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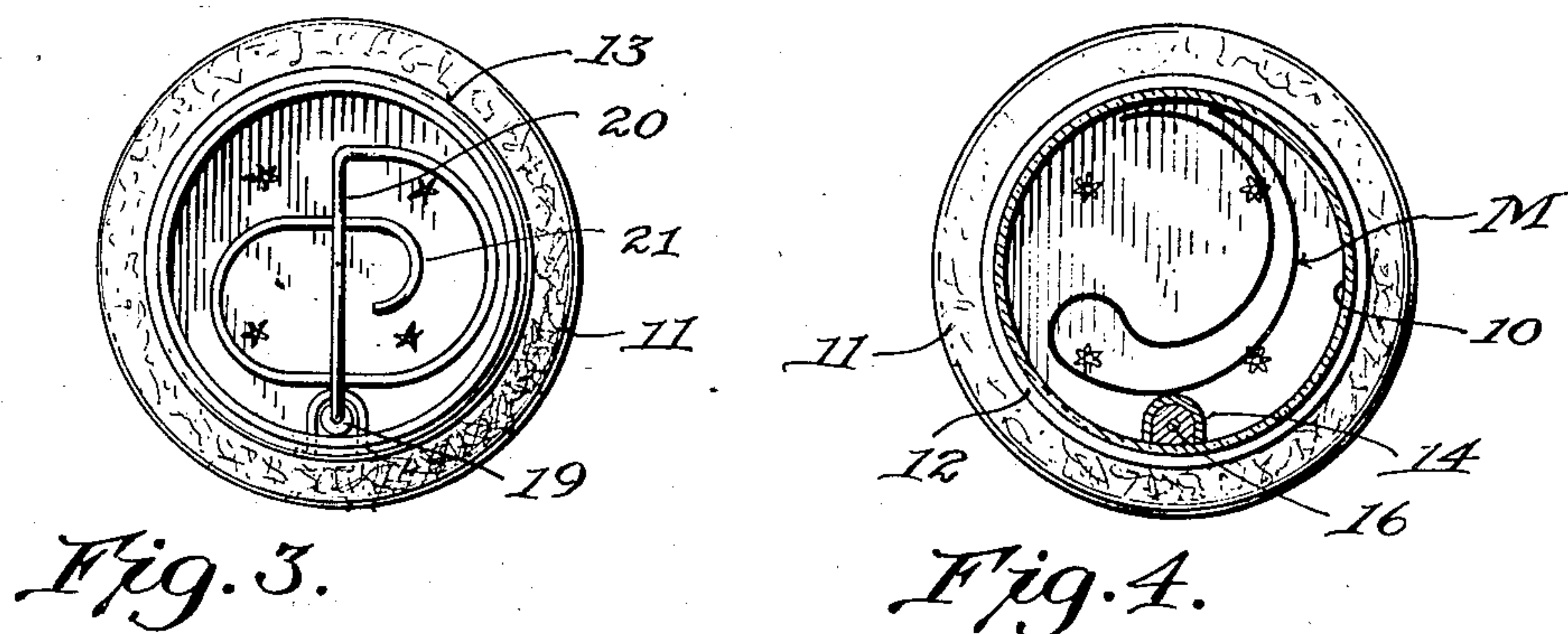
