

(No Model.)

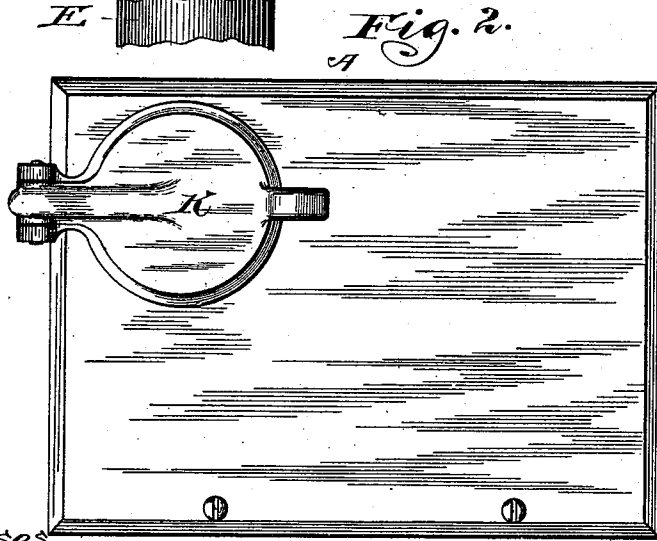
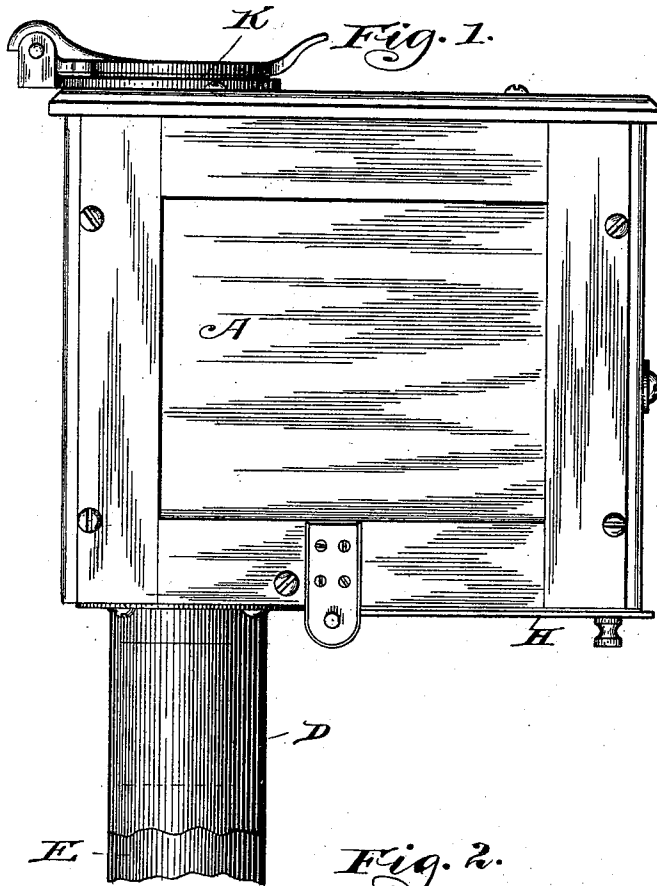
2 Sheets—Sheet 1.

L. G. BOSTEDO.

RECEIVING AND DISPATCH BOX FOR PNEUMATIC DISPATCH SYSTEMS.

No. 523,457.

Patented July 24, 1894.



