

J. PETERSON.
TOBACCO POUCH.
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1,246,650.

Patented Nov. 13, 1917.

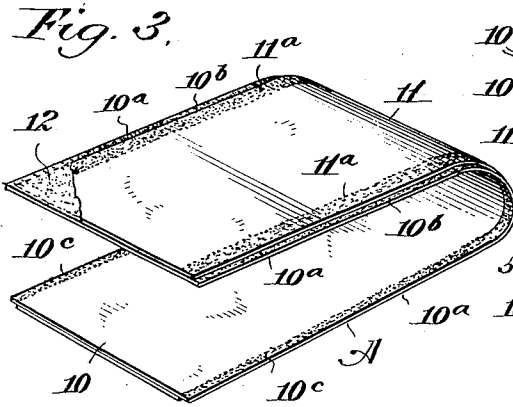
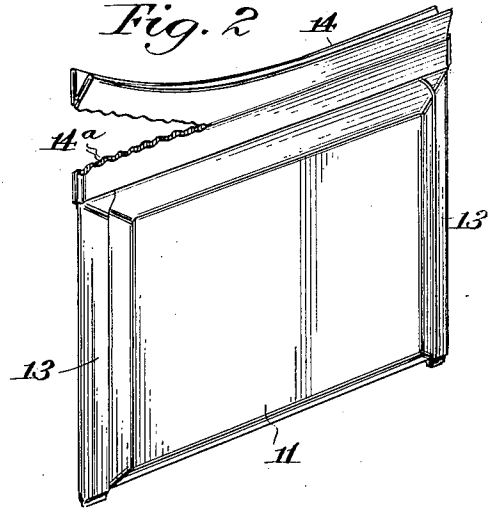
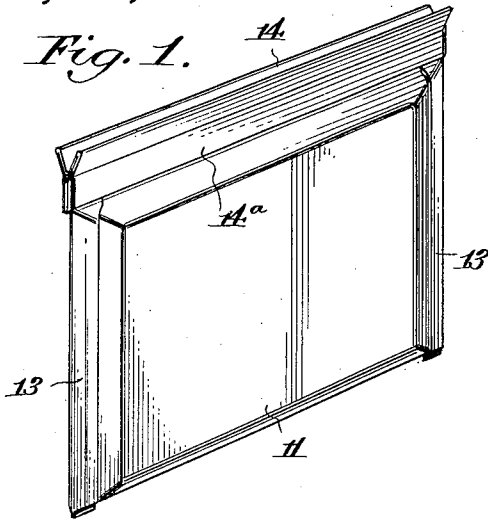


Fig. 4.

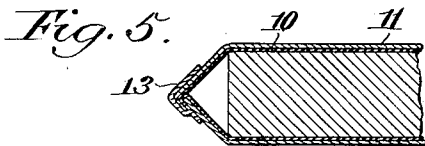
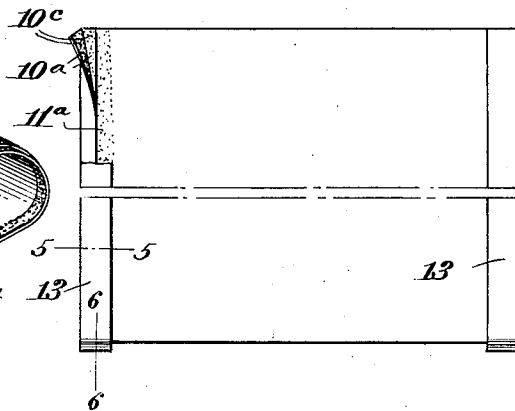
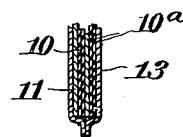


Fig. 6.



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UNITED STATES PATENT OFFICE.

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TOBACCO-POUCH.

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To all whom it may concern:

Be it known that I, JONATHAN PETERSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Tobacco-Pouches, of which the following is a specification.

My present invention relates to a bag, pouch, package or similar container adapted especially for goods of a perishable nature, particularly those liable to be affected by atmospheric changes or conditions.

In the present disclosure I have shown the invention employed as a receptacle or container for the packaging of manufactured tobacco products, but it is to be understood that the invention is not limited to such particular use, as it may obviously be employed for packaging such other goods or merchandise as may be desired or found advisable.

The invention pertains more particularly to the type of containers which form a receptacle for the commodity prior to vending as well as subsequent to the sale, the container and its contents forming the individual package which retains its integrity from the manufacturer to the user. For instance, the container shown in the drawings and which is adapted to form a carrier for a plug of tobacco, receives the plug at the tobacco factory, the package being completed by the addition of the sealing strip. The package is then ready to enter the channels of trade, and the length of time elapsing before it actually reaches the hands of the consumer cannot be determined in advance. As tobacco is a commodity which will deteriorate in the presence of air or moisture, the necessity of practically sealing the package to preserve and maintain the condition of the plug as to aroma, flavor, moisture and other qualities, during this period will be apparent. As the package is comparatively small and sold at a low price, it will be understood that the cost of the container must be as low as possible while meeting these conditions.

