Nov. 30, 1937. F. H. GROVES 2,100,644

HINGED CARTON

Filed March 9, 1935 2 Sheets-Sheet 1

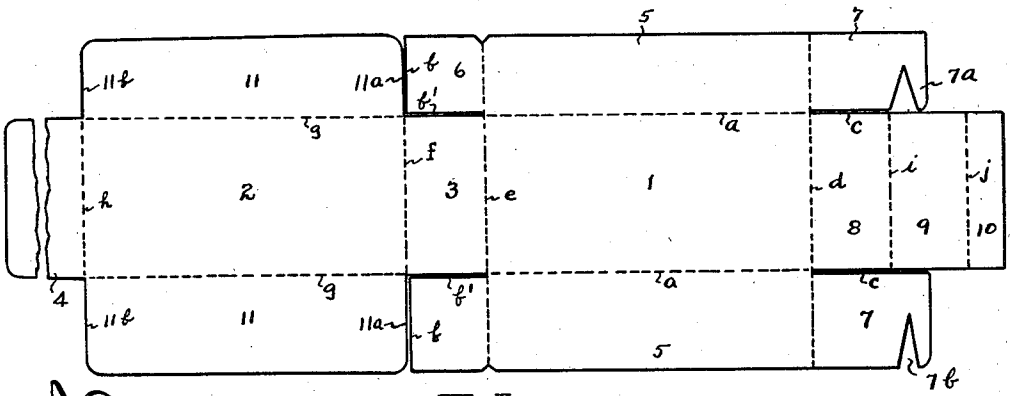


Fig. I

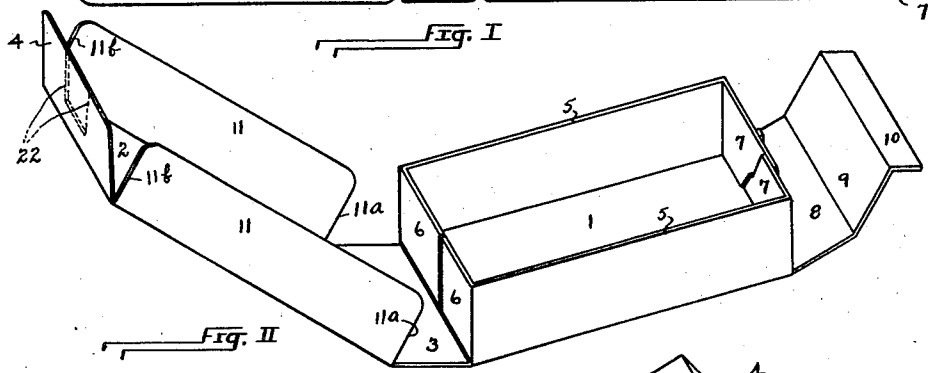


Fig. II

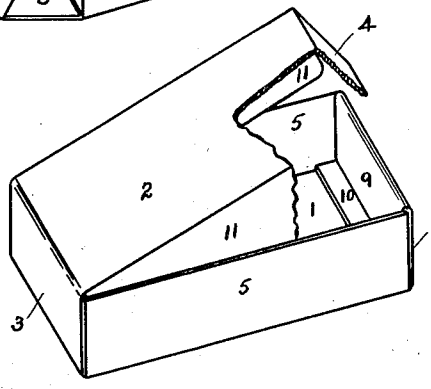


Fig. III

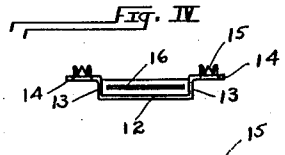


Fig. IV

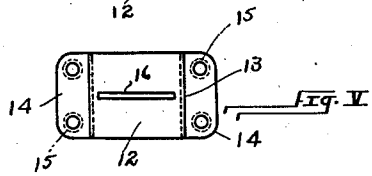


Fig. V

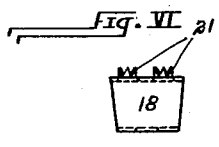


Fig. VI

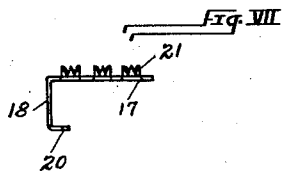


Fig. VII

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HINGED CARTON

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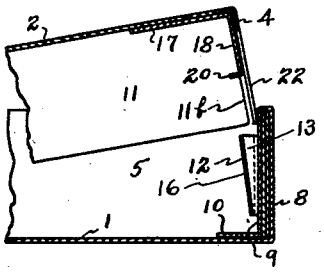


