W. R. ALLEN.

PAPER BOX.

APPLICATION FILED DEC. 3, 1918.

1,298,635. Patented Apr. 1, 1919.

Fig. 1.

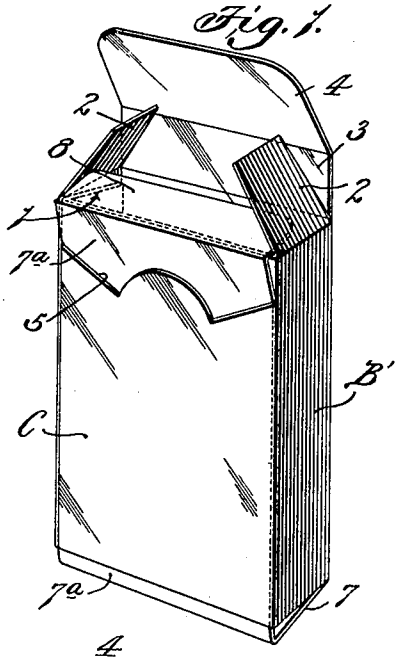


Fig. 2.

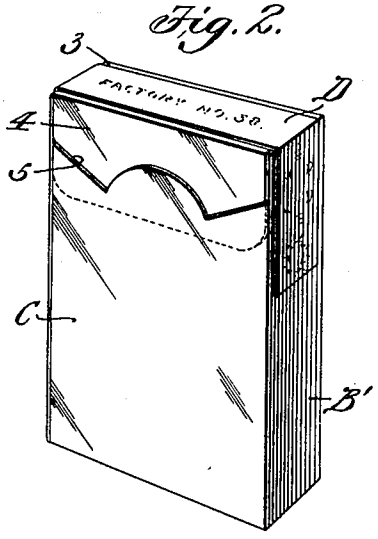


Fig. 3.

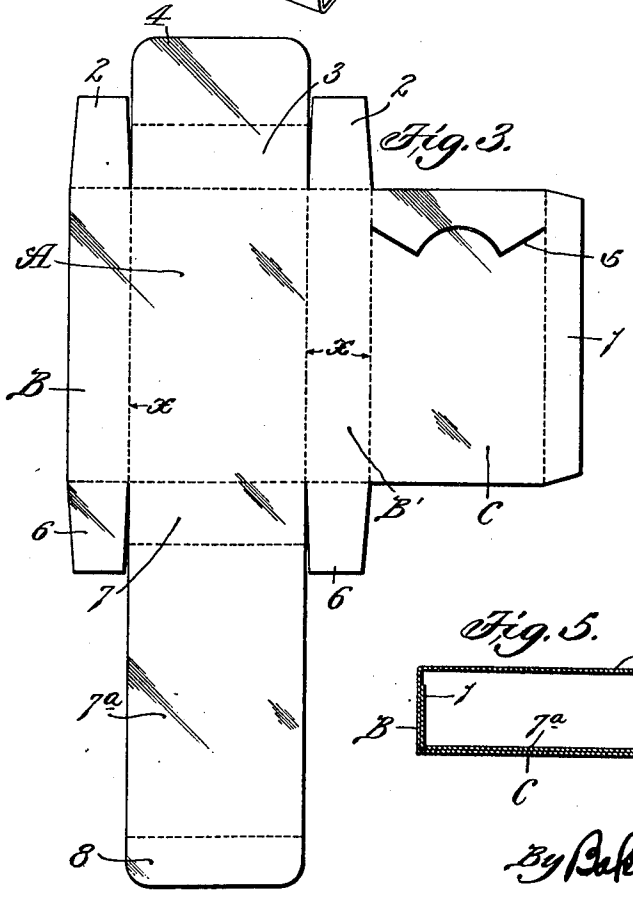


Fig. 4.

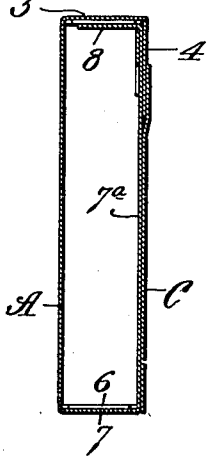


Fig. 5.

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UNITED STATES PATENT OFFICE.

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PAPER BOX.

1,298,635. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed December 3, 1918. Serial No. 265,135.

To all whom it may concern:

Be it known that I, WILLIAM R. ALLEN, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Paper Boxes, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to paper boxes of the folding or collapsible type.

One object of my invention is to provide a folding paper box, which, after being sealed at one end, cannot be opened or its contents removed without showing that the box has been tampered with.

Another object is to provide a folding paper box of the character just referred to which is so constructed that the contents of the box cannot sift out.

To this end I have devised a folding box composed of a sheet of cardboard or other suitable material having portions arranged in such a manner that when said sheet is folded one part of same that is integrally connected to the bottom of the box will extend upwardly through the box and terminate at such a point that it will be locked or clamped securely in position by the lid or top of the box.

Figure 1 of the drawings is a perspective view of a folding box constructed in accordance with my invention, showing the lid of the box open.

Fig. 2 is a perspective view of said box, showing the lid closed and sealed.

Fig. 3 is a top plan view of the blank or sheet of cardboard from which the box is formed.

