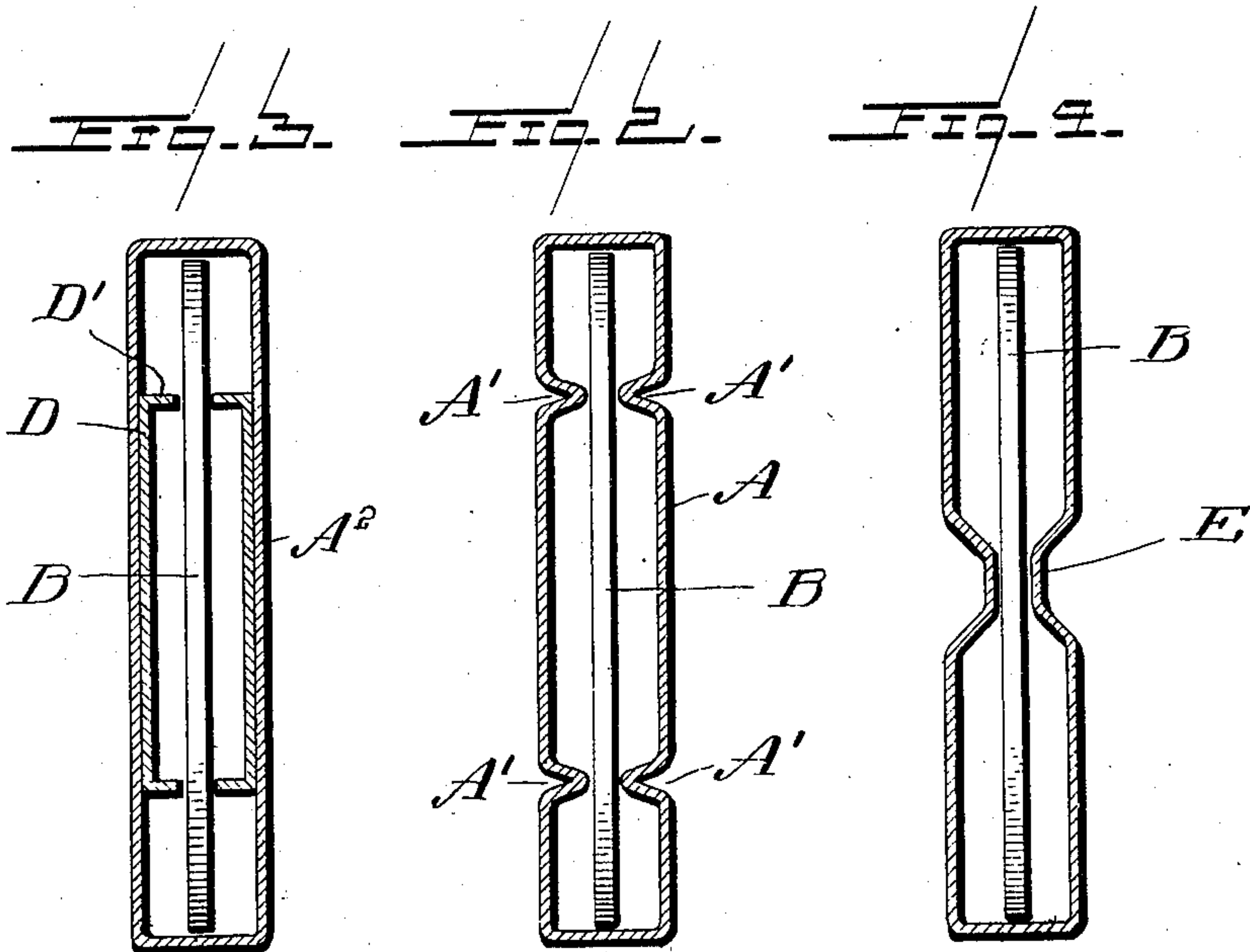