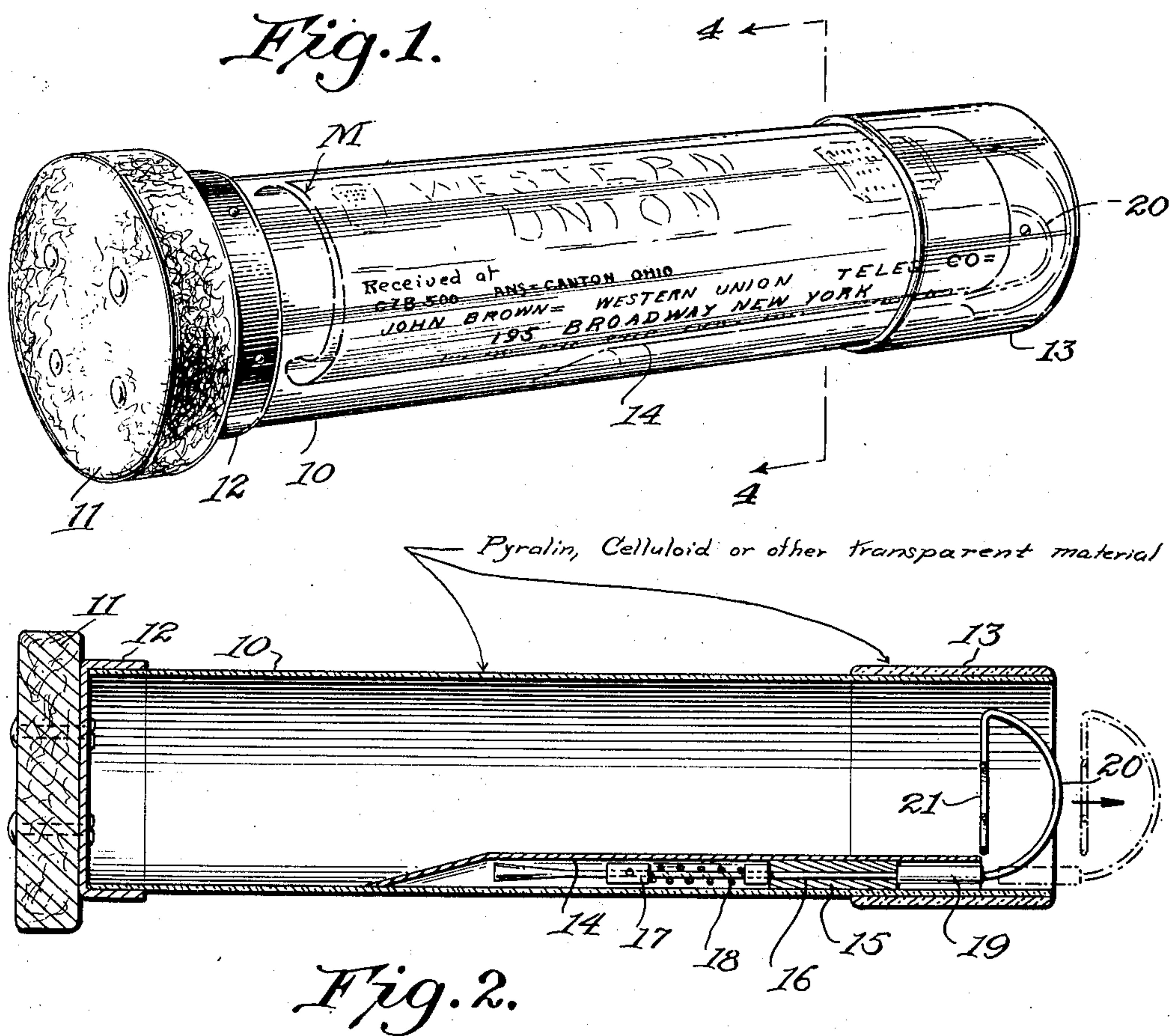
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1,745,786