These difficulties are overcome in the present invention by providing a container lining in the form of a relatively thin sheet of tin foil which enters into the production of the side seams of the container in such manner as to prevent passage of air or mois-

ture through such seam. As this involves certain difficulties due to the inherent weakness of foil to withstand tensile and other strains, I preferably employ it in composite sheet form, such, for instance, as disclosed in patent granted to me #1,137,278, in which the foil is united to a backing sheet of sufficient tensile strength by a film of rubber compound, the two sheets being united throughout substantially the area of the opposed faces. The composite sheet thus produced has certain physical characteristics which make it especially adapted for this use, viz.:—flexibility, softness, tensile strength, durability, inseparability of its composite layers, and impermeability to either air or water.

In the present invention, the composite sheet has the foil layer of greater width than the backing sheet to provide projecting foil edges at opposite sides of the sheet, these edges, when the pouch blank is folded on a transverse line to form the pouch bottom, facing each other beyond the edges of the backing sheet, both of these opposing edges are then folded upon one side of the backing sheet and inclosed by folded strips which are of greater width than the edges and are secured to the backing sheet. As a result, the side seams are not only readily produced in a form to provide low cost of manufacture of the pouch, but in addition have the desired strength as well as the important feature of closing the seam against passage of air or moisture therethrough, the seam formation having as its basis the elimination of any interior exposed surface other than foil, and the ability to provide the intimate contact of the ductile foil layers within the seam, enables the desired result to be obtained.

The general objects of the invention are therefore the production of a pouch adapted to retain the initial characteristics of the commodity contained therein, the elimination of other than a foil exposed surface within the pouch, and the production of a pouch of this type at a comparatively low cost.

In the drawings, in which similar reference characters indicate similar parts in each of the views:

Figure 1 is a perspective view of a preferred form of package embodying the present invention.

Fig. 2 is a similar view showing a way in which the pouch may be opened.

Fig. 3 is a perspective view of a blank, partially folded.

5 Fig. 4 is a face view of one side of the pouch, with parts broken away.

Figs. 5 and 6 are detail sectional views taken on lines 5—5 and 6—6 respectively of Fig. 4.

10 In the present invention I preferably employ the composite sheet structure heretofore referred to, viz: the inner or liner layer of foil, the outer or backing layer of paper of tensile strength, and the uniting
15 film which unites the layers substantially throughout the area of their opposed faces.

The uniting material is preferably in the nature of a thin film of rubber compound that is applied to either or to both layers in
20 the form of a thin coating, the compound being in a fluid or semi-fluid state when being applied. This material provides a yielding, binding medium or adhesive, which, when sufficiently "tacky" or sticky—a result
25 obtained by allowing the coating to be exposed to the atmosphere for a brief period of time—is brought into facial contact with an opposing surface of proper character, and, especially when used with a surface
30 similarly formed, will cause an intimate union of the two opposing faces when the assemblage is subjected to pressure or heat and pressure.

The composite sheet so formed has the
35 qualities of flexibility and strength, as well as being air and moisture proof, through the presence of the film. In addition, the normal frailty of the foil sheet, due to its inability to resist tensile strains or be easily
40 torn, is practically overcome and in such manner that the air and moisture proof condition is still present in the sheet even though the foil sheet be not imperforate. To these advantages may be added that of
45 ductility under service conditions and without damage to the layers.

Owing to the low sale price of the package—the pouch and the commodity therein—the cost of manufacture of the pouch must
50 be reduced to the minimum. To produce this result the body of the pouch is formed from an elongated blank of uniform width from end to end, the blanks being cut from a web having the width of the blank. The
55 blank is folded on a transverse line to produce opposite side faces and a closed bottom, the opposing side edges being closed in suitable manner, as by the use of strips folded over the edges and secured to the outer
60 faces of the pouch sides.

In a prior patent (#1,137,280) I have disclosed the use of a composite sheet of this type for forming a pouch or container, in which the composite sheet has the foil layer
65 of greater width than the backing layer, the

projecting portions of the foil forming the ends of the pouch, the inner face of the foil from one side being united to the outer face of the foil from the opposite side. This not only materially increases the width of foil
70 sheet necessary—increasing the cost of material correspondingly—but also increases the cost of manufacture, owing to the particular manner in which the structure must be manipulated during manufacture.

