also connected with the terminal C and adjacent valve E by means of the by-pass F. The by-pass F is controlled by the valve G operated by the handle H. Carriers discharged from the terminal C are received in the receptacle S. The suction tube I is connected with the suction tube B and is controlled by the by-pass valve G. The transmission tube R is connected with the suction tube I by means of the by-pass M and the valve N controls the said by-pass M. The despatching inlet J pivoted at V carries the section of the tube U which normally connects the transmission tube R with the suction tube I. This inlet J is operated by the handle K and adapted to swing into alinement with either tube R or holder L. The crank arm O controlling the valve N is connected with the crank pin Q on the inlet J by the rod P. The direction of the air circuit is indicated by arrows.

In despatching a carrier, the operator places it in the holder L. In the normal position of the inlet J as shown in Fig. 1, the by-pass M is closed by the valve N and the air circuit is passing through the pipe U. The handle K is now pulled by the operator until the section of pipe U is in alinement with the holder L and the carrier drops into the inlet. In the meantime, the valve N is opened by means of the connecting rod P deflecting the air circuit through the by-pass M. The inlet is now swung back into normal position closing thereby the valve N. The air circuit now passing through the inlet pipe U carries the carrier into the transmission tube R and thence to its destination. A carrier passing through the transmission tube A passes through the valve T and into the terminal C. Upon entering the tube D at the lower end of said terminal, the velocity of the carrier is checked and the carrier cushioned by means of the air therein causing the carrier to discharge easily and quietly through the valve E and into the receptacle S. In the event of a carrier clogging within the terminal or tube D, the valve G is moved from normal position as shown in Fig. 1, by means of the handle H, until it assumes a position as shown in Fig. 2 switching the flow of air from the tube B through the curve C, tube D and by-pass F. This action dislodges and causes the carrier to be discharged through the valve E.

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 a pneumatic despatch tube apparatus, a transmission tube, a double valve terminal connected therewith, a vacuum tube connected with said transmission tube adjacent to said terminal, and means for cutting off communication of said vacuum tube with said transmission tube, and switching the flow of air through said terminal.

2. In a pneumatic despatch tube apparatus, a transmission tube, a double valve terminal connected therewith, a vacuum tube connected with said transmission tube adjacent to said terminal, a by-pass connecting said vacuum tube with said terminal, and a valve normally closing said by-pass and adapted to cut off communication

of said vacuum tube with said transmission tube thereby switching the flow of air from said transmission tube through said terminal and said by-pass and into said vacuum tube.

3. In a pneumatic despatch tube apparatus, a transmission tube, a supply pipe, a pivoted or movable carrier holder normally in alinement with said transmission tube and said supply pipe and maintaining an air circuit therethrough, means for supporting said pivoted holder, a stationary carrier holder, means for swinging said pivoted holder into alinement with said stationary holder whereby the carrier enters the pivoted holder by gravity, a by-pass connecting said transmission tube with said supply pipe and normally closed, means for automatically switching the air circuit through said by-pass when said pivoted carrier is out of alinement with said transmission tube, and automatically closing said by-pass and switching said air circuit through said pivoted holder upon return of said holder to normal position whereby said carrier is despatched into said transit tube.

4. In a pneumatic despatch tube apparatus, a transmission tube, a valved terminal connected therewith, a vacuum tube connected with said transmission tube adjacent to said terminal, a by-pass connecting said vacuum tube with said terminal, a valve normally closing said by-pass, pivoted means for introducing the carrier into said transmission tube, and connections between said pivoted means and said by-pass valve for opening said by-pass valve upon the movement of said pivoted means to receive a carrier for transmission.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 26th day of December A. D. 1905.

CHESTER S. JENNINGS.

Witnesses:
H. D. WATERHOUSE,
H. R. DUNBAR.