Fig. VIII

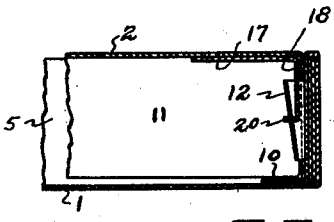


Fig. IX

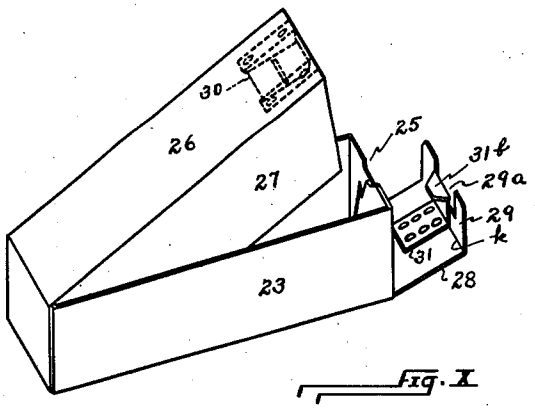


Fig. X

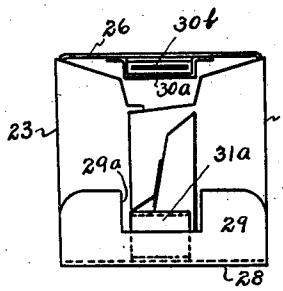


Fig. XI

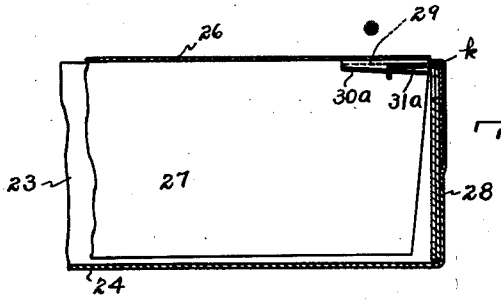


Fig. XII

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2,100,644

UNITED STATES PATENT OFFICE

2,100,644

HINGED CARTON

Frederick H. Groves, Dormont, Pa.

Application March 9, 1935, Serial No. 10,220

7 Claims. (Cl. 229—47)

This invention relates to a paper box, or carton, made in the form of an integral blank, or web, cut, creased, and bent.

The primary object of my invention is to provide in a hinged box, or carton, and particularly in a hinged box, or carton, of the erectable type above-identified, automatic locking means, which are simple and inexpensive, and which so intersecure the receptacle and lid elements of the erected carton as to render destruction of the carton necessary in obtaining access to the interior of the carton.

In the accompanying drawings Fig. I is a plan view of a cut and creased blank, by the bending, and by the proper positioning of the several portions of which, erection of the carton is effected. In this figure of the drawings, full lines indicate cut edges of the blank, and dotted lines indicate creases defining the lines of bending of the blank in erection of the carton.

Fig. II of the drawings is an isometric view, illustrating an initial stage in the erection of the carton.

Fig. III is an isometric view, partly broken away, showing the receptacle element of the carton wholly erected, and illustrating the positioning of the hinged carton lid, in closing the carton.

Fig. IV is a plan view of the female element of locking means appropriate to use on hinged boxes, or cartons, and which may be satisfactorily applied to an integrally formed erectable carton.

Fig. V is a front elevation of the female locking element shown in Fig. IV.

Fig. VI is an end elevation of the male element of the locking means, viewing the said male element from the left of Fig. VII.

