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2,792,997

CONTAINER

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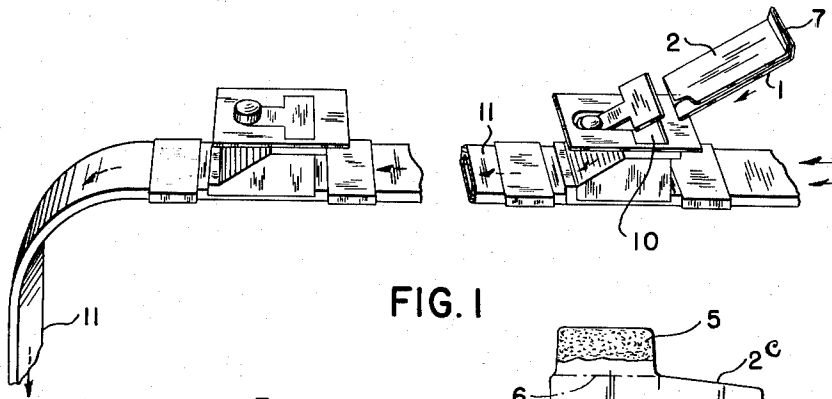


FIG. 1

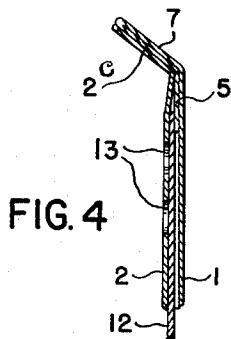


FIG. 4

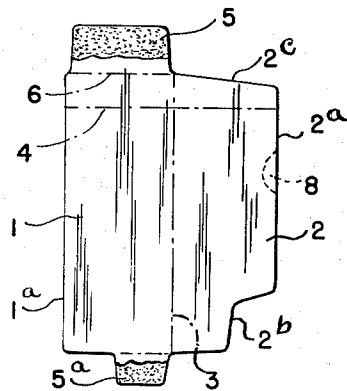


FIG. 5

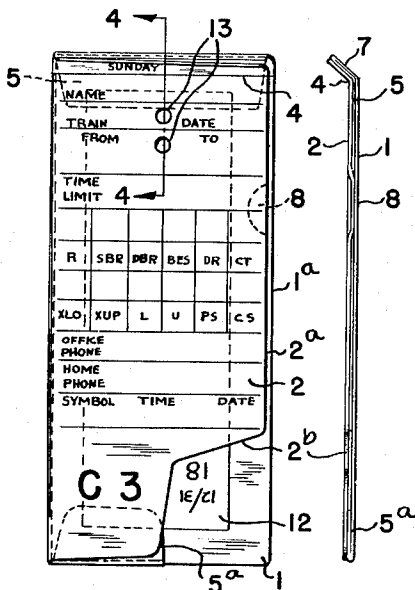


FIG. 2

FIG. 3

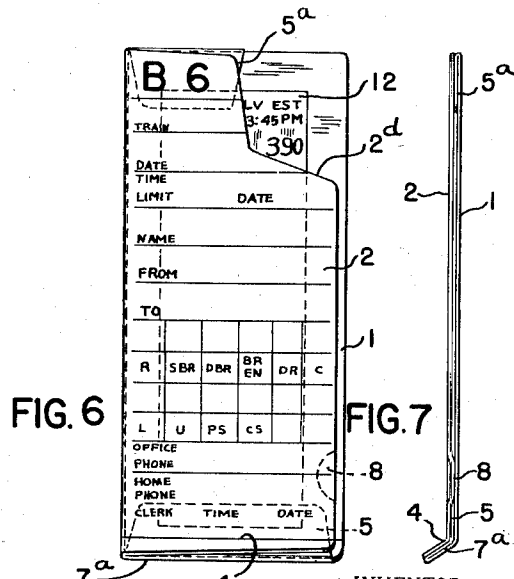


FIG. 6

FIG. 7

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1

2,792,997

CONTAINER

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5 Claims. (Cl. 243—34)

The present invention relates to a container which is made of paper or equivalent material which has sufficient flexibility for its intended use.