PNEUMATIC DISPATCH CARRIER

Filed April 12, 1929

2 Sheets-Sheet 1



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Fig. 5.

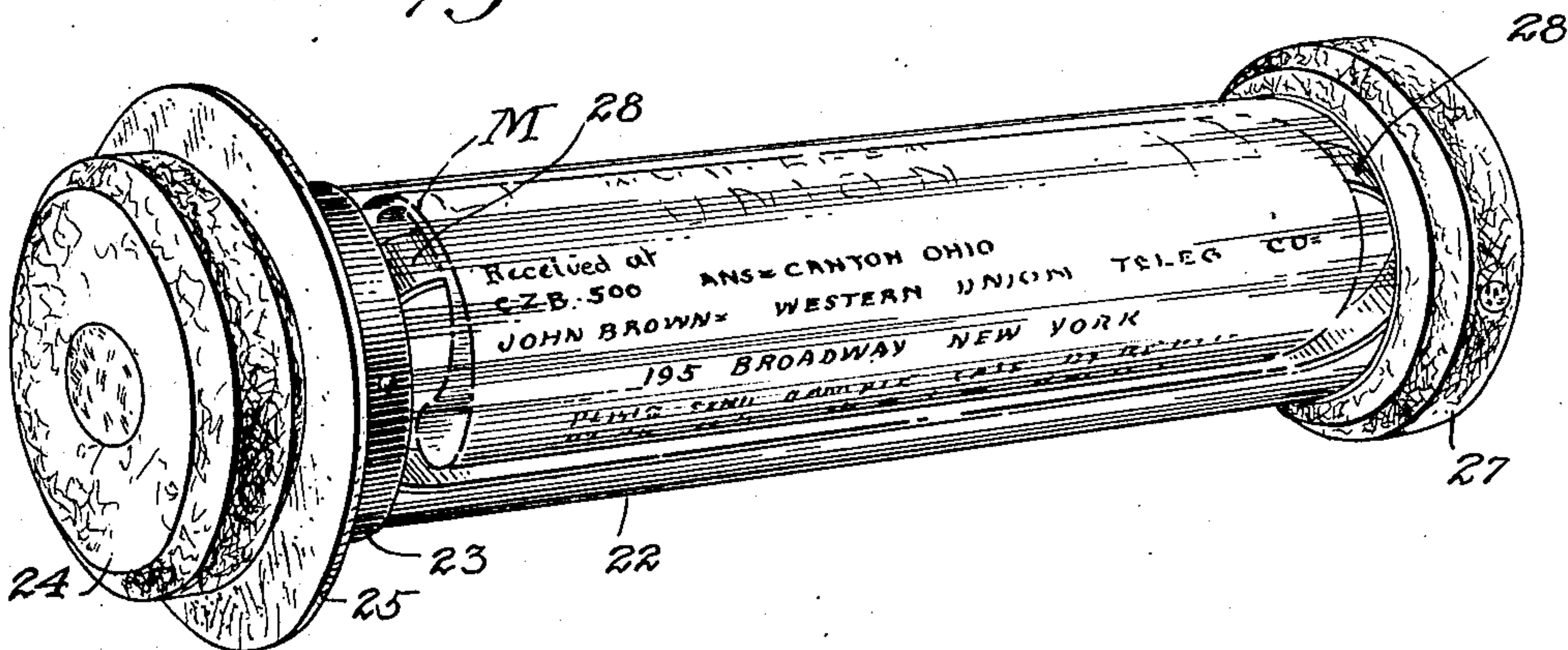


Fig. 6.

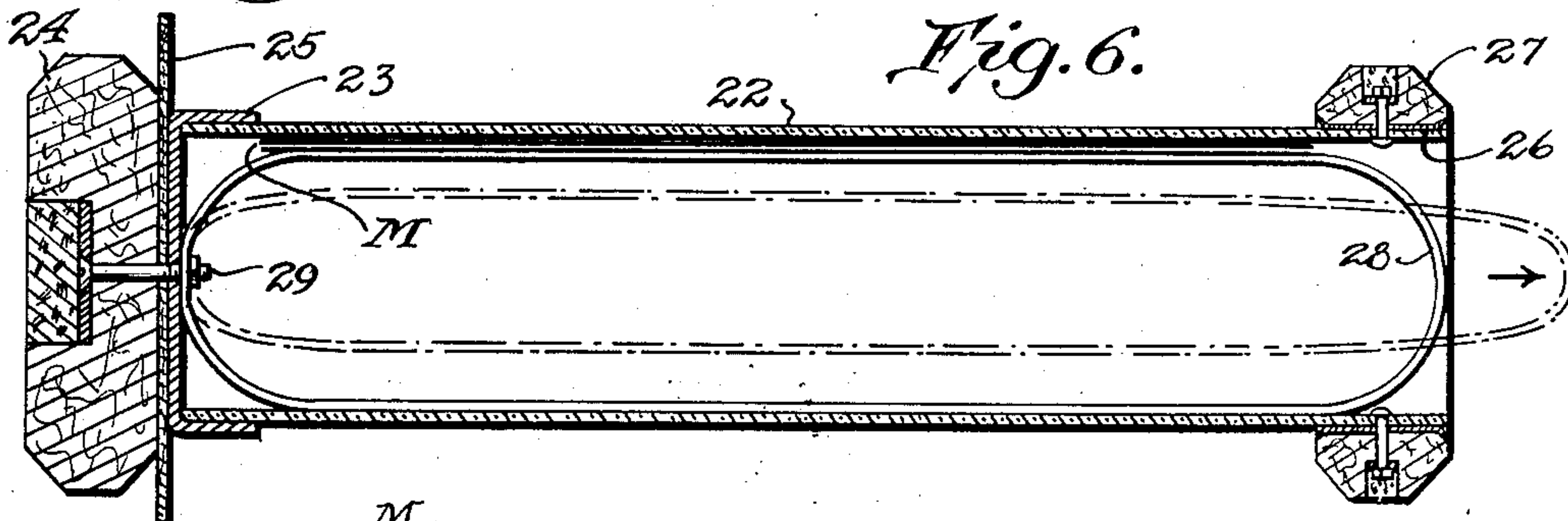


Fig. 8.