Witnesses,
J. J. Maus,
S. W. Brainard,

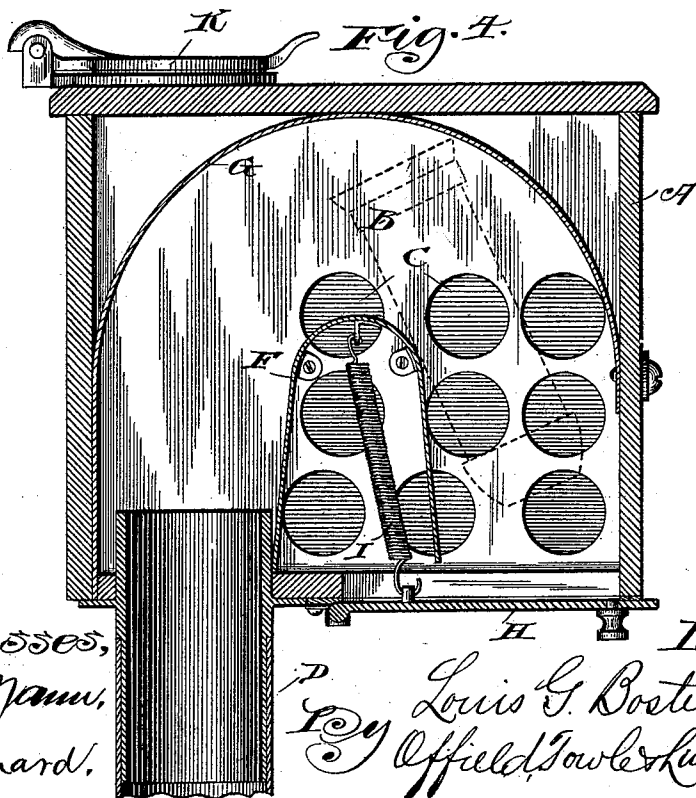
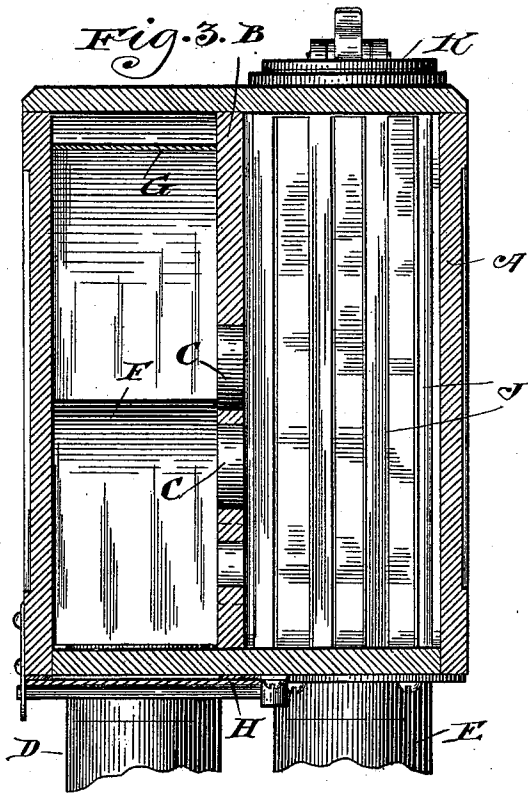
Inventor,
Louis G. Bostedo,
By Alfred Towle & Luthicum

L. G. BOSTEDO.

RECEIVING AND DISPATCH BOX FOR PNEUMATIC DISPATCH SYSTEMS.

No. 523,457.

Patented July 24, 1894.



Witnesses,
D. J. Mann,
S. M. Brainard.

Inventor,
Louis G. Bostedo,
 By *Offield, Fowler & Hutchinson,*
Attys.

UNITED STATES PATENT OFFICE.

LOUIS G. BOSTEDO, OF CHICAGO, ILLINOIS.

RECEIVING AND DISPATCH BOX FOR PNEUMATIC DISPATCH SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 523,457, dated July 24, 1894.

Application filed January 16, 1893. Serial No. 458,538. (No model.)

To all whom it may concern:

Be it known that I, LOUIS G. BOSTEDO, of Chicago, Illinois, have invented certain new and useful Improvements in Receiving and Dispatch Boxes for Pneumatic Dispatch Systems, of which the following is a specification.

This invention relates to a combined dispatch and receiving box for pneumatic dispatch systems which can be used by the salesman or at the cashier's station.

The object of the invention is to provide a combined receiving and dispatch box which is so constructed and arranged that the moving force is constantly exerted upon the carrier until the latter is brought into position where it is automatically discharged by gravity and in which the dispatch of a carrier from the box does not interfere with the simultaneous delivery of a carrier to the same.

In carrying out the invention I provide a box or case so constructed as to be air tight and having its interior divided into two compartments by a transverse partition with perforations therein through which the air may escape from one compartment of the box to the other and having a connection for a receiving tube which delivers into one compartment of the box opposite an imperforate portion of the partition. Curved guide plates are arranged within that compartment which receives the carriers and are so constructed as to guide and deflect the carrier after it enters the box to cause it to discharge by gravity through an aperture covered by a spring controlled door. In the other compartment of the case are preferably arranged straight guide strips which direct the carrier to be sent, from a trap or door in the top of the box to the dispatch tube which communicates with said compartment through an aperture in the wall opposite said trap or door.

In the accompanying drawings, Figure 1 is a side elevation of the box with the receiving and dispatch tubes broken away. Fig. 2 is a plan view. Fig. 3 is a transverse section through the outside walls and partition of the box and through one of the curved plates and showing the guide strips in elevation. Fig. 4 is a vertical section through the box or case lengthwise showing the perforated partition in elevation and the receiving tube and curved guides in sectional elevation.