The container which is herein described may be broadly termed a holder or container which is adapted for use in connection with a pneumatic tube system which receives the container at one station and transmits it to another station connected with the pneumatic tube system.

Without in any way intending to limit the invention as herein described, the present invention may be described in connection with its use as an adjunct in a system whereby an order or reservation for a ticket, for instance, a railroad ticket, is taken by a person at one station of the system, the specifications noted upon an appropriate portion of the container, and the container placed in a suitable receiving port in a pneumatic system whereby the container is pneumatically transported through the tube to a station wherein the attendant there located, receiving the container, ascertains the availability of the accommodations requested and issues a ticket for transportation and/or information relating thereto, places the same in the container which was heretofore delivered at the station, and drops it into a suitable receiving portion of a flat tube pneumatic conveyor, which conveys the container with requested information or the ticket therein back to the station from which the order originated or to other stations if desired.

The present invention does not relate to the pneumatic apparatus to which reference has been made, but only to a suitable container for use in such pneumatic conveyor systems.

Reference should be had to the accompanying drawings forming a part of this specification, in which:

Fig. 1 is a perspective view of a portion of a flat tube pneumatic system with which the container of the present invention is adapted to be used;

Fig. 2 is a plan view of the container forming the subject matter of this invention;

Fig. 3 is a side elevation of the structure shown in Fig. 2;

Fig. 4 is a section upon the line 4—4 of Fig. 2;

Fig. 5 is a plan view of a blank of paper or similar material which is adapted to be folded and secured with respect to its various parts into the shape and form of the container;

Fig. 6 is a plan view of a modified form of the container; and

Fig. 7 is a side elevation of the showing in Fig. 6.

In view of the fact that a container for the purpose of use in connection with such a flat tube pneumatic system is required to be flexible so far as the material of which it is made is concerned, it is herein proposed, as one form of the invention, that the container shall be made of a paper of such a weight that when fabricated into the form as hereinafter explained, the container will be flexible enough to pass around bends or curves in such flat tube conveyor systems and accommodate itself thereto without danger of becoming stuck in the tube.

2

Such a container as is herein proposed, if merely a flat container, would not positively be conveyed through such pneumatic tube when once inserted therein, but in the present invention the container is provided with what may be called a "sail," which normally extends at substantially a right angle with respect to the plane of the body portion of the container, which sail, however, is not high enough to become stuck in the tube, but yet is high enough to present an effective surface to the pneumatic pressure or suction within the tube, to thereby cause a transmission of the container through the tube.

Basically, the container is preferably made from a blank such as shown in Fig. 5, wherein what may be called one leaf of the container is indicated at 1, a cooperating leaf is indicated at 2, and a fold line is provided as indicated at 3. The dimensions of the members 1 and 2 are such that when folded along the fold line 3, the leaves 1 and 2 are superimposed and their side edges, such as indicated at 1a and 2a, are in line with each other. Both of the leaves 1 and 2 are provided with a transverse fold line 4. Extending from the leaf 1 is an extension 5, and there is provided a fold line 6 between the leaf 1 and the extension 5. At the opposite end of the blank, there is an extension 5a, the function of which will be subsequently described. Also, the leaf 2 is notched out as indicated at 2b, the purpose of which will be subsequently described.

The extension 5 is folded along the fold line 6 and is adhesively attached to the leaf 1. It will be noted that the extension 5 is of such width that it extends beyond the fold line 4. The leaves 1 and 2 are folded along the fold line 3 so that they become superimposed with respect to each other and the end portion of the leaf 1 which lies beyond the fold line 4, is folded so that it is superimposed upon the previously in folded extension 5. This part of the leaf 1 which lies beyond the fold line 3, and which is designated at 2c, may be adhesively attached to the folded over extension 5 so that there is provided at the end of the container which is under consideration a triple thickness of material. This assembly which has just been described is then folded along the fold line 4 so that there is provided an angular extension which is indicated at 7 in Figs. 3 and 4. Due to the superimposed and adhesively secured layers of material, the portion 7 will remain in its angular position, and it is that portion of the container which we denominate as a sail for reasons which will subsequently be explained.

