United States Patent [19]

Reihm

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[54] **PACKING DEVICE FOR FRANGIBLE MATERIAL**

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[52] **U.S. Cl.** ..... **229/14 C;** 206/448; 206/454

[51] **Int. Cl.**[2] **B65D 5/40;** B65D 85/48

[58] **Field of Search** ..... 229/14 C; 206/448, 449, 206/454

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Primary Examiner—Stanley N. Gilreath

Attorney, Agent, or Firm—Harness, Dickey & Pierce

[57] **ABSTRACT**

A packing element fabricated from a single workpiece of corrugated or similar packaging material that has been cut and scored in a manner so that the workpiece may be folded into a slotted packing structure that includes at least two side sections, a top section, and a diagonal truss section, and which is adapted to receive frangible glass plates or the like within the slots defined therein and function to support, suspend and constrain the plates within an associated shipping or storage container.

18 Claims, 12 Drawing Figures

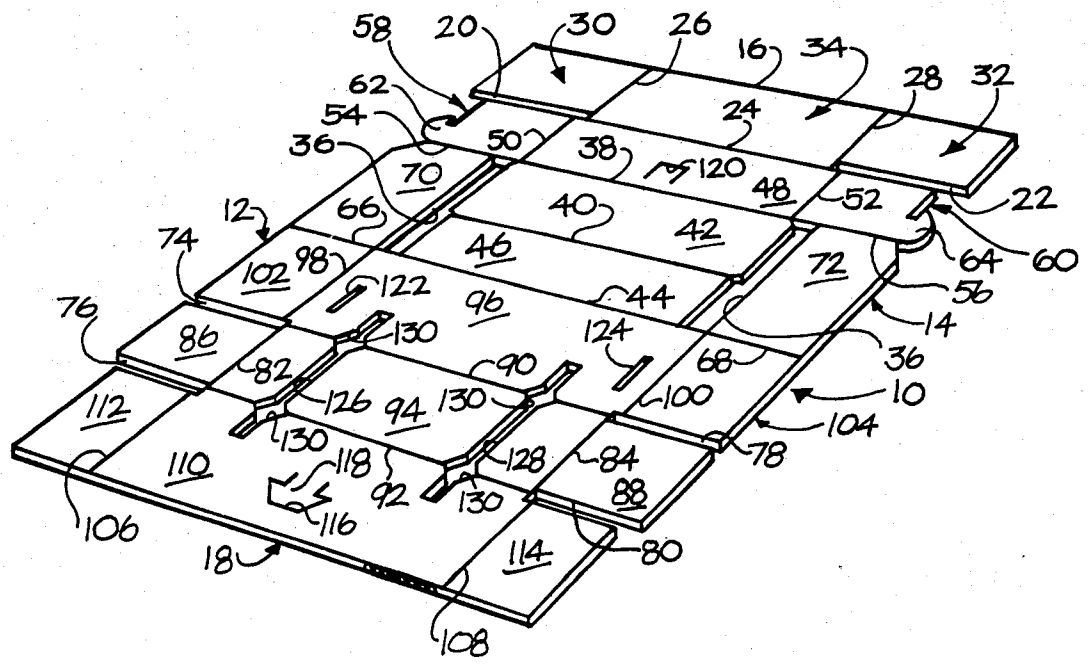


FIG. 1

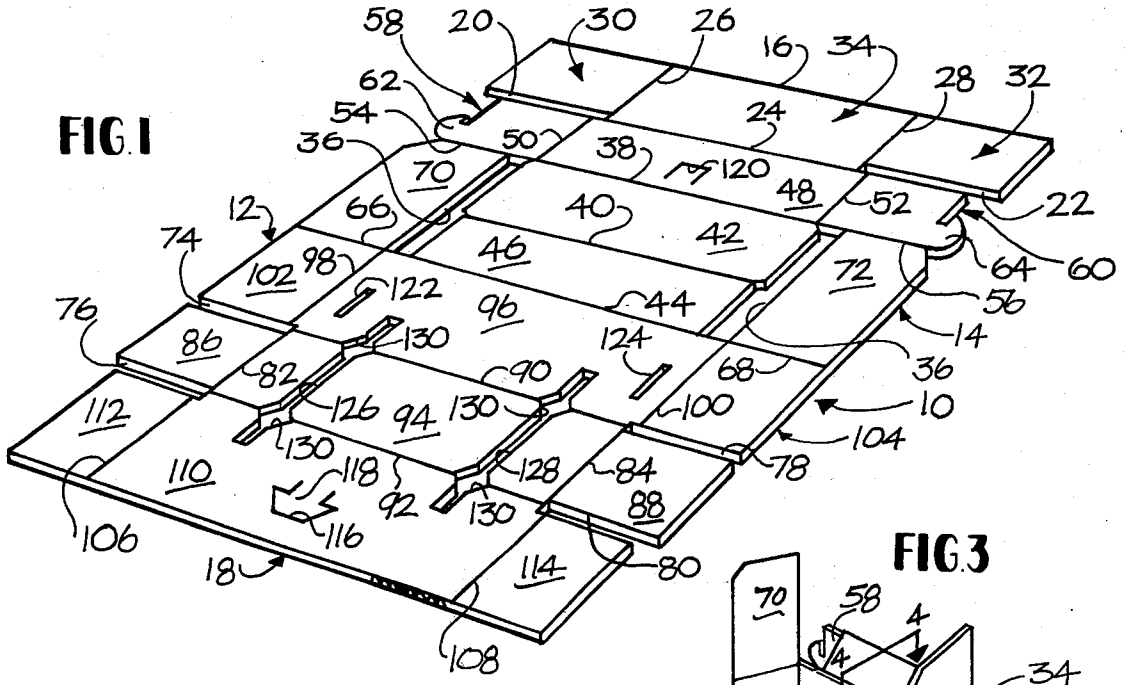


FIG. 2

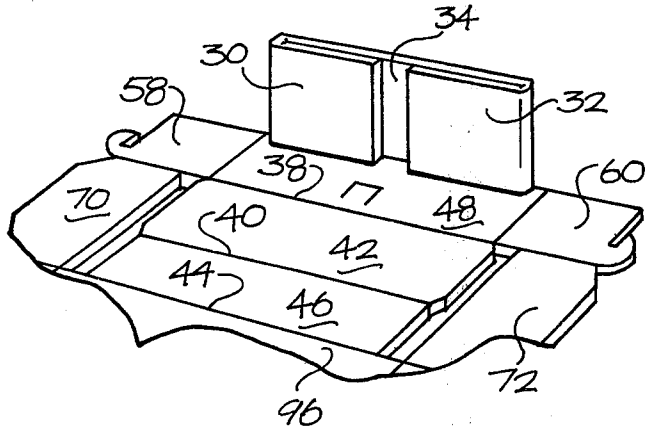
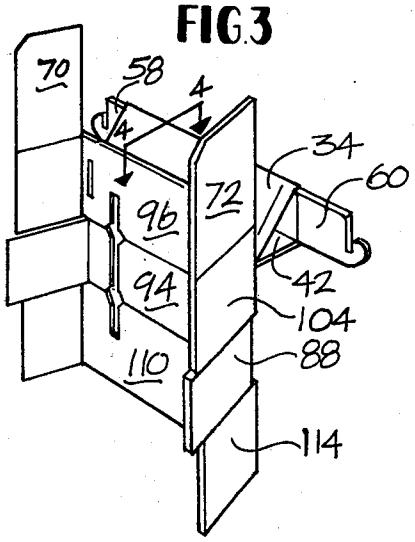