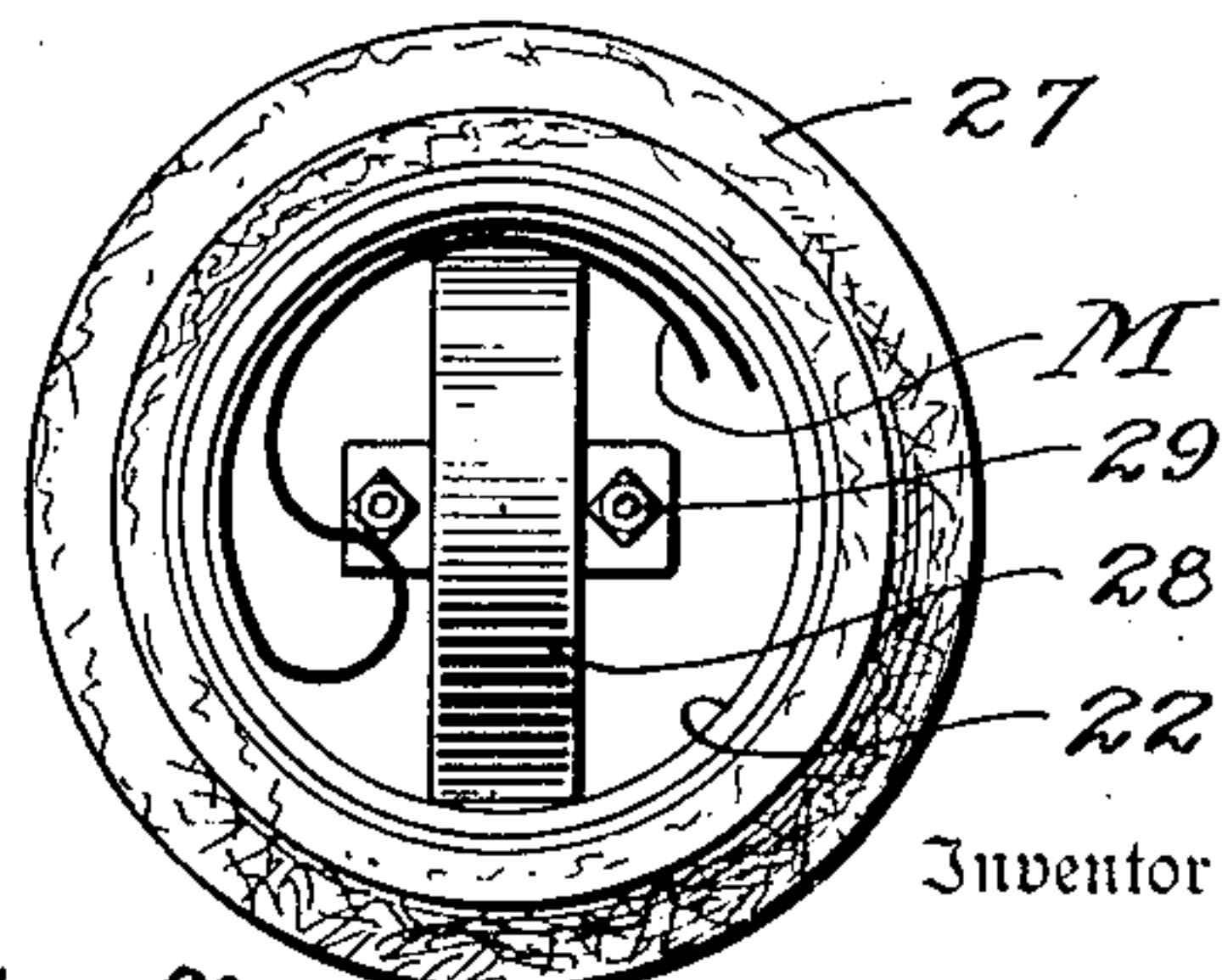