The tab or extension 5a, as shown in Fig. 5, is folded over in the manner indicated in Fig. 2 and adhesively connected to the lower portion of the leaf 2. It will be noted that the tab 5a, so far as its width is concerned, is less than the width of the leaf 2, and such leaf may be notched out, as indicated at 2b in Fig. 5 and as shown in Fig. 2.

In constructing the container, it is entirely possible to omit the flange or tab 5 and to cause adherence between that portion of the leaf 1 and the leaf 2 which is above the fold or score line 4, as shown in Fig. 5. This adherence may be secured by gumming the engaging portions which have just been mentioned when the leaf 2 has been folded along the line 3 to engage with the leaf 1.

Also it will be apparent that the tab or extension 5a may be omitted and the lower ends of each of the leaves 1 and 2 be caused to adhere to each other by a cementing operation.

While in the foregoing description we have referred to the use of an adhesive where the various parts or tabs of the construction are caused to adhere to adjacent portions of the structure when such tabs or parts are

3

folded, it will be understood that any means or form of adhesion may be employed.

In order to prevent complete separation of the leaves 1 and 2, the leaves adjacent the edge, as indicated at 8 in Fig. 5, may have a spot of adhesive which when moistened and the leaves 1 and 2 superimposed will give a spot adhesion with respect to the edges of the leaves 1 and 2.

Speaking from the standpoint of the constructional features involved, such a container as has been described may be introduced through a suitable opening, such as indicated at 10 in Fig. 1, to be received into a flat tube conveyor, which is indicated at 11, such flat tube conveyor being under air pressure, as is indicated by the arrows at the right-hand portion of Fig. 1, and when so introduced into the tube 11, the air under pressure will impinge upon the portion 7 which we call a sail, and will cause the container to be carried through the tube to a station where its progress will be arrested and it will be delivered out of the tube conveyor.

Where the container and the pneumatic apparatus to which reference has been made is used in connection with the sale of a railroad ticket and, as before mentioned, an order for the ticket and the accommodations are taken at one station and pneumatically carried through the system to the second mentioned station, this container when there received, contains indicia either upon the surface thereof or upon an enclosed slip which informs the party receiving the container as to the destination and the kind of accommodations desired by the party who is to purchase the ticket.

The party at the receiving station therefor selects a ticket which will, of course, be suitably stamped or written upon as the case may be, inserts the ticket or information within the container or on the outside thereof and returns the container and contents, if any, to the first station.

Inasmuch as the matter which is to be conveyed back to the original station may be other than a railroad ticket, we have called the article thus placed in the container an insert and indicated such an insert by the reference numeral 12. It will be noted that when such an insert is placed within the container, even though the superimposed edges of the leaves 1 and 2 are not fastened throughout their length, nevertheless the insert cannot drop out of the container because as before stated, the superimposed edges of the leaves 1 and 2 are provided with a spot adhesive as indicated at 8 in Figure 2, therefore, the insert cannot move out of the container in that direction.

Also it will be noted that what, in the drawings, appears as the top of the container is closed and also what appears as the bottom of the container as shown in Figure 2 of the drawings, is also closed by means of securing the extension 5a to the lower end of the leaf 2.

For facilitating inserting or removing the insert from the container there is provided, as shown in Figure 2 in the leaf 1, a notched out portion 2b, so that when the insert is placed within the container, a portion of such insert is exposed to view so that indicia upon said insert may be readily viewed and at least convey a meaning to the party receiving the returned container with its insert.

As shown in Figure 2, the container is shown to have two small openings of any desired form which are indicated at 13 in Figure 2 and this is for the purpose of making visible that portion of the insert which may lie beneath either one of said openings when the insert is placed within the container. In the case of railroad tickets, such tickets are frequently provided with a color band adjacent the end thereof or may be made of distinctive body color and this color will be seen generally through opening 13. By pushing the insert up, the color band may be visible through the upper opening 13 and if the insert is moved downwardly toward the lower end

4

of the container, the color band would be visible through the lower opening 13.