FIG. 3



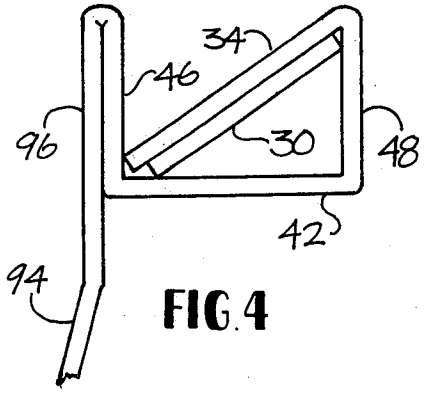


FIG. 4

FIG. 5

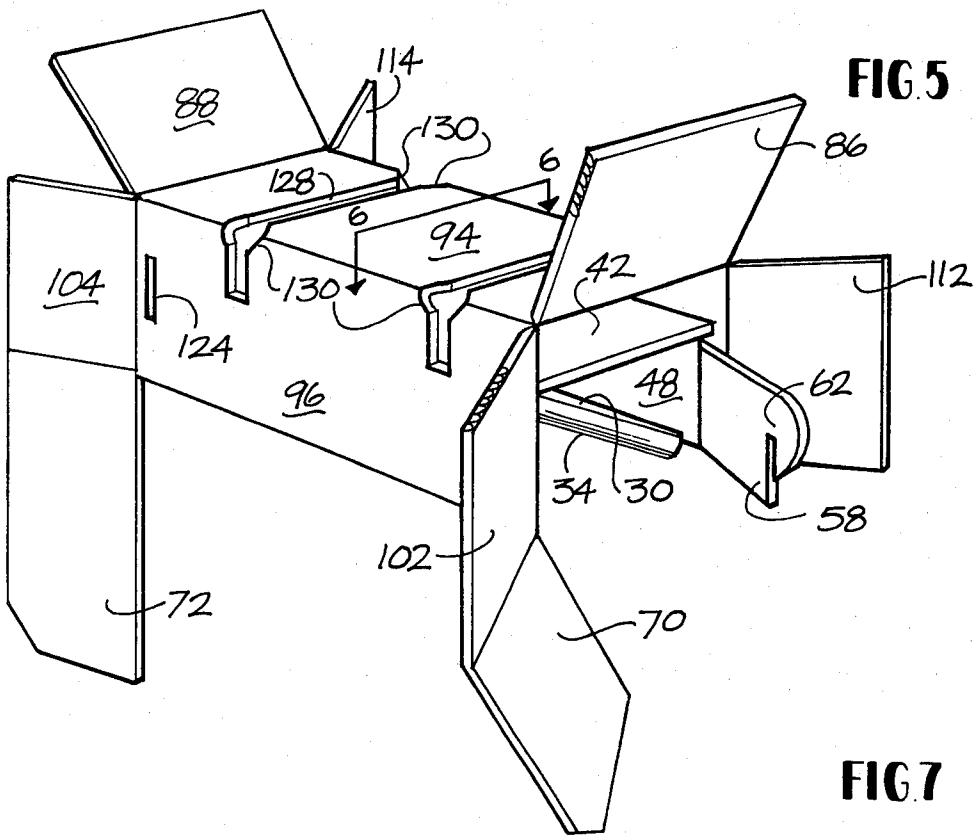


FIG. 6

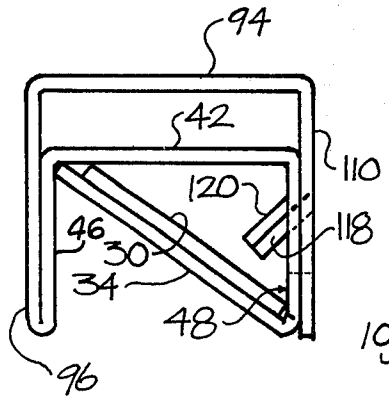


FIG. 7

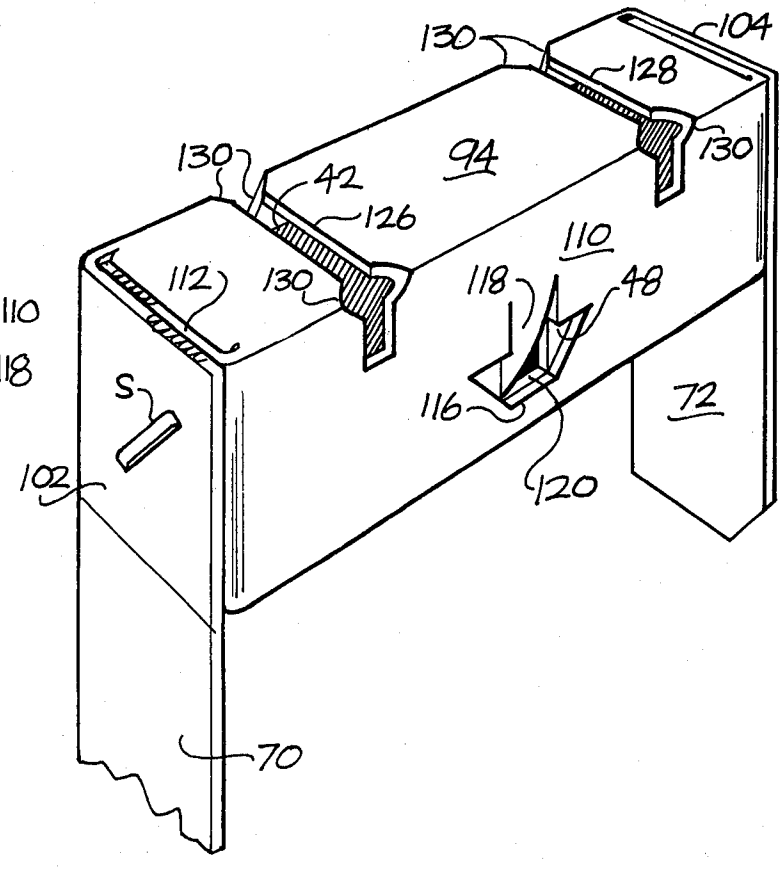
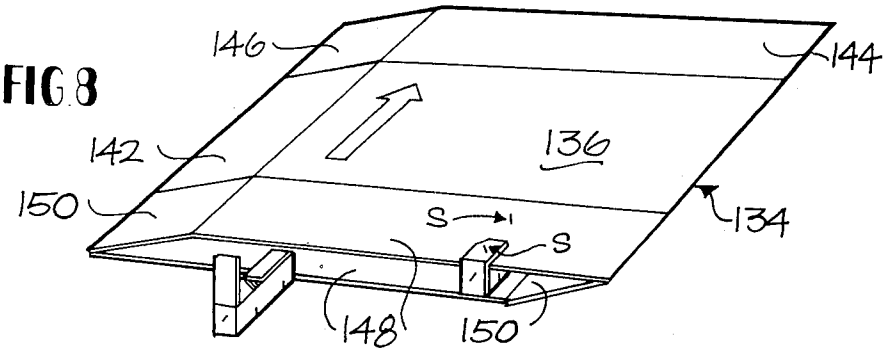