Fig. 4 is a vertical sectional view of the box; and

Fig. 5 is a horizontal sectional view of the box.

Referring to the drawings which illustrate the preferred form of my invention, Fig. 3 shows the blank or sheet of material from which the box is formed. Said blank comprises a portion A that constitutes the rear wall of the box, two portions B and B′ that constitute the end walls of the box and a portion C that constitutes the front wall of the box, said various portions being integrally connected together so as to permit the sheet to be folded along the creased lines *x* to form a rectangular-shaped body portion. The front wall portion C is provided at one edge with a flap 1 that is adapted to be permanently connected by a suitable adhesive to the inner side of the end wall B, as shown in Fig. 5, thus forming a rectangular-shaped body portion whose longitudinal corners are perfectly tight. The top or upper end of the box is composed of two flaps 2 on the end walls that are adapted to be folded inwardly toward each other, as shown in Fig. 1, and an outside flap 3 on the rear wall A that is adapted to be folded downwardly over the inner flaps 2 of the top, said outer flap 3 being provided with a flange 4 that extends downwardly over the upper portion of the front wall C and projects into a transversely-disposed slit 5 formed in the front wall C adjacent the upper edge of same, as shown in Fig. 2.

The bottom of the box is formed by two flaps 6 at the lower ends of the end walls B and B′ that are adapted to be folded inwardly toward each other in a similar manner to the inner flaps 2 of the top and an outer flap 7 integrally connected to the lower edge of the rear wall A and adapted to be folded over the flaps 6. The outer flap 7 of the bottom is provided with an extension 7^a that passes upwardly through the box in parallel relation to the front wall C and thence outwardly through the transversely-disposed slit 5 in said front wall, said extension 7^a being provided at its upper end with a flange 8 which is adapted to be folded inwardly and downwardly over the contents of the box, as shown in Fig. 1. In making the box the blank shown in Fig. 3 is first cut from a sheet of cardboard or other suitable material and scored or creased along the broken lines shown in Fig. 3. Thereafter, the flap 1 on the front wall C is permanently connected to the end wall B and the flaps constituting the bottom of the box are then arranged in operative position by folding the flaps 6 inwardly, then folding the outer flap 7 over same and passing the extension 7^a upwardly through the box so that the upper edge portion of same projects outwardly through the slit 5 in the front wall C.

After the box has been filled the flange 8 on the extension 7^a of the bottom is folded downwardly over the contents of the box, the inner flaps 2 of the top are then folded downwardly over said flange, and thereafter, the outer flap 3 of the top is folded

downwardly and the flange 4 thereon inserted in the slit 5. The final step in the operation of packing the box consists in arranging a sealing strip D over the top flap 3 and connecting said strip to the end walls of the box, as shown in Fig. 2. After the box has been sealed it is impossible for the box to be opened or the contents of the box removed without breaking the seal D or changing the condition of the box to such an extent that it is perfectly obvious that the box has been tampered with. This is due to the fact that the outside flap 7 of the box is locked in position by the extension 7^a on said outside flap, which is tucked under the top flaps 2 and 3 which are secured in position by the seal D. In other words, the lid or top portion of my improved box is protected by the seal D that extends over same, and said seal also protects the bottom of the box, due to the fact that the bottom has integrally connected thereto a part 7^a that is interlaced through the front wall C and then clamped against the upper edge of said front wall by the coöperating flaps 2 and 3 that constitute the top of the box. The extension 7^a on the outside bottom flap 7 not only forms an efficient locking device for the bottom of the box, but it also eliminates the possibility of the material in the box sifting out through the joint or space between said extension and the front wall C of the box, this being due, of course, to the fact that the extension 7^a extends the full height of the box and projects outwardly through the front wall C adjacent the upper edge of said front wall.

A box of the construction above described can be used successfully for marketing various kinds of materials or substances which it is desired to deliver to a purchaser in sealed condition. It is particularly adapted, however, for use in marketing tobacco, and it complies with the Government requirements for tobacco containers, namely, a tight box, which, after being sealed with a revenue stamp, cannot be opened without breaking the stamp or altering the condition of the box to such an extent that a purchaser can readily see that the box has been tampered with. It can even be used successfully for packing smoking tobacco, for it is so constructed that the tobacco cannot sift out of the box. In addition to the desirable features above pointed out, such a box is inexpensive and it can be shipped in a flat or knock-down condition from the box maker to the merchant or manufacturer who uses the box as a container for the material or substance that he sells.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A folding box having a bottom provided with a part or extension that passes upwardly through the box and is interlocked with one of the walls of the box, said part having a flange or portion that lies under the top or lid of the box when the box is closed.

2. A folding paper box, comprising a rectangularly-shaped body portion provided at its upper end with inner flaps that are adapted to be folded inwardly toward each other and an outside flap that is adapted to be folded downwardly over said inner flaps, a flange on said outside flap that is adapted to be inserted in a transverse slit in the front wall of the box, overlapping flaps at the lower end of said body portion that constitute the bottom of the box, an extension on the outer flap of the bottom that passes upwardly through the box and thence projects outwardly through the slit in said front wall, and a flange at the upper end of said extension that is positioned under the top flaps when the box is closed.

WILLIAM R. ALLEN.