This invention relates generally to cigarette cases and the like. More particularly it relates to cigarette cases and the like provided with means for maintaining the contents thereof in good condition for protracted periods of time.

While my invention has been disclosed in its application to cigarette cases, it is to be understood that as to certain phases thereof it may have other applications, as for example, to tobacco jars, or cigar boxes.

The general object of my invention is the provision in a cigarette case of a simple, effective and inexpensive construction, whereby the contents of the cigarette case will be protected and maintained in good condition.

Among the more particular objects of my invention is the provision in a cigarette case of a simple arrangement whereby the cover of the cigarette case is maintained effectively in closed position once it is closed.

Among the more particular objects of my invention is further the provision in a cigarette case of a construction whereby the contents of the cigarette case are visible at all times, and the provision in a cigarette case of an arrangement whereby the moisture conditions within the case will be so maintained as to preserve the contents in good condition and in particular to prevent spoilage due to excessive dryness and whereby stale dried-out cigarettes when inserted into the case may be restored to a condition of freshness.

These objects and such other objects as will hereinafter appear or be pointed out are obtained in the illustrative embodiment of my invention shown in the drawing, in which:

Figure 2 is a side view of the cigarette case of Figure 1;

Figure 3 is a fragmentary rear view in perspective of the upper portion of the cigarette case of Figure 1;

Figure 4 is a fragmentary transverse sectional view on an enlarged scale, substantially on the line 4—4 of Figure 3, looking in the direction of the arrows;

Figure 5 is a perspective view on an enlarged scale of the top of the cigarette case of Figure 1, showing the humidifying element partly drawn out of the cover;

Figure 6 is a fragmentary view in perspective of the moisture retaining pad of one of the humidifying elements;

Figure 7 is a view in perspective of the tray of one of the humidifying elements;

Figure 8 is a plan view on a reduced scale of the blank for the exterior of the body portion of the cigarette case of Figure 1;

Figure 9 is a plan view of the blank for an insert, which together with the blank of Figure 8 constitutes the body portion of the cigarette case;

Figure 10 is a view in perspective indicating the manner of setting up the blank of Figure 9;

Figure 11 is a fragmentary sectional view substantially on the line 11 of Figure 2 looking in the direction of the arrow, and showing a detail of the manner of assembling the blanks of Figures 8 and 9;

Figure 12 is a fragmentary view in perspective also showing the manner of assembling the blanks of Figures 8 and 9; and

Figures 13 and 14 are respectively plan views of blanks for the outside and for the insert of the cover of the cigarette case of Figure 1.

The illustrative embodiment of my invention shown in the drawing comprises a body portion A and a cover portion B, and these are hingedly united as shown at C.

The body portion A is of prismatic form having rectangular faces and it is open at the top. The cover portion B may be described as a section of a prism having its bottom cut away on the bias. The resulting configuration is clearly shown in Figures 1, 2, 3 and 4. As appears from the latter figure the cover B is adapted to seat on the body portion A so as to form therewith a complete prism. Due to the bias construction of the cover, however, the front face of the cover is of greater depth than the rear face.

It will be observed that the hinge C is positioned below the upper edge of the body A whereby, as can be seen from Figure 4 as the cover B is tilted about the hinge the point P on the inside of the front face thereof, located at the level of the hinge C, will travel along the path indicated by the circular arc P—Q which intersects the upper edge of the front wall of the body A at a point P', and this point P' is positioned to the rear of the point P at the top of the outer face of the front wall of the body A. As tilting of the cover is continued the point P will reach the point P' and in this position the front wall of the cover is entirely clear of the body portion.

From what has been said it will be understood that before the cover can be brought into the dot and dash line position of Figure 4, in which the point P has reached the position P', it is neces-
sary for the front wall of either the base or the cover to yield, and for this purpose one or both of these front walls are made of elastic material, which material is also resilient, so that, while it affords resistance to the opening of the cover it will spring back into place, after the cover is open, and whereby when the cover is again positioned in its full line or closed position the front wall of the base A will resist opening of the cover.

When the cover B is in its full line position of Figure 4 which represents the normal position of the case, it will be seen from this Figure that the front wall of the cover B will yield over the body portion A and will provide a closure that is practically airtight. Tilting of the cover B in a counterclockwise direction is prevented by the alignment and seating engagement of the front wall of the cover on the front wall of the body.

To attain certain of the objects of my invention both the cover and the body of the cigarette case are made of moisture proof non-inflammable material, and to attain other objects the material may also be transparent, whereby the contents of the cigarette case are at all times visible without the necessity of opening the cigarette case. Many materials having the desired characteristics are available at the present time. I have found among others that cellulose acetate and synthetic resin are materials that are highly satisfactory in practice.

While the use of water proof material such as cellulose acetate and synthetic resin compounds will to a certain extent help to maintain the contents of the cigarette case in good condition, I have found that it does not entirely prevent the drying out of the contents. In order to prevent such drying out I have found it desirable, as an added feature of my invention, to provide humidifying means in the cigarette case, which may be in the form of a water vapor emitting element H in the body of the case and another water vapor emitting element M in the top of the base. These elements are preferably positioned above and beneath the open ends of the cigarettes in the case as shown in Figure 1. Obviously if desired only one humidifying element either in the case or in the body may be used. These humidifying elements the natures H and M may also be in the form of inserts slideable into compartments provided for that purpose respectively in the cover and the body.