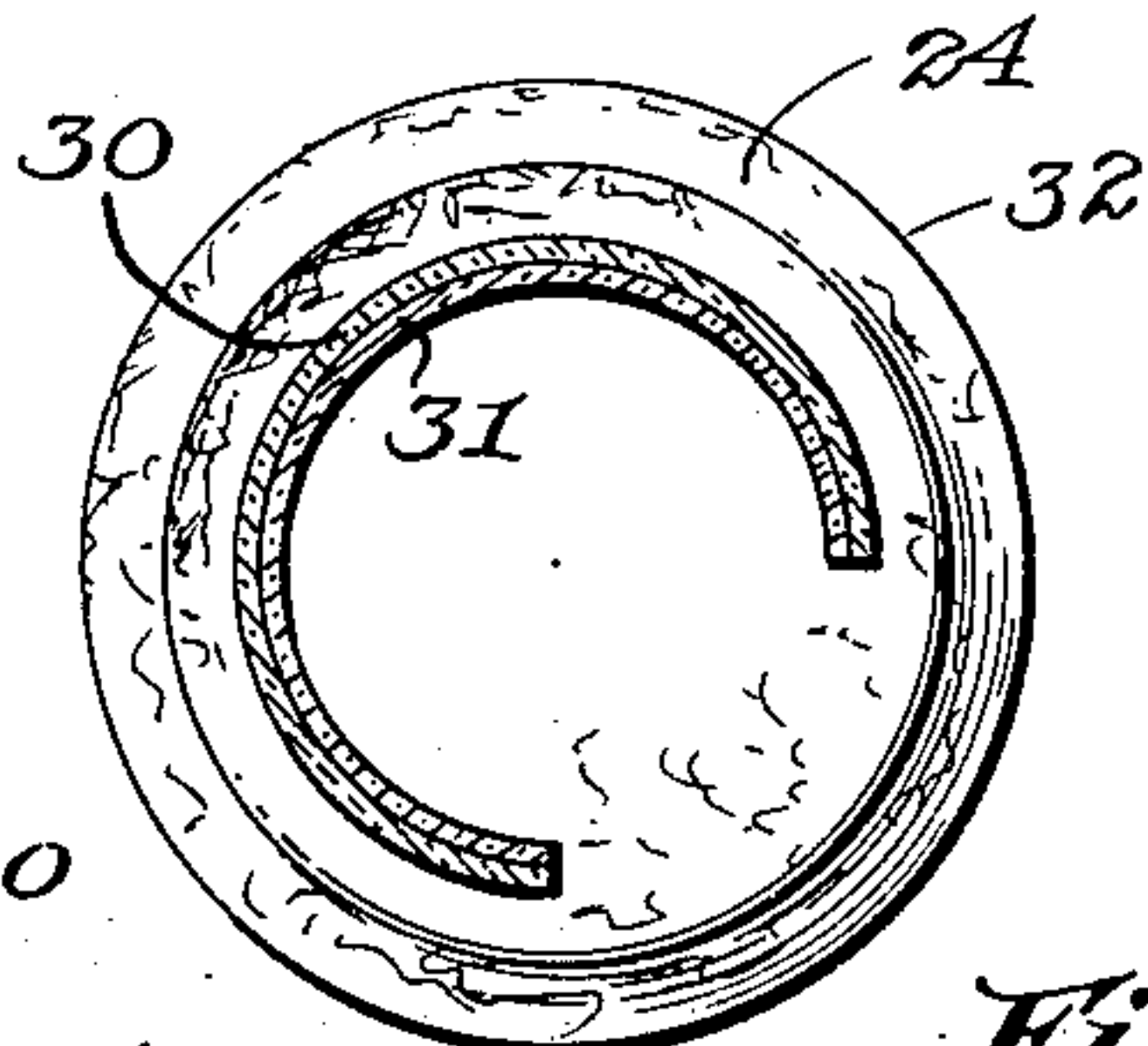
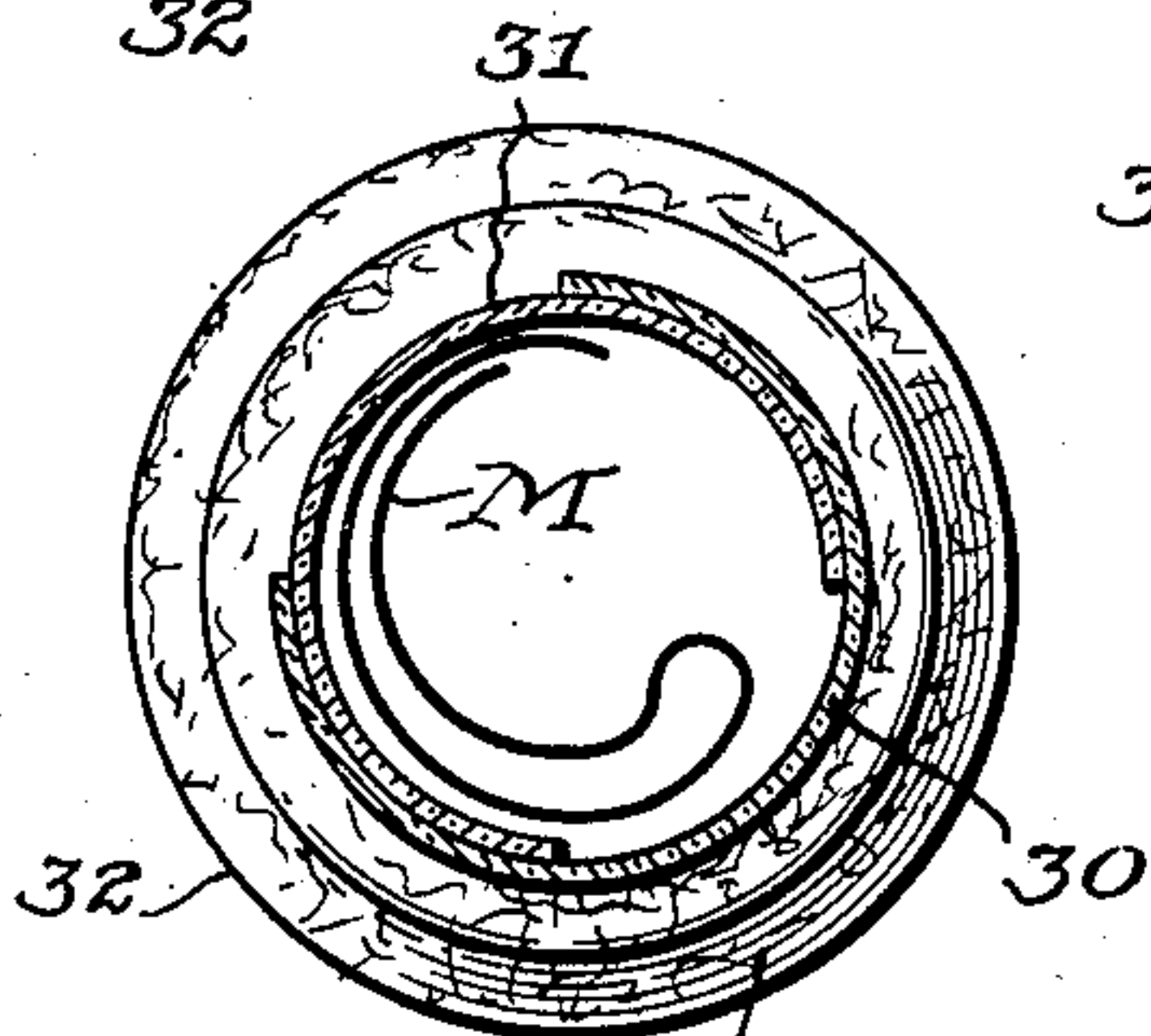
