

(No Model.)

N. D. WELLS.
PNEUMATIC DISPATCH TUBE.

No. 497,845.

Patented May 23, 1893.

Fig. 2.

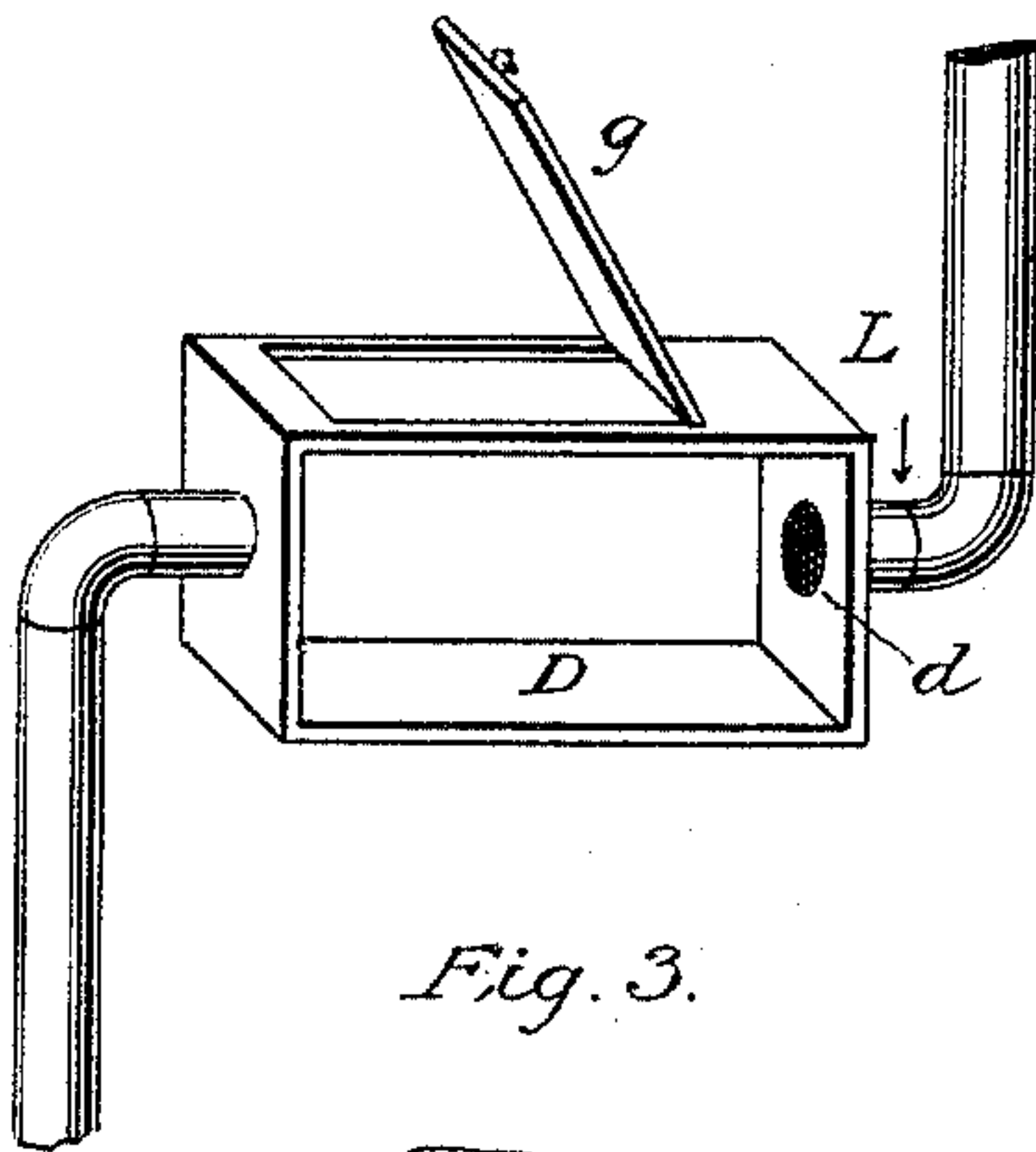


Fig. 3.