The matter of providing the notched out portion in the leaf 2 as shown in Figure 5 and also in Figure 2 and the provision of the ample length unattached, of the superimposed edges of the leaves 1 and 2, is of utility in that it facilitates the insertion of, or removal of an insert from the container.

In Figures 6 and 7 there is shown a slight difference of the construction which is shown in Figure 2, in that the notched out portion 2d is toward the upper right hand corner rather than the lower right hand corner of the container. This is a mere variation of the container construction but the remaining portions of the container are constructed as has been described with respect to Figure 2 including the provision of such a folding of the parts as will produce a sail 7a.

While heretofore we have referred to the container as made of paper or equivalent material which has the required flexibility, it will of course, be understood that the container may be of plastic material which will have the advantages of being transparent. In such construction, the sail may be permanently formed when the material of the container is folded to its final form.

From the foregoing description, it will be seen that there is herein provided a flexible container which is adapted for use in connection with a tube pneumatic system and the container is provided with means, which we have herein termed a sail, which offers a surface against which the air in the pneumatic system may impinge to cause propulsion of the container through the tube of the pneumatic system.

While there is herein described the best method of practicing the invention, it will be obvious that variations in the present construction herein defined may be employed without departing from the spirit of the invention.

Having thus described the invention, I claim:

1. A flat container for use as a conveyor, in a tube pneumatic system, comprising a sheet folded to form two leaves, the free edges of the leaves being essentially superimposed, a portion of the leaves at one end of each leaf being individually transversely folded, the folded portion of each leaf being adhesively engaged with each other and bent upon a transverse axis to form an upstanding sail whereby the container is caused to move when introduced into said tube pneumatic system.

2. A flat container for use in connection with a flat tube pneumatic system comprising a sheet folded to form two leaves, the free edges of said leaves being superimposed, one of the said leaves at one end thereof being individually folded and adhesively secured to the same leaf, the second leaf having a portion thereof, at the end thereof adjacent the folded portion of the first leaf, which portion is adhesively attached to the folded portion of the first leaf, the said folded portions of the said leaves being bent along a fold line to form an upstanding sail, said sail serving as an impact surface for the air pressure when the container is introduced into a pneumatic tube.

3. A flat container for use in connection with a tube pneumatic system comprising a folded sheet forming superimposed leaves having the free edges of the leaves superimposed and unsecured except for a spot attachment, one of said leaves being provided with an extension, which said extension is folded back upon itself and upon the leaf from which it extends and adhesively secured thereto, the other of said leaves being provided with a portion which is above the fold line and is adapted to engage with the folded portion of the aforesaid extension when the leaves are superimposed and the same portion of the second mentioned leaf being adhesively secured to the folded portion of the first leaf thereby providing a reinforced extension at an end of the said leaves when they are superimposed, the said extension being folded to an angular position with respect to the main portion of the super-

5

imposed leaves to thereby form a sail and thereby adapting itself for use in a tube pneumatic system.

4. A flat container for use in connection with a tube pneumatic system comprising a folded sheet forming superimposed leaves having their free edges superimposed when folded, said leaves being at one end secured to each other and being folded upon a fold line to provide a portion which extends at approximately right angles to the body of the folded sheet to thereby form a sail and thereby adapting itself for use in a tube pneumatic system.

5. A flat container for use in connection with a tube pneumatic system comprising a folded sheet forming superimposed leaves the said leaves at one of their ends being partially secured together leaving a part of one end of the leaves and edges of the leaves unattached except for a spot attachment so that a flat body such as a rail-

6

road ticket may be readily inserted between the leaves without destroying the container, the said leaves at an end thereof opposite to the end which has before been mentioned, are provided with folded portions which are secured to each other and folded upon a full line to form an upstanding sail.

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