The constructional details of the illustrative embodiment of my invention shown in the drawing will now be described. It will of course be understood that this is only one of the many ways in which my invention may be embodied.

In Figure 8 I have shown a blank D of which the exterior of the body A of the cigarette case is formed. This blank is composed of a pair of panels 15 and 16 constituting respectively the front and rear of the body. Intermediate the side walls is a panel 17 which constitutes one end wall. The lines 18 and 19 indicate the lines of folding of these panels. The other end wall is constituted by a pair of panels 20 and 21, the former being joined to the panel 15 through the line of folding 22, and the latter being joined to the panel 18 through the line of folding 23. When these panels are folded about the respective fold lines the panels 20 and 21 will meet in alignment relation as can be seen in Figures 1 and 2, as well as in Figure 12.

A pair of panels 24 and 25 each constituting one half of the bottom wall of the case are connected respectively to the panels 15 and 16, the fold lines being shown at 26 and 27. When the blank is set up these panels will come into abutting relation to form the bottom wall of the body A.

It will be observed that a portion of one end of each panel 20 and 21 is cut away so as to leave an open end at the bottom of the end wall through which the humidifying element H may be inserted, as will be described more fully hereinafter. These cut away portions are indicated at 28 and 29. The bottom panels 35 and 36 are also provided with an open end so as to provide a recess within which a lug carried by the humidifying element M may be accommodated, as will also be more fully described hereinafter. These cut away portions are indicated at 31 and 32. In order to complete the base A I have provided a second blank E shown in Figure 9, which comprises a panel 32, which, as will subsequently appear, constitutes a false bottom overlying but spaced from the outer bottom of the case. Perforations 33 are provided in this panel for a purpose that will also appear hereinafter. Attached to one side of the panel 32 is a panel 34 adapted to hinge about the fold line 34. Attached respectively to the other three sides of the panel 32 are narrow panels 35, 36 and 37, their respective fold lines being shown at 38, 39 and 40.

Attached to the panel 36 is a panel 41, which is contoured and dimensioned so as to overlie panels 24 and 25 of the blank of Figure 8, and has a portion 41a cut out of its free end for purposes to be described. While the cut out 41a is shown as V-shaped it will be understood that it may have other contours, as will be understood as the description proceeds. The panel 41 hinges about the line 41b.

The manner of folding the blank E for association with the blank D is indicated in Figure 10. It will be observed that the panel 32 is disposed horizontally while the panel 35a is shown as folded up in a vertical position. The panels 35, 36 and 37 are folded downward into a vertical position and the panel 41 is folded so as to underlie the panel 32. In Figure 10 the panel 41 is not shown in its final position but instead is shown in an intermediate position, and movement into the horizontal position is shown as in arrow 42, which shows that the panel 41 is to be moved into a horizontal position underlying but spaced from the panel 32. When in these respective positions it will be observed that the panels 32, 35, 36, 37 and 41 constitute the walls of a compartment that is open at one side as shown in Figure 10) and the blank E is adapted to be associated with the blank D so that the panel 33a registers with the panels 20 and 21. It will be observed that the open side of the compartment formed by the blank E registers with the cut away portions 28 and 29 described in connection with the blank A, while the cut out portion 41a of the panel 41 registers with the cut away portions 30 and 31 of the blank D.

This manner of association of blanks D and E is indicated in Figure 11. It will be understood that the panels 20 and 21 are suitably secured to the panel 33a as by cementing them thereto, and that the panels 24 and 25 are suitably secured to the panel 41 as by cementing them thereto. Where it is desired to make the case transparent it will be understood, of course, that the cement should also be transparent.

It is to be understood that while the blanks D and E have been described as made of an integral...
piece of material, that for particular purposes, as for instance, to save material, or to reinforce portions, it may be found advantageous to make each blank of more than one piece, these pieces being joined together in any suitable or preferred material. For reinforcing purposes several layers of material may be used.

It will be observed, particularly from Figure 11, that by assembling the blanks D and E in the manner described a strong rigid construction that is free from awkward overlaps is obtained. Wherever overlapping occurs as in the case of the panels 26, 21 and 35a, and 24, 25 and 41, this overlapping occurs throughout an entire wall and not merely a portion of a wall.

It will further be observed that a compartment is formed in the bottom of the base A, opening outwardly at one end thereof, into which may be slipped the humidifying arrangement H, which will shortly be described. This compartment is separated from the main body of the base A by the false bottom 32 but water vapor from the humidifying element H may enter the main portion of the base A through the perforations 33.