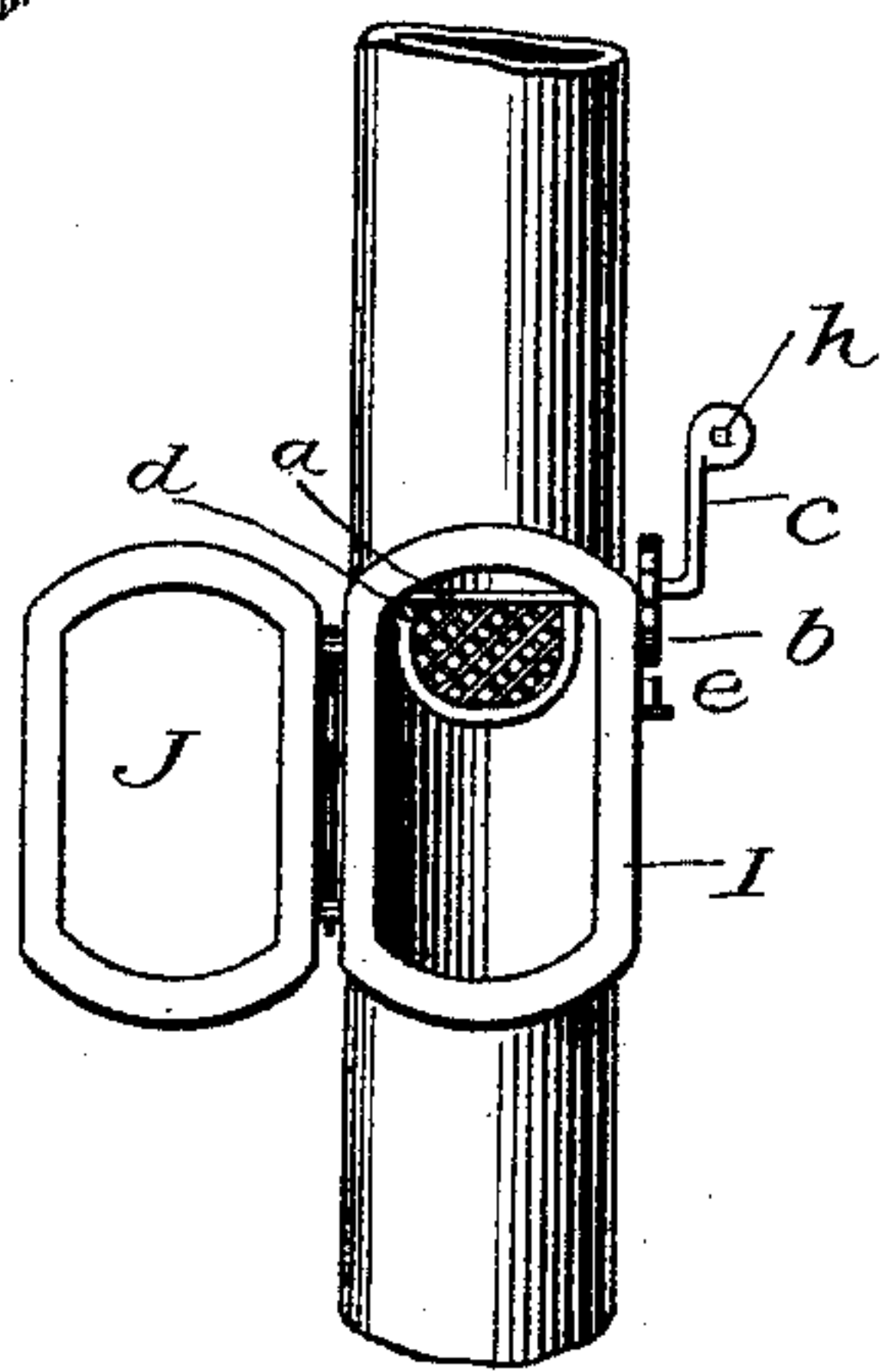


Fig. 4.