FIG. 8



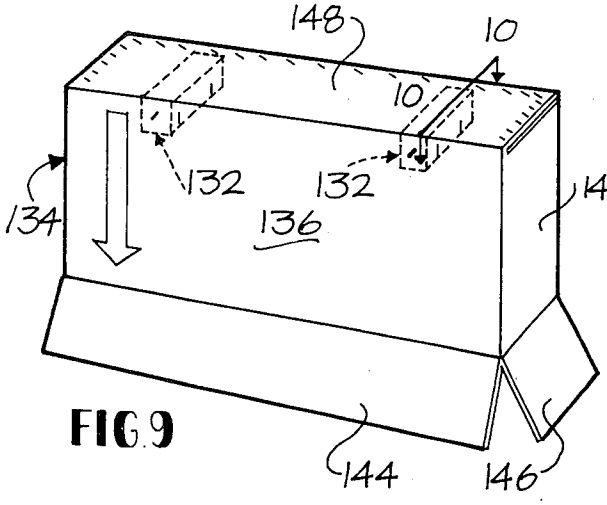
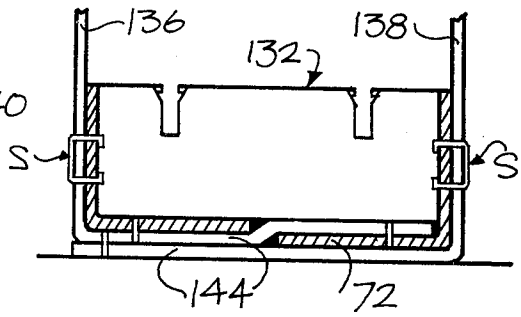


FIG. 9

FIG. 10



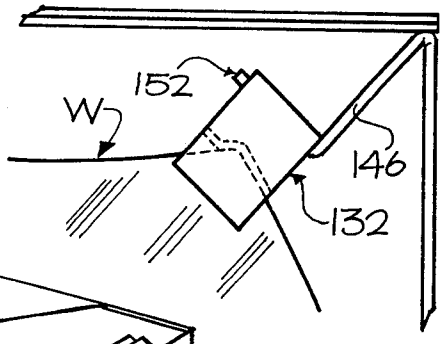


FIG. 12

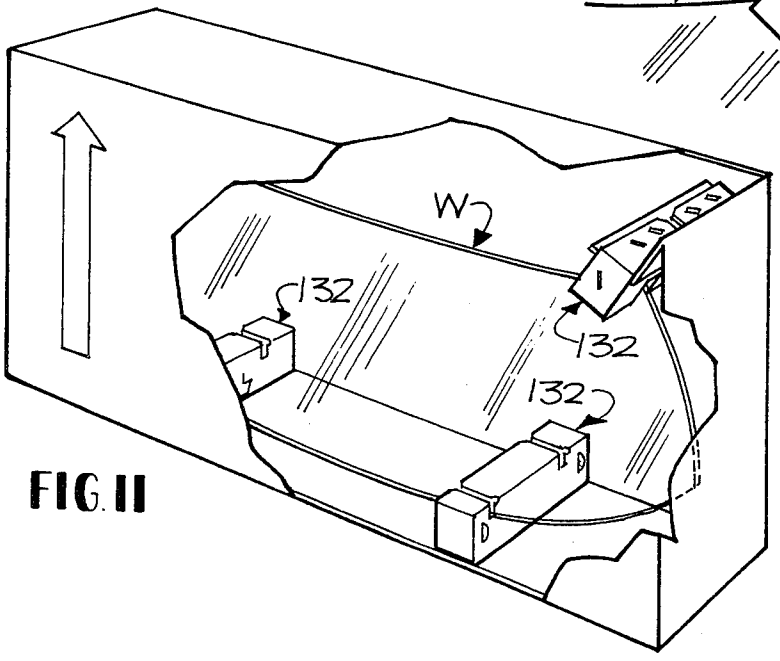


FIG. 11

PACKING DEVICE FOR FRANGIBLE MATERIAL

SUMMARY OF THE INVENTION

Generally speaking, the present invention relates to the packaging of frangible materials of a sheet-like nature, such as sheets of glass or the like. More particularly, the present invention is directed toward a novel packing element for use in the shipment, storage and related handling of sheet-like materials which is adapted to function in supporting and suspending the material within the inner walls of an associated protective shipping or storage container.