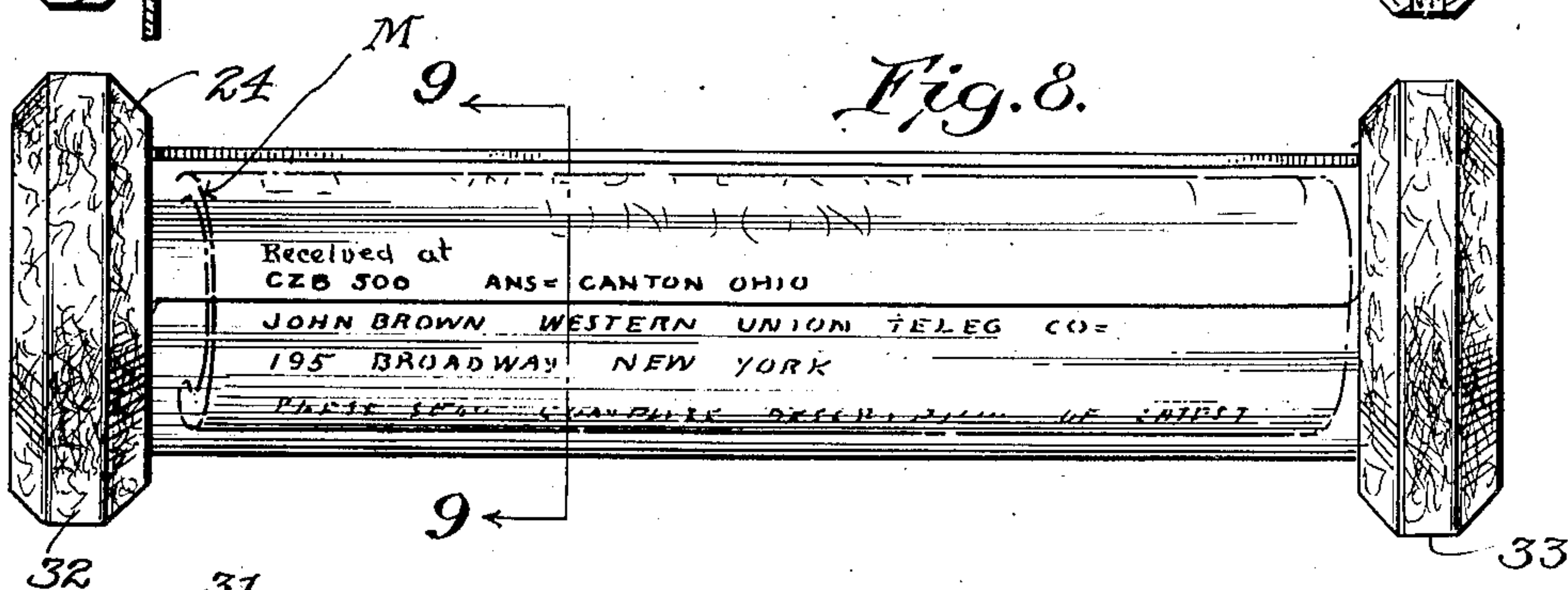