Fig. VII is a side elevation, or edge view, of the male locking element, looking from the right of Fig. VI.

Fig. VIII is a fragmentary, central, vertical section taken at the front of my hinged carton; that is, the region of the carton removed from the hinged end, and illustrating the attachment of the male and female elements of the locking means to the lid and receptacle portions, or elements, of the carton. In this figure of the drawings, the parts are shown in their relative position assumed during the final stage of rotating the lid element of the carton into closing position with respect to the receptacle element of the carton.

Fig. IX is a view similar to Fig. VIII, but illustrating completely closed condition of the carton, with the locking elements in engagement to interlock the receptacle and lid elements of the carton.

Fig. X of the drawings is an isometric view showing an erected hinged carton suitable as a package for radio tubes, and for similar uses; illustrating the attachment of the locking elements, shown in preceding figures of the drawings, to the lid and receptacle elements of the carton.

Fig. XI is a front elevation of the carton shown in Fig. X, showing the lid element of the carton fully positioned with respect to the receptacle element of the carton, and illustrating the portion of the receptacle element which carries one of the locking elements in disengaged position.

Fig. XII is a fragmentary, central, vertical section taken at the front region of the carton shown in Figs. X and XI, illustrating the position of the locking elements when the carton is wholly closed.

In the accompanying drawings reference numeral 1 designates the bottom of the carton, as it occurs both in the blank, and in the erected carton. Similarly, the other elements of the carton proper, being all present in the blank as well as in the erected carton, bear identical reference numerals, both as designating regions of the blank, and as designating elements, or portions, of the erected carton.

Referring particularly to Fig. I of the drawings, showing the extended blank, it will be noted that the blank comprises a single web. In this web the carton bottom 1 is connected with the carton top, or lid, 2, by a bridging region 3.

Along the lateral edges of the bottom 1 extend two duplicate strips, which in their intermediate extent are defined with respect to the bottom by the crease lines *a*, and which rearwardly of the bottom are defined by lines of cutting *b*, *b'*, which extend respectively at right angles to, and parallel to, the edges of the side strips. At the forward end of the blank, the side strips are defined by cuts *c*, which extend longitudinally inward from the front edge as far as the crease line *d* which defines the forward edge of the bottom. At its rear edge the longitudinal extent of the bottom 1 is defined by a crease line *e*, which extends transversely outward through the width of the side strips.

In line with the transverse cut lines *b*, is a crease line *f*, which defines the demarcation between bridging region 3 and the top 2 of the carton. The top 2 of the carton is defined, as of equal area to the bottom 1, by longitudinal crease lines *g*, in alignment with the cut lines *b'*, *b'* of the side elements associated with the bottom 1 and the crease lines *a*, *a* which define the lateral

edges of the bottom 1; and by a transverse crease line *h*, which defines the demarcation between the top 2 of the carton and a longitudinal extension 4, which is of a width equal to the width of the top 2.

It may be here convenient to designate the regions of the side strips which are longitudinally co-extensive with the bottom by reference numeral 5; to designate the rearward flaps of side strips 5 which are defined by the cut lines *b*, *b'*, and the crease line *e*, by reference numeral 6; and to designate the forward flaps of the side strips which are defined by the cut lines *c*, and the crease line *d*, by reference numeral 7. These latter flaps 7 are cut away triangularly from the inner edge of one, and from the outer edge of the other, to leave terminally-disposed tongues 7*a*, and triangular slots 7*b*.

A rectangular region of the blank lies partially between the flaps 7, and partially extends forwardly beyond the forward edge of these flaps. This piece, the rearward edge of which is defined by crease line *d*, is divided by transverse crease lines *i* and *j* into three regions 8, 9, and 10, designating these regions progressively from the rearward edge to the forward edge of the piece.