The shipping, storage and related handling of frangible plates, such as plate glass or the like, requires extreme care. The reason for this is that the frangible material or plates must be held firmly, and yet at the same time, some controlled shock absorbing means must be provided to minimize the affect of shock occurring during the handling of the containers during normal shipping and storage. This is especially true with regard to vehicular windshields and side and rear lites which are frequently of a relatively arcuate configuration and are subject to considerable handling as they are transported from the manufacturer to various warehouses, distributors, etc., and eventually to automobile dealers or other locations of vehicular maintenance and repair. While a myriad of packing devices have heretofore been proposed, one device that has experienced at least some commercial success is described in U.S. Pat. No. 3,414,124, issued to E. J. Lidgard on Dec. 3, 1968. This device relates to an arrangement requiring a series of frangible plate gripping lock pads that are provided with an adhesive material such as two-sided masking tape, etc., which are adapted to be secured to selected edge portions of the frangible plates and are cooperable with rigid blocks or logs located within the associated packing or storage containers.

Notwithstanding the above, the patented device disclosed in the aforementioned U.S. Pat. No. 3,414,124 has been found to be objectionable from a number of standpoints, primarily due to the cost of the lock pad elements and the problems which arise in properly aligning the same with the associated logs within the packaging containers. Additionally, this design has been objectionable since it results in excessively complex dunnage, and more importantly, the adhesive material must be removed from the glass at additional cost. This design was also incapable of properly supporting the larger frangible plates in a manner so as to minimize attrition thereof.

The present invention is directed toward a new and improved packing device of the aforedescribed character but which overcomes the objectionable characteristics of prior known devices, particularly of the type shown in the aforementioned patent. More particularly, the present invention is directed toward a new and improved packing device for frangible plates, such as vehicular windshields, side lites and the like, which obviates the need for the aforementioned lock pad elements and at the same time, provides a packing arrangement that functions in a highly economical manner in positively supporting and suspending frangible plates so as to effectively minimize damage thereof during shipment, storage or related handling.

It is, accordingly, a general object of the present invention to provide a new and improved packing device of the above character which is adapted to function in positively restraining, supporting and suspending frangible sheet-like materials, particularly materials such as glass which are used as vehicle windshields, side and rear lites.

It is a more particular object of the present invention to provide a new and improved packing device of the above character which may be easily and quickly assembled, and which reduces the need, now present in the industry, of carrying a large variety of dunnage materials in inventory.

It is another object of the present invention to provide a new and improved packing device which may be preassembled and thereby be maintained in inventory preparatory to the packing, storage or other handling of frangible sheet-like materials.

It is another object of the present invention to provide a new and improved packing device which utilizes a single piece of dunnage that may be employed in a universal fashion, without consideration of righthandedness or lefthandedness, or regardless whether the device is attached to the top, bottom, ends or sides of an associated container.

Other objects and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is an elevated perspective view of the die cut blank from which the packing device of the present invention may be assembled;

FIG. **2** is an enlarged fragmentary elevated perspective view of a portion of the blank shown in FIG. **1**, after an initial assembly operation has been performed;

FIG. **3** is an elevated perspective view of the packing device of the present invention after a subsequent assembly step has been taken;

FIG. **4** is an end elevational view of a portion of the packing device of the present invention, as taken substantially along the line **4—4** of FIG. **3**;

FIG. **5** is an elevated perspective view of the packing device of the present invention with the diagonal truss lock section thereof in place and shown prior to the lock tab inner end panels being inserted into their respective locking slots;

FIG. **6** is a transverse cross-sectional view taken substantially along the line **6—6** of FIG. **5**;

FIG. **7** is an elevated perspective view of the packing device of the present invention in its completed or assembled configuration, as shown ready for attachment or mounting within an associated shipping container or the like;

FIG. **8** is an elevated perspective view of the packing device of the present invention as shown in operative association with a typical shipping container, with the device being operatively secured to the overlap flaps of the container;

FIG. **9** is an elevated perspective view of an assembled shipping container with a pair of the packing devices of the present invention operatively mounted therein;

FIG. **10** is a transverse cross-sectional view taken substantially along the line **10—10** of FIG. **9**;

FIG. **11** is an elevated perspective view of a typical shipping container which is partially broken away to disclose a plurality of the packing devices of the present invention shown in their respective operative posi-

tions supporting or suspending a frangible plate in the form of a vehicular windshield or the like; and

FIG. **12** is an enlarged fragmentary view of a portion of a shipping container shown in FIG. **11** and discloses how the packing device of the present invention may be conveniently mounted within one corner thereof for operatively supporting a frangible plate or the like.