In fields such for instance as above indicated—plug tobacco packages—such cost of manufacture may be greater than is permitted to meet competition. To meet this condition and at the same time produce a pack-
80 age in which the entire inner face of the package is of foil formation and provides the air and moisture proof qualities, I employ the simple blank formation referred to above, and produce a seam formation hav-
85 ing the desired qualities and which, although based on the use of the fragile foil, can be readily produced at a comparatively low cost.

To obtain this result, I decrease the width
90 of the foil layer so as to provide a narrow projecting strip at the opposite side edges of the blank, bring the inner faces of the projecting portions into direct opposition, and then fold the opposed projected por-
95 tions onto the outer face of one of the sides of the pouch, thus placing the folded portions on the outer side of the backing layer. While these projecting portions are of the fragile foil material and easily damaged the
100 folding is readily done since the edges of the backing layer act as a form and the ductility of the foil material permits it to be readily folded to position without liability
105 of damage.

The opposing faces of the projecting portions may or may not be secured together, but I prefer that the folded portion be united to the backing sheet. After folding, a strip, preferably of paper, is secured to
110 the outer faces of the sides, extending over the folded portions of the foil.

As a result the interior of the pouch will have a width equal to the width of the backing layer, and the folded projecting portions
115 of the foil will prevent exposure of either the backing layer or the side strips to the interior of the package, the foil producing the complete face for the package interior. Rupture of the foil on the folding line is pre-
120 vented by the overlapping side strip.

In the drawings A designates the composite sheet blank, having the foil layer 10, backing layer 11, and film of cementitious material 12. The projecting edges of the
125 foil indicated at 10^a, are of relatively narrow width and preferably have the outer face coated with the cementitious material—the rubber compound—as at 10^b.

The backing layer is also provided with 130

strips 11^a of such material along the side edges.

The side strips are indicated at 13 and are also preferably coated on their inner faces with such material. These strips are folded to form two wings which overlap the sides of the pouch at the edges, as shown in Fig. 5.

After the blank has been folded, placing the inner faces of the foil projecting edges in direct opposition, these edges are both folded over on to the same face of backing sheet, after which strips 13 are applied. As strips 13 have a wing width greater than the width of the folded foil edges, the latter will not only be inclosed by strips 13, but said strips will also be united to the backing sheet beyond the foil, so that a firm connection will be had between the backing layer and the strips. As the strips and backing layer have material tensile strength, the foil will not be subjected to strains on the folding line and hence will maintain the integrity of the weak material on such line, it being understood that such line is at the ends of the pouch, where the movements of the pouch sides, in spreading or closing the pouch mouth, will tend to provide a strain.

As will be seen the coated faces 10^b of the folded foil edges will be secured respectively to the backing layer and the strips and thus be held from movement relative to these parts. As the strips and backing layer are held fixedly relatively to each other, it will be clear that the sharp bend placed in the foil in folding the edges will be maintained, without strain. And since the opposing faces of such foil edges, beyond the folding line, are in close contact beneath the strip, an effective barrier is provided against passage of air or moisture through the seam. It is to be understood of course that the parts are united by the action of pressure or heat and pressure.

If desired, the inner faces of edges 10^a may be provided with a strip 10^c of the cementitious material, such arrangement causing the opposing faces of these edges to be secured together and affording an additional guard against leakage through the seam and producing a direct connection between these faces. Such connection, however, is entirely beyond the folding line, so that the entire interior of the pouch may be exposed when the mouth is spread open.

Owing to the ductility of the foil, the projecting edges can be readily folded over in such manner as to closely fit the side edges of the backing layer, thus tending to prevent any formation of leakage points at the corners formed at the bottom of the pouch. If desired, however, I may extend the strips 13 slightly beyond the bottom of the pouch, and then press the extended portions to-

gether, thus sealing the lower ends of the strip. This arrangement is preferred, although it may be omitted.

To complete the package, I preferably close the mouth of the pouch by a sealing strip 14 of suitable configuration, preferably of the type shown in the drawings and which is provided with wings 14^a secured in position after the commodity is inserted. I prefer to extend the ends of the sealing strip and close the extended portion to prevent formation of leakage points at the mouth end of the pouch.

The specific structure of the sealing strip is not claimed herein, the same forming the subject matter of companion applications. It is to be noted, however, that it is so formed as to be readily torn or ripped to expose the mouth of the pouch.

The package thus produced is of a form which will retain the desired qualities of the commodity present when the package is completed, regardless of the length of time the package remains unopened. Hence the dealer will be assured of a salable commodity regardless of the length of time elapsing between forming of the package and the time of sale, and the purchaser will be assured of receiving a commodity which has not deteriorated from its initial condition.