An illustrative manner of constructing the humidifying element H is shown in Figures 6 and 7. G (see Figure 7) denotes a tray having end walls 43 and 44 and side walls 45 and 46, all of these being secured to a base panel 47 so as to form a tray. The outer end wall 43 is preferably of a thickness to insure practically air-tightness when fully inserted in the compartment. The material of these parts is preferably water proof and may also be transparent. Cellulose acetate, synthetic resin, plastics, sheetings or molding compounds and the like may be mentioned as examples of suitable materials. A lug 48 is provided on the outside wall of the panel 47 at one end thereof and this lug serves as a finger grip when the tray G is inserted into the compartment intended to receive it. The lug 48 is so dimensioned that it will fit into the recesses 30, 31 and 41 (see Figure 11) whereby it will be observed that the base A can be completely inserted into the said compartment and the lug, while readily accessible for purposes of manipulation, will not protrude beyond the general contours of the base A to an objectionable extent and preferably is made flush with the base of the case. The construction just described can be readily understood by reference to Figures 3 and 5 which illustrate the humidifying element M, which is a duplicate of the humidifying element H, respectively in its fully inserted position and in a partly protruded position.

In Figure 6 I have shown a moisture retaining pad L adapted for insertion into the tray G of Figure 7. It consists essentially of a mass of water retaining material, such as layers 49 of absorbent paper within muslin on the face to prevent the paper from roughing or tearing, a compressed cotton pad or a clay pellet and surrounded on all sides except one face by moisture proof material 50. The uncovered face is shown at 51.

The pad or pellet L is first moistened and is then placed in the tray G so that its face 51 is exposed. The entire assembly H is then slid into the compartment in the base A with the face 51 of pad L positioned underneath the wall 32 so that vapors therefrom can pass through the perforations 33 of said wall and into the main body of the base A. Since the cigarettes have their end portions resting on the wall 32 the vapors will enter the cigarettes without having to pass through the wrappers thereof.

It will be observed that the humidifying element H can be inserted into the case or withdrawn therefrom without opening the case, so that no exposure of the contents is necessary.

It is further to be noted that while I have described the use of water with the humidifying element, that flavoring substances or perfumes may be used therewith if desired, so as to impart a desired flavor or perfume to the contents of the case.

The cover B, in general, is shown as constructed similarly to the base A. It comprises two blanks N and O. Suitable means is made for the hinge, and the end walls have their edge portions cut on the bias.

The blank N, which corresponds to the blank B comprises panels 52, 53, 54, 57, 58, 61 and 62, corresponding respectively to the panels 15, 16, 20, 21, 24 and 25 of blank D, and folding on the lines 55, 56, 60, 63 and 64 respectively, corresponding to the various folding lines of the blank D. A plurality of tabs 65 are provided on the free edge of the panel 62 and constitute in effect hinge plates. If desired the tabs 65 may be formed on a separate panel, which is then suitably secured to the panel 52.

The blank O, which corresponds to the blank E of the base A, comprises panels 66, 68, 70, 71, 72 and 76, folding on the lines 69, 73, 75, 77 and the panel 76 having a cut out portion corresponding to the portion 41a.

The panel 66 has perforations 67 therein corresponding to the perforations 33.

The assembly of the blanks N and O is similar to that of the blanks D and E and for that reason requires no detailed description.

The assembly of the base A and the cover B is shown effected by a hinge construction comprising a panel 78 provided with tabs 60 (see Fig. 3) which are doubled back and are positioned so as to alternate with the tabs 65 of the blank N, which are also doubled over and suitably secured in place. Thereby a hinge plate construction is obtained, and the two hinge plates are united by means of a hinge pin 81 which is laid in the lugs portions of the tabs 68 and 70.

By making the body of the case of a size as illustrated so that the cigarettes protrude therefrom, the latter may be readily withdrawn from the case, and further add additional security to the closure of the case, by the frictional and resilient contact of the protruding ends with the inside of the cover.

The humidifying element M is shown as an exact duplicate of the element H. Its tray R carries a pad S (see Fig. 4). The parts R and S are of a construction identical with that of the parts G and L of the element H, and further description thereof may therefore be omitted as superfluous.

While I have herein disclosed one illustrative embodiment of my invention, it will be understood that the same may be embodied in many other forms without departing from the spirit of the invention, as will be obvious to those skilled in the art, and it will be further understood that the disclosure herein is by way of illustration merely and is not to be interpreted in a limiting sense, and that I do not limit myself other than as called for by the prior art.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is:
A cigarette case comprising a cover member and a body member, one of said members being formed of a blank folded into prismatic form to comprise a pair of side wall panels, an end wall panel uniting said side wall panels and the outer ends of said side wall panels each having a panel attached thereto to form one half of the other end wall and also another panel attached thereto to form one half of the top wall, and of a second blank received in said first mentioned folded blank folded to comprise a panel secured to the inside face of the two half end wall panels of said first mentioned folded blank, another panel secured to the inside face of the two half top wall panels of the said first mentioned folded blank, a perforated false partition united to said first panel and a short end wall uniting said second panel and said false partition, whereby said second folded blank when attached to the first folded blank forms a compartment adjacent an outer wall of said member, and parts of the said half panels of the top wall attached to said first folded blank being cut away so as to provide an opening in said top wall affording access to said compartment.