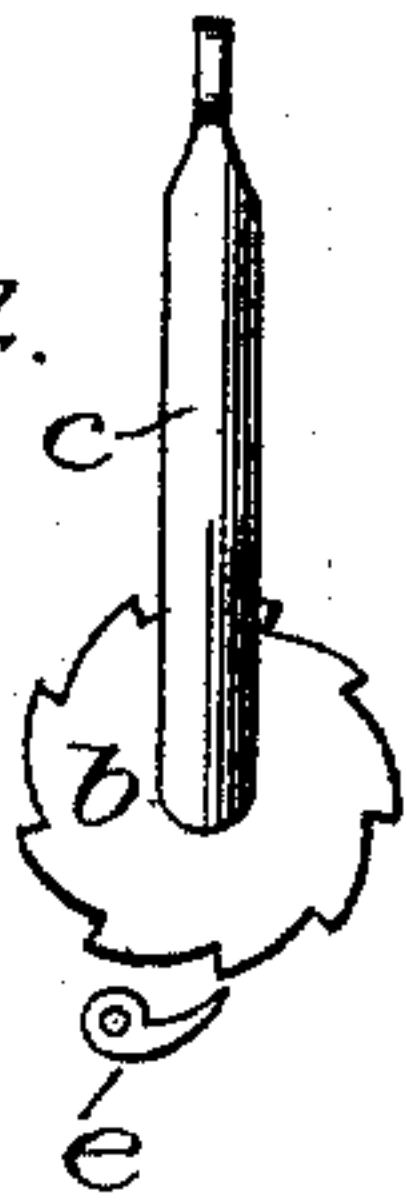
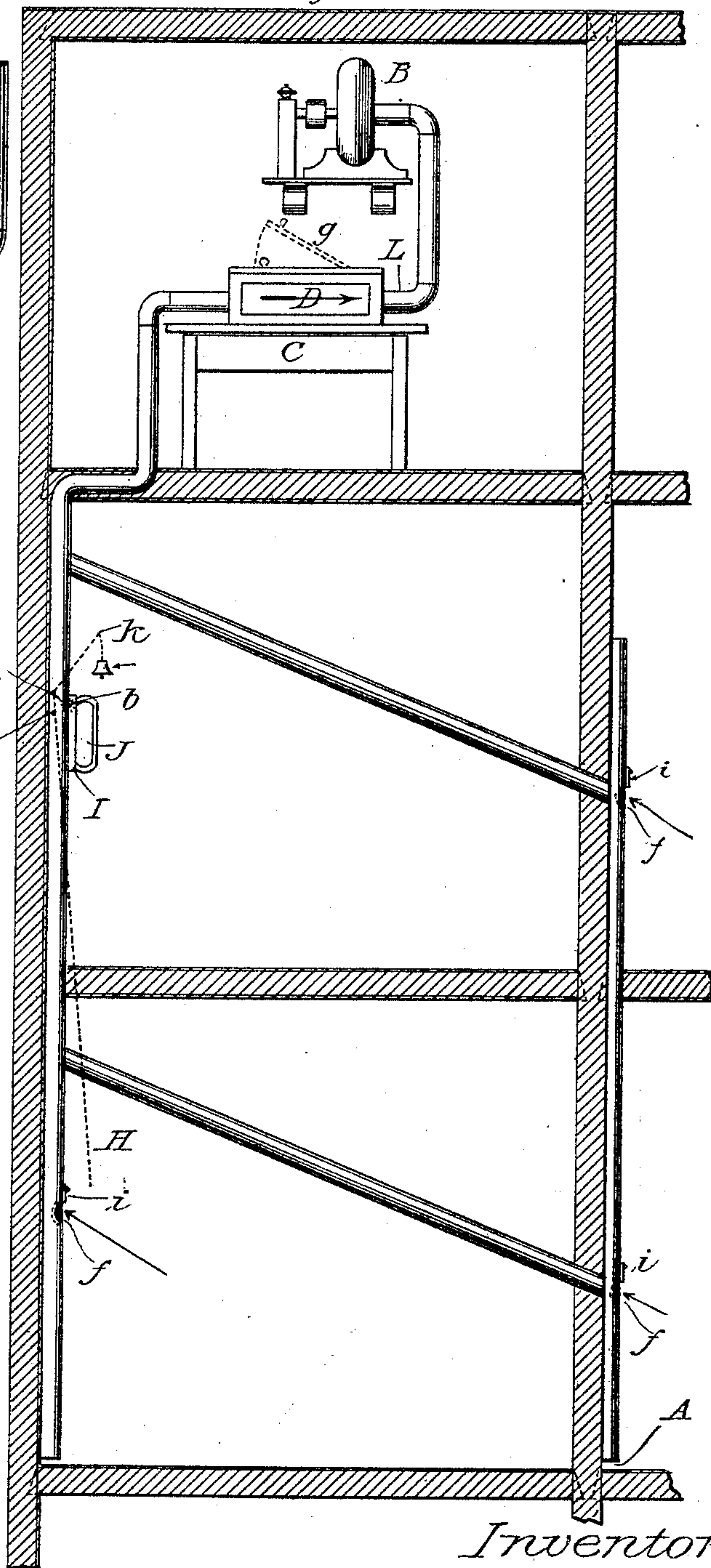


Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

NELSON D. WELLS, OF DAYTON, OHIO.