Furthermore, these results are obtained by the use of a pouch or container relatively low in cost, it being readily understood that the coatings and strips can be placed in position while the sheet is in web form, the cementitious material being of a type which need not be wetted or moistened to provide uniting action, this action being provided by the application of pressure or of heat and pressure. The required manipulation can be readily provided, so that the cost of manufacture is low.

While I have shown and described a preferred form of structure and use it will be obvious that variations and modifications in structure may be required or desired to meet the exigencies of use, and therefore I reserve the right to make any and all such changes as may be necessary in so far as the same may fall within the spirit and scope of the invention as expressed in the accompanying claims. It is also to be understood that the specific disclosure herein is not to be considered as limiting the use of such structure to the particular field indicated.

While I prefer to use the foil layer in the composite sheet form referred to, the invention is not limited to such form, as I may provide the blank with separate backing and foil sheet layers or may have these layers "tacked" together,—these variations being considered within the invention.

What I claim is:

1. A pouch formed with a frail foil liner and an outer backing sheet folded on a

transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges.

2. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, said backing sheet and the strips being united to the outer faces of said edges.

3. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, the faces of the backing sheet and said strips which oppose the outer faces of said folded foil edges being treated with a normally-dry non-adhesive substance having cohesive properties to unite said outer edge faces to said backing sheet and strip faces.

4. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, the outer faces of the folded foil edges being treated with a normally dry non-adhesive substance having cohesive properties to unite said faces to the strips and said backing sheet.

5. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, the faces of the backing sheet,

strips and foil edges which oppose each other in the pouch formation being treated with a normally dry non-adhesive substance having cohesive properties to intimately unite said faces.

6. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, the opposed inner faces of the folded foil edges being intimately united together.

7. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, said liner having the longitudinal edges of its inner face treated with a normally dry non-adhesive substance having cohesive properties to form a medium for uniting the opposed inner faces of the folded foil edges.

8. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, said liner having the longitudinal edges of its inner face treated with a normally dry non-adhesive substance having cohesive properties to form a medium for uniting the opposed inner faces of the folded foil edges, the outer faces of the folded foil edges being united to the backing sheet and said strips.

9. A pouch formed from a flexible composite blank consisting of superposed layers in sheet form facially united with the inner or lining layer composed of frail foil, said blank having the foil layer of greater width than the outer layer to provide projecting foil edges extending throughout the length of the foil layer, said blank being folded on a transverse line to produce opposing faces with the inner foil faces of the projecting edges in facial contact, said contacting foil edge faces being folded to overlie a side of the pouch, and strips having greater width

than the folded foil edges and secured to the outer layer in inclosing relation to such edges.

10. A pouch formed from a flexible composite blank consisting of superposed layers in sheet form facially united with the inner or lining layer composed of frail foil, said blank having the foil layer of greater width than the outer layer to provide projecting foil edges extending throughout the length of the foil layer, said blank being folded on a transverse line to produce opposing faces with the inner foil faces of the projecting edges in facial contact, said contacting foil edge faces being folded to overlie a side of the pouch, and strips having greater width than the folded foil edges and secured to the outer layer in inclosing relation to such edges, said foil layer having the outer faces of its projecting edges treated with a cementitious material to unite the folded edges to the outer layer and said strips.

11. A pouch formed from a flexible composite blank consisting of superposed layers in sheet form facially united with the inner or lining layer composed of frail foil, said blank having the foil layer of greater width than the outer layer to provide projecting foil edges extending throughout the length of the foil layer, said blank being folded on a transverse line to produce opposing faces with the inner foil faces of the projecting edges in facial contact, said contacting foil edges being folded to overlie a side of the pouch, and strips having greater width than the folded foil edges and secured to the outer layer in inclosing relation to such edges, said foil layer having the inner and outer faces of its projecting edges treated with a cementitious material to unite the

folded edges together and to the outer layer and said strips.

12. A pouch formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, and strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, said strips extending beyond the pouch bottom to produce strip extensions with confronting faces extending inward beyond the side faces of the pouch, said extension faces having an adhesive coating to permit the confronting faces to be secured together.

13. A commodity container having air and moisture proof qualities and comprising a pouch portion formed with a frail foil liner and an outer backing sheet folded on a transverse line, said liner being of greater width than the backing sheet to produce projecting foil edges, the inner faces of said edges opposing each other in the pouch formation, said edges being folded to overlie the backing sheet, strips extending over the pouch ends and secured to the outer faces of the pouch sides to overlap the foil edges, and a sealing strip adhesively connected to the mouth of the pouch, said strip serving to complete the sealed condition of the pouch and capable of being ripped or torn to permit access to the pouch interior through the pouch mouth.

In testimony whereof I affix my signature.

JONATHAN PETERSON.