DESCRIPTION OF A PREFERRED EMBODIMENT

As used herein, the terms "vertical," "horizontal," "up," "down," "inner," "outer," and the various derivatives thereof are used merely for purposes of clarity of description and are in no way intended to limit the present invention as defined in the claims appended hereto.

Referring now in detail to FIG. **1** of the drawings, the packing device of the present invention is adapted to be fabricated of a generally rectangular-shaped section of a flat structural material, generally designated by the numeral **10.** In a preferred construction of the present invention, the material **10** consists of corrugated fiberboard, although various alternative materials will find very satisfactory application, such as cardboard, plastic or other materials which may be easily die cut and scored to provide for one portion of the material **10** being folded or otherwise deformed relative to another section thereof. The material **10** from which the packing device of the present invention is fabricated is shown as comprising a pair of laterally spaced parallel longitudinal side edges **12** and **14** and a pair of longitudinally spaced laterally extending side edges **16** and **18.** The terms "longitudinal" and "lateral," as used herein, are for purposes of clarity of description and are relative terms only. It is to be understood that any portion of the present invention described by or with said terms is in no way to be limited to any one particular configuration or orientation other than that defined in the appended claims.

The material **10,** as best seen in FIG. **1,** is shown as being formed with a pair of laterally inwardly extending slots **20** and **22** which are generally colinear and have a generally laterally extending score line **24** extending between the inner ends thereof. The term "score line," as used herein, denotes an operation that occurs during the die stamping of the material **10** and which permits the portion of the material **10** on one side of the score line to be folded along the line to some predetermined degree relative to the portion of the material on the opposite side of the line, whereby to provide for a smooth uniform fold between the adjacent portions, as will be appreciated by those skilled in the art. Extending longitudinally from the inner ends of the slots **20, 22** at generally right angles to the score line **24** is a pair of longitudinally extending score lines **26** and **28** which define with the slots **20, 22,** a pair of rectangular- shaped support panel sections **30** and **32.** The score lines **26, 28,** along with the aforementioned score line **24** define an elongated diagonal truss section **34** which is substantially coextensive of the score line **24** and is generally laterally aligned with the support panel sections **30, 32,** as illustrated.

Spaced longitudinally away from the slots **20, 22** is a pair of laterally spaced, longitudinally extending slots **36** which have a pair of laterally disposed score lines **38** and **40** extending parallel therebetween. The score lines **38, 40,** along with the slots **36,** define an inner floor section **42,** with the score line **40** cooperating with another laterally extending score line **44** that is spaced longitudinally from the line **40** to define an inner vertical wall section **46.** As shown, the laterally opposite ends of the inner floor section **42** and inner wall section **46** are delineated by the slots **36.** The laterally extending score line **38** defines with the aforementioned lateral score line **24,** an inner wall section **48** which is disposed interjacent the truss section **34** and the floor section **42.** The laterally opposite ends of the inner wall section **48** are defined by longitudinally extending score lines **50** and **52** which cooperate with a pair of laterally extending slits or cuts **54** and **56** that are colinear with the score line **38** to define a pair of foldable inner end lock panel sections **58** and **60,** respectively. The laterally outer ends of the sections **58,** 60 are formed with generally hook-shaped lock portions **62** and **64** which function in a manner hereinafter to be described.

Spaced longitudinally from the slits **54, 56** is a pair of laterally extending score lines **66, 68** which intersect the ends of the slots **36** and define therewith a pair of mounting flap sections **70** and **72.** Two pairs of laterally inwardly extending, longitudinally spaced slots **74, 76** and **78, 80** are formed in the lateral side edges **12, 14** of the material **10** and define with a pair of laterally spaced, longitudinally extending score lines **82, 84,** a pair of end flap sections **86** and **88.** Extending laterally between the laterally inner ends of the slots **74, 78** and **76, 80** is a pair of longitudinally spaced, laterally extending score lines **90** and **92,** respectively, which cooperate with the score lines **82, 84** in defining an outer top section **94.** The score line **90** is cooperable with the aforementioned score line **44** and defines a laterally extending outer wall section **96,** the lateral ends of which are defined by longitudinally extending score lines **98** and **100** which respectively define outer end flap sections **102** and **104.** The laterally inner ends of the slots **76, 80** intersect a pair of longitudinally extending, laterally spaced score lines **106** and **108** which define with the slots **76, 80** and the lateral side edge **18** of the material **10,** an outer wall section **110.** The score lines **106** and **108** define with the slots **76, 80,** a pair of end flap sections **112** and **114.**