Referring to Fig. II of the drawings, which illustrates the erection of the carton, the side walls 5 have been brought into vertical position with respect to the bottom 1 by bending along the crease lines *a*. The front wall of the receptacle element of the carton has been erected by bending the front flaps 7 on the extensions of the crease line *d*, so that these flaps, formed as extensions of side walls 5, have been brought into both vertical and transversely extending position, in which position they have been interlocked by means of end tongues 7*a*, and the slots 7*b*, associated with them. At the rear of the bottom, the flaps 6 have likewise been bent along the continuations of the crease line *e*, and brought into vertical position extending transversely inward, with their vertical free edges abutting, or closely adjacent, each other. Desirably, at this stage of erection, some slight folding has been done along the crease lines *d* and *e* throughout the width of the bottom 1, in order further to define the receptacle portion of the carton.

The side strips 11 of the carton top have been folded to extend angularly from the plane of the top 2, forming side walls for the top, or lid. Similarly the flap 4 has been folded along crease line *h*, providing an end wall for the top, or lid.

It will be observed that in this stage of erecting the carton, the receptacle element of the carton is already formed and is in condition to receive goods which are to be contained by the carton. This fact leads to advantage in the use of the carton, since the blank can be brought, by folding, into contents-receiving condition intermediately of its erection; it being, therefore, unnecessary wholly to close the carton, and then to reopen it for the reception of its contents. The packing of the carton may thus be involved in a stage of its erection.

To complete the erection of the structure, as a closed and rigid carton, the front piece of the blank comprising the regions 8, 9, and 10, is brought into position to enfold the interlocked front wall of the receptacle. In so doing the piece is first bent at the crease line *d*, so that the region 8 extends vertically to lie forwardly beyond, and to match, the interlocked front wall. By then bending on the crease lines *i* and *j*, an inner reinforcing wall 9 is formed, which extends vertically downward to a horizontally-disposed foot 10. As thus brought into assembly position, the front walls 8 and 9 wholly enfold the interlocked primary front wall of the receptacle, and the foot 10, lying flat against the upper surface of the bottom 1, tends to maintain the enfolded condition of the front wall interlock. This is particularly the case if contents of the carton, or an element of the carton top, be caused to bear against the upper surface of the foot 10. In bringing the top, or lid, of the carton into closing position, the intermediate blank portion 3 is brought into position extending vertically to the rear of, and against, the flaps 6 which form a primary rear wall for the carton. The bridging region, brought into vertical position by bending on the crease line *e*, thus forms an exteriorly-disposed reinforcing rear wall for the carton. By bending on the crease line *f*, at the junction of the reinforcing rear wall 3, and the body 2 of the top, or lid, the top of the carton is brought into closing position, the crease line *f* serving as the equivalent of a hinge for turning movement of the carton top. As the top of the carton is rotated into closed position parallel with the bottom 1, the side walls 11 of the top are caused to enter the receptacle element of the carton, and to lie inwardly against the primary side walls 6.

In this position, the rearward edges 11*a*, of the lid sides 11, lie inwardly against the rear flaps 6, so that these flaps are embraced between the reinforcing rear wall 3, and these rear edges 11*a* of the lid sides. The front edges 11*b*, of the lid sides 11, lie inwardly against the inner reinforcing portion, or wall, 9 of the structure enfolding the interlocked flaps 7. These side walls 11 of the carton top, or lid, thus serve to stiffen the carton longitudinally.

As shown, the walls 11 are of equal height with the walls 5 of the primary receptacle structure. Lying inwardly of the walls 5, they, therefore, provide not only an additional thickness of material at the sides of the carton, but also, by contact with the bottom 1, provide spacing means for positioning the lid vertically, and vertically stiffen the carton structure.

The flap 4, as folded into a position extending angularly to the plane of lid body 2 forms a front flap for the lid. This flap 4, which, when the carton is fully closed, lies rearwardly of the front wall assembly, assists in frictionally maintaining the lid, or top, of the carton in position, and tends to stiffen the carton structure transversely. If this flap is made of a height equal to the height of the lid sides 11, it may bear against the upper face of foot 10, thus tending to maintain the enfolding structure of the front wall in position.