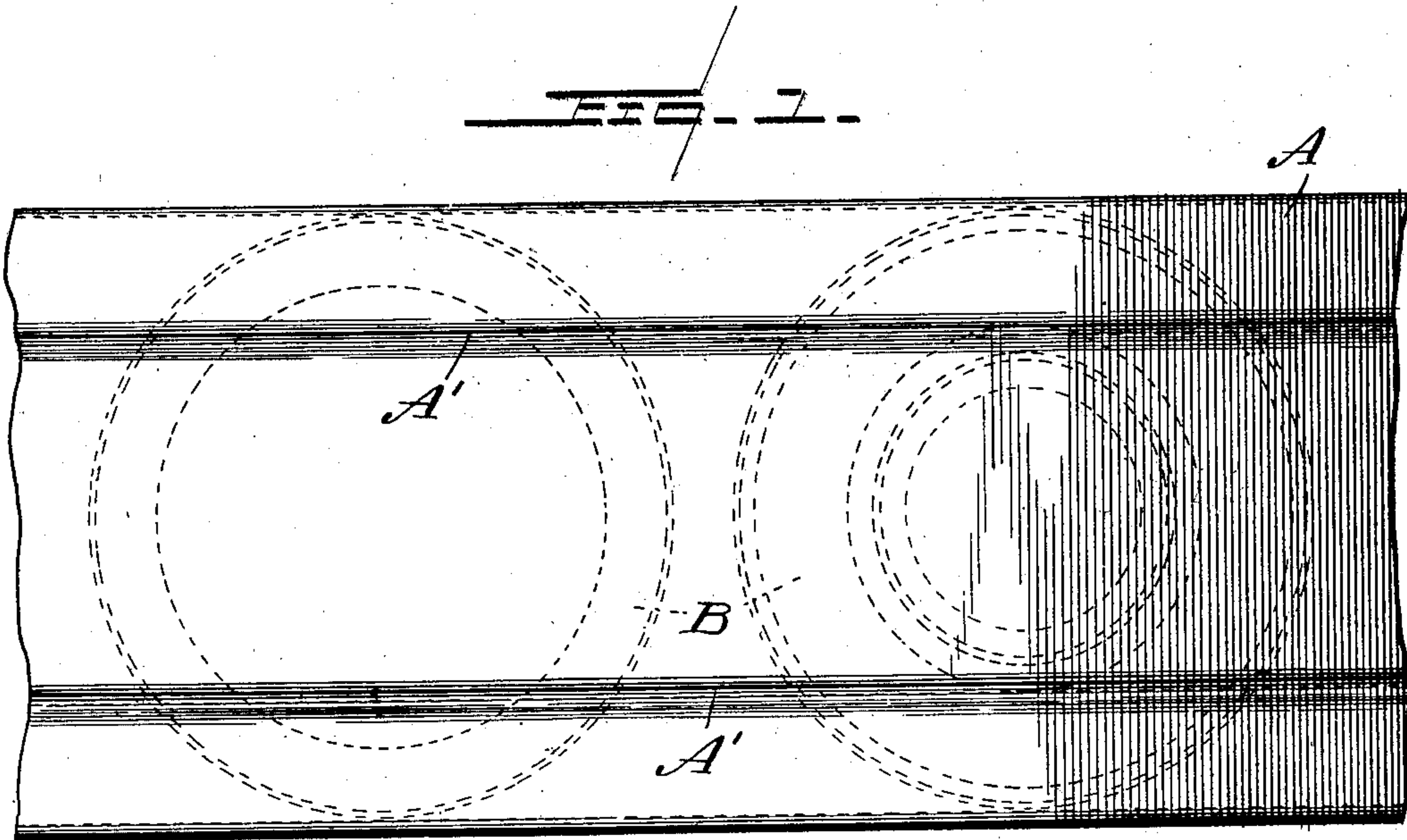