PNEUMATIC DISPATCH-TUBE.

SPECIFICATION forming part of Letters Patent No. 497,845, dated May 23, 1893.

Application filed May 21, 1892. Serial No. 433,933. (No model.)

To all whom it may concern:

Be it known that I, NELSON D. WELLS, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Pneumatic Dispatch-Tubes, of which the following is a full, clear, and exact description.

My invention relates to improvements in a system of pneumatic dispatch tubes including an exhaust fan, and main, and branch tubes adapted to carry messages written on paper, envelopes, newspapers, or any other light material from any point where introduced into the pipes, to any desired place arranged for receiving same.

The invention consists in certain novel features of construction and combination of parts of the pneumatic tubes, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts of all the figures.

Figure 1. is a vertical sectional view of the complete system. Fig. 2. is a view of the main receiving box. Fig. 3. is a sectional view of the intermediate receptacle for arresting messages, newspapers, &c. Fig. 4. is a sectional view of the ratchet wheel, showing spring ratchet and ratchet crank.

This system provides for a main tube and as many branch tubes as are desirable, or convenient, for the building in which constructed.

In A. A. is shown the beginning or lower ends of the tubes which are left open for the free ingress of air in order to produce a continuous current when the exhaust fan is in motion.

B. is the exhaust fan which is the motive power for producing a continuous current and C. is a table or platform on which rests the main receiving box.

Openings in the main and branch tubes for introducing messages for the main or intermediate receiving boxes are indicated by the letters, *fff*, and these openings, when not in use, are covered by drop slides *iii* fastened to the pipes on pivotal bolts.

As stated previously, this system provides for a continuous current of air from the bot-

tom, or beginning of the tubes to the exhaust fan, and D. is the main receiving box, located on the top floor, or nearest the exhaust fan. This receiving box is provided with glass sides *j* in order to readily see any articles which may be sent to this box.

The intermediate receptacles may be put on the main or branch tubes at any point desired for convenience, and are arranged as follows: A metal frame, I, with a hinged glass door, J, is fitted into an opening in the tube. Through the upper part of the frame I. is passed a pivotal rod *a*, to which is fastened the wire screen *d*; also on the end of the rod *a* is fastened a ratchet wheel *b*, to which is secured a crank *c* through the end of which is a round hole *h*. The ratchet wheel *b* holds the screen *d* open, as seen in Fig. 3, by means of a spring pawl *e*. Connected with each intermediate receiving box is a pull cord H which is fastened to the crank *c* in hole *h* running from thence over the pulley *k* to bell K. It is designed, ordinarily, for the pivotal screen *d* to be open and the glass door J. of the intermediate receiving box, to be closed.

When it is desirable to send a message to any one of the intermediate receiving boxes, the operator takes hold of the pull cord H, connected with the box, to which he desires to send a message, and draws it downward ringing the bell K, notifying the operator in that room of the receipt of a message, and at the same time, draws the crank *c* from a vertical to a horizontal position, closing by means of a ratchet wheel *b* the screen *d* thus preventing the message passing beyond the box to which it was desired to send it. At the time of drawing the pull cord downward, the operator will raise the drop slide *i* and insert the message in the opening *f*, when it is immediately carried upward by the exhaust fan to the desired place for receiving same. After receiving the message, operator No. 2 will open screen *d*, setting the ratchet spring *e* to hold it in position, close the glass door J. which allows an uninterrupted current from the bottom of the tubes to the main receiving box D. to which point messages and other like material may be sent without notification on the part of the operator dispatching same.

I am aware that prior to my invention, pneu-

matic systems, constructed for the purpose of carrying light materials, have been made. I, therefore, do not claim such a combination broadly; but

5 What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination, in pneumatic dispatch tubes, of an intermediate receptacle I., having a glass door J, a wire screen *d*, on a piv-

otal rod *a* connected with a ratchet wheel *b*, 10 having a spring ratchet *e* and crank *c*, operated by a pull cord H., connected to a bell K., substantially as described.

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Witnesses:

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E. D. HYRE.