It may be desirable to provide automatically-engaging locking elements on the top element of the carton, and on the receptacle element of the carton. Desirably such locking elements are of a type which, when once engaged, cannot be disengaged from each other without destructively tearing apart the carton. For this purpose, I prefer to use the automatic locking means which are shown in detail in Figs. IV to VII inclusive, of the drawings. The locking means are closely similar to the locking means disclosed and claimed in my Patent No. 2,052,402, dated August 25, 1936. Whereas, however, the automatic locking means of my said co-pending application are adapted particularly to use with a telescoping box, or carton, the locking means herein shown and described are adapted particularly to use with a box, or carton, which has a lid, or top

cover, hinged at one end, and normally free from the receptacle element of the box, or carton, at its other end.

Referring to Figs. IV and V of the drawings, the female element of my locking means comprises a strap of readily deformable metal, such as light-gauge aluminum. This strap is formed into an intermediate or socket portion comprising a front wall 12, which is inclined rearwardly and downwardly to provide an upwardly flaring socket. Extending at the side edges of the front wall 12 are downwardly tapered side walls 13, from which extend outwardly ears, or lugs, 14, lying in a plane disposed at an acute angle to the plane of the front wall 12. The complete strap is desirably, as shown, formed from a single, integral piece of deformable sheet metal.

In order to mount the female locking element on a thin wall of penetrable material, suitable tangs are provided. The preferred form of mounting tang is, as shown, a simple rosette 15 produced by driving a pointed instrument through the ears, or lugs, 14 from the front of the structure, so that the rosettes 15 extend rearwardly. Front wall 12, provided intermediate its height with a transverse slot 16, is engaged with the male locking element of the locking assembly.

Referring particularly to Figs. VI and VII of the drawings, the male locking element is formed of an integral strip of metal comprising a base 17, a leg 18 extending substantially at right angles to the plane of the base, and a foot 20 bent inwardly to overlap the base 18 in a plane approaching parallelism with the plane of the base. The base 18 of the male locking element is similarly provided with tangs, such as the rosettes 21, extending from the face of base 18 which lies away from the leg and foot of the structure. This male locking element is formed of heavier gauge material than that of the female locking element, or is of a different, less readily deformable, metal. The purpose of this difference in rigidity between the elements will appear later, in describing the manner of their interengagement.

Figs. VIII and IX of the drawings show the locking elements mounted in cooperative relation on the carton shown in Figs. I to III inclusive, of the drawings. In this assembly, the male locking element has been mounted against the inner face of the top 2 of the carton, as by forcing rosettes 21 outwardly through the material of top 2, and bending them down against the outer surface of the lid. In this mounted position, the base of the male locking element lies along crease line *h*, which defines the junction of the lid body 2, and the depending front flap 4. In this position, leg 18 of the male locking element depends from the plane of the base 17 and lid body 2, and locking foot 20 extends horizontally, and rearwardly, of the carton.

The female locking element is shown as mounted on the inner enfolding front wall 9. As so mounted, with the ears 14 of the structure lying flush against the inner face of the wall 9, the front wall 12 of the element forms an upwardly flaring socket. In order that the male and female locking elements may be mounted in cooperative alignment with each other, the front flap 4 is cut away from its lower edge, to provide a space 22, which permits the front flap to clear the mounted female locking element.

Fig. IX of the drawings illustrates locking engagement of the male and female elements, permanently to secure the carton cover, at its front, to the front of the carton receptacle. This locking engagement is effected automatically, merely by bringing the carton cover 2 into full closing position. As the carton cover is rotated about the hinge provided by crease line *h*, leg 18 and foot 20 of the male locking element enter the upwardly flaring socket of the female locking element. The depth, that is, the rearward extension, of foot 20 is greater than the width of the socket formed by mounting the female element on a plane surface, at the line intermediate the height of the front wall of the female element 12 at which slot 16 is disposed. As the material of the male locking element is more rigid than that of the female locking element, foot 20, after entering freely the flared upwardly open end of the socket, bows, or deforms, the front wall 12 of the female element outwardly during its downward passage. Upon reaching slot 16, foot 20, therefore, snaps into the slot. When foot 20 of the male locking element has entered slot 16, tendency of front wall 12 of the female element to return to form causes the foot to remain in position projected through the slot. Because of the form of the female locking element, but little resiliency in the material of the element is necessary in order to cause this locking projection of foot 12 on the male locking element.