No. 735,909.

PATENTED AUG. 11, 1903.

J. G. & M. O. REHFUSS.
PNEUMATIC PASSAGEWAY.
APPLICATION FILED DEC. 27, 1902.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN G. REHFUSS AND MARTIN O. REHFUSS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO THE BUREAU CAN AND MANUFACTURING COMPANY, OF DELAWARE.

PNEUMATIC PASSAGE-WAY.

SPECIFICATION forming part of Letters Patent No. 735,909, dated August 11, 1903.

Application filed December 27, 1902. Serial No. 136,852. (No model.)

To all whom it may concern:

Be it known that we, JOHN G. REHFUSS and MARTIN O. REHFUSS, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pneumatic Passage-Ways; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in pneumatic tubings designed especially for use in conveying tops and bottoms of cans; and it consists in the provision of corrugations, indentures, or projections extending inward from the opposite side walls of the tubing and provided for the purpose of preventing the tops and bottoms or other articles which may be conveyed through the pipes from clinging to the sides of the pneumatic passage-way, thus offering a small surface of the top and bottom to the sides of the passage-way and preventing the same clinging to the sides by the vacuum formed within the tube or passage-way.

The invention consists, further, in various details of construction and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

Our invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts in the views, in which—

Figure 1 is an elevation of a portion of a pneumatic tube or passage-way, showing in dotted lines the top and bottom of a can contained therein and also the corrugation or indenture being illustrated in dotted lines. Fig. 2 is a cross-sectional view through the tubing shown in Fig. 1. Fig. 3 is a sectional view showing a slight modification, in which in-

stead of indentures, as shown in Fig. 2, we have shown angle bars or strips, which are secured to the inner opposite walls of the pneumatic passage-way; and Fig. 4 is a similar view showing indentures made centrally in the opposite walls.

Reference now being had to the details of the drawings by letter, A designates a pneumatic passage-way, which in the present instance, in order to adapt the same for the particular use for which we desire it, is made of generally rectangular outline in cross-section and utilized for the purpose of conveying tops and bottoms of cans.

In Fig. 2 the opposite side walls A are shown as having indentures at A' A' at two locations in the opposite walls and opposite each other. These indentures serve to hold the top or bottom of the can B centrally within the pneumatic passage-way and prevent a large amount of the surface of the top or bottom from coming in direct contact with the inner walls of the passage-way and offering as little frictional contact as possible to the top or bottom as it is drawn through by pneumatic power.

In Fig. 3 instead of showing indentures we have shown the opposite side walls A² of the passage-way as parallel, and we have fastened strips D to the inner walls of the passage-way, said strips having their longitudinal ends angled, as at D', said angled portions being oppositely disposed, as shown, with a space intervening between the same forming a passage-way of sufficient width to allow for a top or bottom of a can to pass readily and at the same time said top or bottom being held from contact with the broad faces of the passage-way.

In Fig. 4 we have shown still another modification in which the opposite side walls of the pneumatic passage-way have a single indenture on each side, as at E, said indentures being formed longitudinally with the passage-way and centrally, thus reducing the amount of friction between the can and the passage-way.

From the foregoing it will be observed that by the provision of the indentures or project-

ing portions of the passage-way, as herein described, the top or bottom or whatever article of manufacture may be conveyed through the passage-way the same will be prevented from clinging to the sides of the passage-way by reason of the vacuum formed therein and the amount of friction between the sides of the article being conveyed and the passage-way is reduced to a minimum.

While we have described our invention as especially adapted for use in connection with the conveying of tops and bottoms for cans, it will be understood that the same may be applicable for various uses in conveying any articles which would have a tendency to be retarded in their progress by contact with the side walls of the passage-way, and we do not limit ourselves to this specific use nor to the exact construction shown, as obviously we may make alterations in the passage-way, indentures, &c., without departing from the spirit of the invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A pneumatic passage-way, rectangular in cross-section, and provided with inwardly-bent guide members projecting from its opposite parallel walls forming contracted passage-ways for the travel of articles between

the free ends of said guide members, as set forth.

2. A pneumatic passage-way for conveying articles, comprising a passage-way with indentures formed in its opposite walls designed to hold the top or bottom of a can or other article being conveyed from contact with the broad faces of the inner walls of the passage-way, as set forth.

3. A pneumatic passage-way for conveying articles, said passage-way having side walls with oppositely-disposed indentures designed to hold the article centrally in the passage-way and between said indentures, as set forth.

4. A pneumatic passage-way comprising a rectangular tubing, the opposite walls of which have indentures forming projections which are oppositely disposed with spaces intervening between the same designed to hold the top or bottom of a can or other article being conveyed from contact with the broad faces of the passage-way, as set forth.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

JOHN G. REHFUSS.
MARTIN O. REHFUSS.

Witnesses:

J. B. JARDELLA,
A. KRAUSSE.