In the drawings, A represents the inclosing walls of the box.

B is a partition which divides the box longitudinally into two compartments into one of which the carrier is received and through the other of which the carriers are discharged. These compartments have communication through the apertures C which are formed in the partition at the lower front corner of the box.

D indicates the receiving tube and E the dispatch tube, which communicate with their respective compartments through the bottom wall of the box.

Within the receiving compartment are arranged the curved guide plates F, G, which are so arranged as to form a practical continuation of the receiving tube so as to direct the carrier toward the lower front corner of that compartment in the bottom wall of which is arranged the hinged door H which is controlled by the spring I. The carrier which is impelled through the receiving tube is delivered into the compartment under the action of exhaust and will be deflected by the guides above mentioned to cause it to pass between them. The moving force is exerted until the carrier has passed over the apex of the lower guide when the carrier will be directed against the door H, the momentum which it has attained under the moving force being sufficient to carry it around the guide and cause it to strike the door with such force, as assisted by gravity will open the door against the action of the spring and discharge the carrier from the box. As the two compartments of the box are in communication, if the apparatus be working under exhaust, this force may be freely exerted to direct the carrier around its curved path by reason of the provisions of the apertures C and of the fact that the other compartment of the box is in open communication with the discharge or distributing tube E.

J represents straight guide strips which form a perforated cylinder to direct the carriers to the dispatch tube E.

K represents a hinged door at the top of the box through which the carriers are deposited within the cylindrical guide J. Thus the exhaust operates not only to draw the carriers out through the tube E, but also acts con-

stantly upon the carrier which is being delivered to the box through the tube D until such carrier is discharged. The exhaust operates therefore to hold both of the doors closed while the spring is an auxiliary device and assists to close the door quickly. The apertures in the partition wall and the slits in the cylindrical guide are of sufficient size to permit the free movement of the air through them, and the area of the apertures in the partition and the combined area of the apertures in the guide should be respectively greater than the respective areas of the tubes which communicate with the box. In practice I make them double in order to compensate for friction.

The apparatus is placed in the position shown, either at the salesman's station or at the cashier's desk or both, and will be arranged so as to be most convenient to the salesman and cashier. The box might be used in other positions than that shown, as the force which moves the carriers through the tube operates as efficiently in moving the carrier through the box, minus of course the friction of the carrier upon the curved walls of the delivery tube within the box, and a slight leakage of motor fluid around the carrier while passing between the curved guides. The device is therefore not solely dependent upon gravity for the delivery of the carriers but acts positively and therefore with greater certainty and efficiency than a gravity device. The form of the guides may be somewhat varied and other of the structural features may be modified.

It is obvious that instead of arranging the door in the bottom wall that it might be arranged in the front wall of the case and when so arranged it would not be necessary to employ a spring to assist its closing as it might be so arranged that the action of gravity would assist to close it.

I claim—

1. A combined receiving and dispatch box for pneumatic dispatch systems having its interior divided into two compartments by a

partition wall, a receiving tube delivering into one of said compartments, near its bottom a normally closed discharge aperture in said compartment and a curved guide arranged therein between the receiving tube and the discharge aperture whereby the direction of the carrier is changed, a suction tube communicating with the other of said compartments, an aperture therein for placing the carrier to be dispatched and the partition having apertures therein for the passage of the motor fluid from one compartment to the other, substantially as described.

2. A combined receiving and dispatch box for pneumatic dispatch systems having its interior divided into two compartments by a perforated partition, a receiving tube communicating with one of said compartments near its bottom, a discharge aperture in the bottom wall of the receiving compartment, a curved guide arranged in said compartment between the receiving and discharge apertures, a spring controlled door for the discharge aperture, a suction tube communicating with the other of said compartments, and an aperture for placing the carrier to be discharged, substantially as described.

3. A combined receiving and dispatch box for pneumatic dispatch systems having a perforated partition therein, a receiving tube communicating with said case through its bottom wall and adjacent to an imperforate part of said partition, curved guide plates arranged in the compartment with which the receiving tube communicates, a discharge door arranged in the bottom wall of the case in the receiving compartment, a dispatch tube communicating with the other of said compartments, and a door or valve affording access thereto, the perforations being arranged in the lower end of the partition substantially as and for the purpose described.

LOUIS G. BOSTEDO.

Witnesses:

N. M. BOND,
L. F. MCCREA.