It should be noted that the side walls 13 of the female locking element close the socket at its sides. It is, therefore, impossible to disengage the locking elements by slipping a thin instrument, such as a knife blade, between the cover of the carton and the inner reinforcing wall 9 of the carton. In order to disengage the elements, wall 9, carrying the female locking element, must be separated physically from the remainder of the front wall structure, or the carton in its forward region otherwise visibly mistreated. For this reason, the form of locking means herein disclosed is particularly desirable for use on erected cartons of the hinge type, provided that the front wall structure of the carton is of sufficient rigidity to maintain locking engagement between the male and female elements. It is generally useful on containers comprising hinged lids if it be unnecessary initially to deliver such containers in fully closed condition, such as would produce automatic locking of the lid element to the receptacle element of the container.

Figs. X, XI, and XII of the drawings illustrate the application of specialized locking means, above-described, to a paper carton, such as a carton suitable as a container for radio tubes. Automatic locking means are specifically desirable in association with such carton, for the reason that the deterioration of radio tubes by use is not readily observable, and it is, therefore, of importance that the tubes be sold in tamper-proof packages.

The carton shown in these latter figures of the drawings is generally similar to that shown in the preceding figures of the drawings. This latter carton, however, is modified in structure by omitting the front flap of the lid, or cover, and by omitting the inner reinforcing wall enfolding the interlocked primary wall at the front of the receptacle element of the carton.

This modified form of carton comprises, when erected, a receptacle element having side walls 23, upstanding from the bottom 24, and an interlocked front wall 25 formed by extensions of the side walls 23. The cover, or top, element comprises the plane, central portion 26, and depending sides 27 which are adapted to lie, in

closed condition of the carton, against the inner faces of receptacle walls **23**. The reinforcing front wall of the carton is formed as a simple extension **28** of the bottom, which extension is adapted to be brought into vertical position, lying outwardly of and against interlock **25**, and forming a reinforcing front wall. A terminal tab **29** extends at right angles to the reinforcing front wall **28**.

At the forward edge of cover portion **26** there is mounted a female locking element **30**, which is identical with the female locking element shown in Figs. IV and V of the drawings. This female locking element **30** is mounted on the inner face of cover portion **26**, and has its open terminal presented forwardly toward the front wall of the carton. The wall **30***a* of the female element, intermediately slotted at **30***b*, lies beneath the face of cover portion **26**, and lies at a slight angle thereto flaring forwardly to its open end.

Against the rearward, and inner, face of reinforcing wall portion **28** there is mounted a male locking element **31**. As mounted the base of the male locking element lies parallel to the plane of wall **28**, and the leg **31***a* of the element extends at right angles to this plane at the folded edge *k* lying between wall portion **28** and tab **29**. Foot **31***b* of the male locking element extends reversely parallel to the plane of the reinforcing wall **28**. It will be noted that, in the region of the male locking element **31**, the tab **29** is cut away to provide a space **29***a* of a width greater than the width of the female locking element **30**.

With the cover of the carton in its seated, or closing, position, as shown in Fig. XI, with the flared opening of female locking element **30** presented forwardly, reinforcing wall **28** is brought into its vertical position, to stiffen the forward end of the carton, and automatically to lock the carton. As wall **28** is brought into vertical position, male locking element **31** is carried rearwardly. The male and female locking elements being mounted in alignment with each other, as shown, the male locking element is thereby caused to enter the forwardly presented open end of the female locking element. Rearward passage of the male locking element is permitted by the cut-away region **29***a*, of tab **29**, which permits the tab to embrace the female locking element.