Fig. 9.

Fig. 10.

Fig. 7. Adam Drenkard, Jr.

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UNITED STATES PATENT OFFICE

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PNEUMATIC DISPATCH CARRIER

Application filed April 12, 1929. Serial No. 354,586.

This invention relates to pneumatic tube systems or conveyors and has special reference to a system of this kind used in the conveyance of telegraph messages, letters and other like articles. More especially the invention relates to a message carrier for use in connection with such a system, the carrier being in the form of a hollow cylindrical receptacle which travels through the tube or tubes of the system.

In systems of this kind it is common to send messages from a central or other sending station to one or more distributing stations and at these distributing stations the carriers are delivered from the pneumatic tubes and distributed to other tubes of the system or to some other distributing means. As is well known, in the handling of telegrams and other like messages, each article bears the address to which it is to be sent or has distinctive color or has a sticker or other designation attached to it. If opaque carriers are used to hold the messages then they have to be removed and the address read or designation noted at the distributing station before they can be properly routed from that point. Attempts have been made to overcome the loss of time and the errors occasioned by this manner of routing the carriers and their messages by providing an otherwise opaque carrier with a transparent window through which the address or other designation on the message may be observed. However, this necessitates the use of much care in placing the message in the carrier so that the designation is properly opposite the window and furthermore the message is apt to shift its position during the passage of the carrier through the tubes of the system so that it is frequently necessary, even with a window provided carrier, to withdraw the message to observe the designation. Thus there is a loss of time at the sending station in positioning the message and a frequent further loss of time at the distributing station.

The principal object of the present invention is to provide a novel form of carrier so constructed that, irrespective of the position of the message within the carrier, so long as

the designation is on the outside, the designation of the message may be observed.

With the above and other objects in view various forms of the invention will now be specifically described and claimed, reference being had to the accompanying drawings, wherein:

Figure 1 is a perspective view of one form of the improved carrier.

Figure 2 is a longitudinal median section therethrough.

Figure 3 is an end view thereof.

Figure 4 is a section on the line 4—4 of Figure 1.

Figure 5 is a perspective view of a modified form of the invention.

Figure 6 is a longitudinal median view through the modified form.

Figure 7 is an end view of this modified form.

Figure 8 is a side elevation of a second modification of the invention.

Figure 9 is a section on the line 9—9 of Figure 8 showing the carrier closed and holding a message.

Figure 10 is a section similar to Figure 9 but showing the carrier open for the extraction or insertion of a message.