Disposed centrally of the outer wall section **110** is a generally U-shaped slit **116** that defines a locking tab **118.** The tab **118** is cooperable with a locking slot **120** which is formed centrally of the inner wall section **48** in a manner hereinafter to be described. The outer wall section **96** is formed with a pair of laterally spaced and aligned locking slots **122** and **124** which are generally longitudinally aligned with the score lines **50, 52** and are cooperable with the hook-shaped lock portions **62,** 64, respectively, of the lock panel sections **58** and **60.** Finally, a pair of longitudinally extending, laterally spaced die cut panel receiving slots **126** and **128** are formed in the material **10** and extend longitudinally from the outer wall section **96** through the outer top section **94** into the outer wall section **110.** The slots **126, 128** intersect the score lines **90** and **92,** which intersections are formed with relief cuts **130** which function to relieve undue pressure on the frangible sheets which are inserted into and supported within the slots **126, 128,** in a manner hereinafter to be described.

Referring now in detail to FIGS. **2** through **7,** assembly of the packing device of the present invention is initiated by folding the diagonal truss section **34** and support panels **30, 32** at the opposite ends thereof along

the score line **24** to a position wherein the truss section **34** is arranged generally at right angles or perpendicular to the plane of the remaining portion of the material **10.** Thereafter, the support panels **30, 32** are folded along the score lines **26, 28,** respectively, to a position wherein they are generally coplanar of the truss section **34,** i.e., are lying flat or contiguous thereagainst, as best seen in FIG. **2.** Next, the inner vertical wall section **46** is folded along the score line **44** from a position in general coplanar relation with the outer wall section **96** to a position wherein the inner wall section is generally contiguously disposed with the underside of the wall section **96,** as best seen in FIGS. **3** and **4.**

After the inner vertical wall section **46** has thus been folded relative to the outer wall section **96,** the outer top section **94** is folded along the score line **90** from a position in general coplanar relation with the outer wall section **96** to a configuration wherein the outer top section **94** is disposed at right angles to the section **96.** Thereafter, the outer wall section **110** is folded along the score line **92** to a position wherein the section **110** is disposed at right angles to the outer top section **94.** As best seen in FIG. **6,** when the outer wall section **110** is thus folded, it is disposed adjacent the outer side of the inner wall section **48,** while the outer top section **94** is disposed in spaced parallelism with respect to the inner floor section **42.** In this configuration, the locking tab **118** will be disposed directly exteriorly of the locking slot **120** in the inner wall section **48,** whereupon the outer end of the locking tab **118** may be inserted through the locking slot **120** to a position wherein the shoulders defined on the locking tab **118** lockingly engage the inner side of the wall section **48.** The packing device of the present invention will now assume the configuration generally shown in FIG. **5.**

In the configuration shown in FIG. **5,** the locking panel section **58** is disposed generally coplanar of the inner wall section **48** and is now folded along the score line **50** at right angles to a position wherein the panel section **58** has the lock portion **62** on the end thereof adapted for insertion through the locking slot **122** in the outer wall section **96,** and the lock portion **62** may thereafter be inserted through the slot **122** to lockingly secure the lock panel section **58** in place. In a similar manner, the lock panel section **60** may be folded along the score line **52** at right angles to a position wherein the hook-shaped lock portion **64** on the outer end thereof is adapted for insertion through the locking slot **124** in the outer wall section **96,** and the portion **64** may thereafter be inserted through the slot **124,** as above described.

Following assembly of the inner end lock panel section **58** and **60,** as above described, the end flap section **86** is now folded along the score line **82** to a position disposed at right angles to the outer top section **94,** in which position the flap section **86** is folded over the lock panel section **58.** Thereafter, the end flap section **112** is folded along the score line **106** at right angles to the outer wall section **110** and is thus folded over the end flap section **86.** Finally, the outer end flap section **102,** along with the mounting flap **70,** is folded along the score line **98** to a position overlying the end flap sections **112** and **86,** whereupon means in the form of a suitable staple S, adhesive or other fastening device may be used for fixedly securing the sections **86, 112** and **102** in their respective assembled positions. Assembly of the packing device of the present invention is completed by folding the end flap section **88** along the score line **84** at generally right angles to the outer top section **94,** whereby the end flap section **88** covers the lock panel section **60.** Thereafter, the end flap section **114** is folded along the score line **108** to a position generally perpendicular to the outer wall section **110** and the outer end flap section **104** along with the mounting flap **72** is folded along the score line **100** to a position overlying both the sections **88** and **114,** whereupon means, such as the aforesaid staple S or the like, may be used for securing the sections **88, 114** and **104** in their respective assembled positions as shown in FIG. **7.** The packing device of the present invention is now essentially assembled and appears generally as depicted in FIG. **7** with the mounting flaps **70, 72** depending downwardly from the opposite ends thereof and the plate receiving slots **126** and **128** facing upwardly and extending partially downwardly along the opposite sides of the device.