Fig. XII of the drawings shows the completely closed, and locked, carton. In the position of the parts shown in this figure of the drawings, the foot **31***b* of the male locking element **31** has passed rearwardly into the female locking element **30**, as far as the transverse slot **30***b*, by deforming the material of wall **30***a* in its rearward travel. Upon reaching the slot **30***b*, the foot **31***b* of the male locking element snaps through it, as in the different mounting of the locking elements shown in Figs. VIII and IX.

It will be observed that the interlocking function of the male and female locking elements is identical whether the elements be mounted as in Figs. VIII and IX, or whether they be mounted as in Figs. X to XII. When the elements, mounted in accordance with the showing of the latter figures of the drawings, are in their interlocking position, it is similarly impossible to insert a sharp instrument into the socket of the female locking element, so to deform the female element as to effect disengagement of the male element therefrom.

It has been explained that my specialized locking means are generally suitable as providing automatic locking for boxes and cartons of various types. The locking elements herein specifically disclosed are more suitable for use on hinged boxes and cartons than the automatic lock disclosed in my Patent No. 2,052,402.

More specifically, the locking assembly disclosed herein is suited peculiarly to single piece blanks, erectable into hinged cartons. This is for the reason that, as applied to the carton blanks, both the male and female locking elements are relatively thin, and thus do not interfere to any serious extent with the shipment and storage of the blanks. As each carton is erected, and its contents inserted, it may automatically, and permanently, be locked merely by bringing its elements into fully closed position.

I claim as my invention:

1. In an erectable paper carton formed of a single blank cut, creased, and bent to form bottom, top, side, rear, and front walls together with a reinforcing front wall formed as an extension of the bottom, male and female locking elements one mounted on an inner surface of the carton top and the other mounted on the reinforcing front wall in aligned position with respect to each other in the carton structure interiorly of the carton as erected; said female element and said male element comprising interengageable means adapted to be brought into locking interengagement as the carton is brought into fully erected and closed condition to provide an inaccessible lock for the carton.

2. In an erectable paper carton formed of a single blank cut, creased, and bent to form bottom, top, side, rear, and front walls together with a reinforcing front wall formed as an extension of the bottom, male and female locking elements one mounted on an inner surface of the carton top and the other mounted on the reinforcing front wall in aligned position with respect to each other in the carton structure interiorly of the carton as erected; said female element formed as a socket having continuous side walls and flaring to an open end, and said male and female elements comprising interengageable means adapted to be brought into locking interengagement as the carton is brought into erected and closed condition to provide an inaccessible lock for the carton.

3. In an erectable paper carton formed of a single blank cut, creased, and bent to form bottom, top, side, rear, and front walls together with a reinforcing front wall formed as an extension of the bottom, automatically engageable locking means comprising a female locking element mounted on the under face of the lid or cover element of the carton at the forward end thereof, said female locking element formed as a socket having continuous side walls and flaring to a forwardly presented opening, a male locking element carried by the reinforcing front wall of the carton in alignment with the said female locking element in the carton structure and arranged to project rearwardly interiorly of the carton and into the open end of the female locking element in vertical receptacle-completing position of said reinforcing front wall, and interengaging means in said male locking element and said female locking element, whereby there is provided in an erectable carton an inaccessible lock for the carton.

4. In an erectable carton comprising as erected a bottom, upstanding side, rear, and front walls folded upwardly from the carton bottom, a top

wall having hinged connection with the rear wall upstanding from the carton bottom and having along at least two of its unhinged edges dependent flanges which in closing movement of the carton move downwardly along the walls upstanding from the carton bottom, and a reinforcing front wall formed as an extension of the carton bottom, the arrangement being such that in closing movement no dependent flange comes into position outwardly of the front wall structure; automatically engageable locking means comprising a combination a female locking element and a male locking element mounted cooperatively one on the under surface of the carton top adjacent its forward end and the other on the reinforcing front wall of the carton in alignment with each other in the carton structure, the said female locking element being formed as a deformable socket having continuous side walls and flaring to an opening which in erected position of the carton is presented to the male locking element, the locking elements being so proportioned and mounted that the male locking element projects into the open end of the female locking element in fully erected and closed condition of the carton, and interengaging means in the male locking element and in the socket of the female locking element adapted to be brought into registering engagement partway of the depth of the said socket, the said interengaging means of the locking elements being protected against disengagement by an instrument inserted at the joint between the front wall structure and the top wall of the carton by the continuous side walls of the female locking element thereby to provide in an erectable carton a tamper-proof lock for the carton.