In the form of the invention shown in Figure 1 the body of the device is made of a single transparent tube 10 of Pyralin, celluloid or other suitable transparent material. This body forms a cylindrical tube open at both ends but at one end there is provided a piston member 11 of felt or the like of such size as to fit snugly in the pneumatic tube through which the carrier is to pass. Riveted to this piston is a cup 12 which receives one end of the tube 10 so that this end is closed and held to the piston 11. At the other end of the tube 10 is a collar 13 preferably made from the same material as the tube and this collar not only acts as a reinforcement for the mouth of the tube but also forms the selector element for use in connection with certain automatic carrier distributing mechanisms in which the distribution is controlled by the width of the collar. Secured to the inner side of the tube 10 is a small substantially semi-circular tubular

guide 14 having a perforated plug or stopper 15 adjacent its free end. Through this stopper slides a wire 16 which carries a collar 17, the wire being surrounded by a spring 18 so that it is constantly urged inwardly. Beyond this stopper 15 the wire is provided with a stop collar 19 limiting its inward movement and the extremity of the wire is arched as at 20 to form a finger grip and is then coiled into a species of flat spiral 21 to form a stopper which, when in position, prevents the accidental dropping out of a message M. In inserting or removing a message the finger grip 20 is grasped, the wire drawn out and rotated leaving the mouth of the tube free for the insertion or withdrawal of the message, the tube being afterwards closed by a reversal of this operation.

In the form of the invention shown in Figures 5 to 7 inclusive the body is likewise formed of a transparent tube 22, one end of which is received in a cup 23 secured to a piston 24, a flange 25 being interposed between the cup and piston to make a closer fit of the carrier in the pneumatic tube. The other or open end is reinforced by a band 26 carrying a felt ring 27. In this form the message M is retained in the tube 22 by an elongated loop 28 of spring material having one end secured to the piston 24 as at 29. In operating this type of message holder the free end of the loop 28 is grasped and pulled out which contracts the loop laterally to the position shown in dotted lines in Figure 6 whereupon the message may be readily removed or a message put in position.

In the form shown in Figures 8 to 10 inclusive the body of the device is formed of two arcuate tube sections 30 and 31, each extending arcuately more than 180° and here shown as extending for about three-quarters of a circle. These sections are nested inside of each other and one section is carried by a piston 32 while the other section is carried by a piston 33, the sections being interlocked so that they will not slide longitudinally on each other. By rotating these pistons with respect to each other the sections may be moved between the position shown in Figure 9 in which the openings or gaps of the sections do not register and the position shown in Figure 10 in which such openings or gaps do register. In any event it will be seen that the entire body of the carrier is transparent so that the message inserted therein may have the designation observed no matter in what position such message may lie so long as the designation is on the exterior as is common in folding such messages. Thus no care is necessary in inserting the message in the carrier nor can it assume, after insertion, any position wherein such message cannot be read or observed.

It will be observed that by means of this construction there is no necessity of opening

the carrier to ascertain the destination of the contents when the carrier is relayed from any one tube to any other tube or to any other distributing system and thus a marked increase in handling speed is effected. Furthermore, this arrangement eliminates the necessity of attaching to the carrier costly indicating devices which must be adjusted to indicate various destinations.

This carrier will also eliminate the necessity for providing a large number of groups of variously colored, numbered or lettered carriers, one group being assigned to each possible route which a message or other contents might traverse.

Also the transparent carrier eliminates the possibility of a message or other contents lying dead in a carrier which is presumably empty, since the entire contents may be seen at all times.

Having thus described the invention, what is claimed as new, is:

1. A message carrier for pneumatic tube systems, having a body formed solely and throughout of transparent material.
2. A message carrier for pneumatic tube systems, having a body consisting of a cylinder of transparent material and having a collar also of transparent material.
3. A message carrier for pneumatic tube systems, consisting of a cylindrical tube of transparent material open at both ends, a piston member closing one end of said tube and attached thereto, and article retaining means at the open opposite end thereof.
4. A message carrier for pneumatic tube systems, consisting of a cylindrical tube of transparent material open at both ends, a piston member closing one end of said tube and attached thereto, article retaining means at the open opposite end thereof, and a collar of transparent material surrounding the open end of said transparent tube.
5. A message carrier for pneumatic tube systems, having a body formed of transparent material, and constructed to permit the insertion of an article and means to retain the article without obscuring the same.
6. A message carrier for pneumatic tube systems, having a body consisting of a cylinder of transparent material and having a collar thereon.

In testimony whereof I affix my signature.
ADAM DRENKARD, JR.