5. In an erectable carton comprising as erected a bottom, upstanding side, rear, and front walls folded upwardly from the carton bottom, a top wall having hinged connection with the rear wall upstanding from the carton bottom and having along at least two of its unhinged edges dependent flanges which in closing movement of the carton move downwardly along the walls upstanding from the carton bottom, and a reinforcing front wall formed as an extension of the carton bottom and as erected folded over the primary front wall of the carton to stand vertically inwardly of the said primary front wall, the arrangement of the carton parts being such that in closing movement of the carton top no dependent flange comes into position outwardly of the front wall structure of the carton; automatically engageable locking means comprising in combination a female locking element mounted on the inwardly and vertically positioned portion of the reinforcing front wall, said female locking element formed as a deformable socket having continuous side walls and flaring to an upwardly presented opening, a male locking element mounted on the under surface of the carton top wall at the forward end thereof in alignment with the said female locking element in the carton structure and arranged to project downwardly of the carton and into the open end of the said female locking element in erected position of the reinforcing front wall carrying the female locking element, and interengaging means in the male locking element and the socket of the female locking element adapted to be brought into registering engagement partway of the depth of the said socket, the said interengaging means of the locking elements being protected against disengagement by an instrument inserted at the joint between the front wall structure and the top wall of the carton by the continuous side walls of the female locking element thereby to provide in an erectable carton a tamper-proof lock for the carton.

6. In an erectable carton comprising as erected a bottom, upstanding side, rear, and front walls integral with the carton bottom, a top wall having hinged connection with the rear wall upstanding from the carton bottom and having along at least two of its unhinged edges dependent flanges which in closing movement of the carton move downwardly along the walls upstanding from the carton bottom, and a reinforcing front wall formed as an extension of the carton bottom, the arrangement of the carton parts being such that in closing movement of the carton top no dependent flange comes into position outwardly of the front wall structure of the carton; automatically engageable locking means comprising in combination a female locking element mounted on the under face of the carton top wall at the forward end thereof, said female locking element formed as a deformable socket having continuous side walls and flaring to a forwardly presented opening, a male locking element carried by the reinforcing front wall of the carton in alignment with the said female locking element in the carton structure and arranged to project rearwardly interiorly of the carton and into the open end of the female locking element in erected position of the said reinforcing front wall of the carton, and interengaging means in the male locking element and in the socket of the female locking element adapted to be brought into registering engagement partway of the depth of the said socket, the said interengaging means of the locking elements being protected against disengagement by an instrument inserted at the joint between the front wall structure and the top wall of the carton by the continuous side walls of the female locking element thereby to provide in an erectable carton a tamper-proof lock for the carton.

7. In an erectable paper carton formed of a single blank cut, creased, and bent to form bottom, top, side, rear, and front walls together with a reinforcing front wall formed as an extension of the bottom and having a portion lying inwardly of the said carton front wall in erected condition of the carton, automatically engageable locking means comprising a female locking element carried by the said inwardly disposed portion of the reinforcing front wall, said female locking element being formed as a socket having continuous side walls and flaring to an opening upwardly presented in erected position of the reinforcing front wall, a male locking element mounted on the under face of the lid or cover element of the carton at the forward end thereof in alignment with the said female locking element in the carton structure and arranged to project downwardly of the carton and into the open end of the female locking element as the lid or cover element is brought into closing position, and interengaging means in said male locking element and said female locking element, whereby there is provided in an erectable carton an inaccessible lock for the carton.

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