It will be appreciated, of course, that the plate receiving slots **126, 128** are dimensionally dependent upon the thickness of the packaged frangible sheet-like material or plates which are to be supported therein, which plates in the presently contemplated mode of the present invention could be curved glass sheets such as are used for automobile windshields. While the packing device hereinabove described is shown as being provided with two plate receiving slots **126, 128,** it will be noted that a greater or lesser number of slots of an identical or different configuration could be incorporated in any specific application, depending upon the nature and specifications of any particular type or size of frangible plates. Likewise, it will be appreciated that the specific configuration of the slots **126, 128** may be oriented in different positions relative to the packing device, for example, the slots **126, 128** could be located at a preselected angle to the longitudinal axis of the device in accordance with the particular characteristics of any specified frangible plates. The primary consideration is, of course, that the slots **126, 128** are mutually compatible with the curvature, i.e., shape, of the associated frangible plates when the same are placed within the slots, and the particular size, number and shape of the slots shown herein is merely for purposes of disclosing an exemplary embodiment of the present invention and is not intended to in any way limit the scope of the claims appended hereto.

Referring now to FIGS. **8** through **11,** a typical application of the packing device of the present invention is shown wherein at least one automobile windshield, generally designated by the letter W, is shown packaged within a suitable container. More particularly, the windshield W is shown in operative association with a plurality of the packing devices of the present invention, generally designated by the numeral **132.** The devices **132** are associated with a typical shipping or storage container **134** comprising a pair of spaced sides **136, 138** and ends **140, 142.** As will be appreciated by those skilled in the art, the container **134** is typically fabricated or corrugated fiberboard, with the upper end thereof being provided with a pair of foldable side flaps **144** hingedly connected to the uppermost portions of the sides **136, 138** and the ends of the container **140, 142** being provided with foldable end flaps **146.** Similarly, the lower end of the container **134** is provided with side flaps **148** and with end flaps **150.** The container **134** is depicted in its knocked down or flat

state; that is to say, not yet assembled, with its side walls **136, 138** slightly separated so as to allow insertion of two of the packing devices **132** of the present invention, as best seen in FIG. **8.** In order to provide for the assembly of the devices **132,** one of the mounting flaps **70, 72** of two of the devices is folded along its respective score line **66** or **68** to a position in generally coplanar relation with the underside of the two devices **132.** The particular flap **70** or **72** which is thus folded is the one which is located closest to the ajar opening of the container **134,** as illustrated in FIG. **8.** The devices **132** are then inserted under the over flap or uppermost of the flap **148** to a position wherein the terminal edge thereof engages the other of the mounting flaps **70** or **72** of the devices **132.** Means in the form of suitable staples S or the like are then utilized to secure the flap **148** to the folded mounting flaps **70** or **72** of the devices **132.** Thereafter, the other of the mounting flaps **70** or **72** is folded downwardly along its respective score line to a position in overlying relation with the flap **148,** whereupon other staples S or the like are utilized in securing the said mounting flaps **70** or **72** to the flap **148.** After both of the packing devices **132** have been assembled to the flap **148,** the container **134** is turned upside down to the position in FIG. **9** and the ends **150** and the other of the side flap **148** are folded to their operative position whereupon the container **134** will assume a generally parallel piped configuration, as illustrated. Suitable means such as staples S or the like may then be utilized for operatively securing the flaps **148, 150** in their respective operative positions. In addition, each of the packing devices **132** is further fastened to the side walls **136, 138** of the container **134** by means of suitable side staples S, as best illustrated in FIG. **10,** whereby to further increase the stability of the packing devices **132** within the container **134.**

The container **134** is thereafter inverted to a position wherein the packing devices **132** face upwardly and the plate receiving slots **128** are adapted to receive the lower edge of the windshield W or other suitable frangible type material which is to be placed interiorly of the container **134.** The windshield W is then lowered into the container **134** and suitably aligned with the slots **128** whereupon the lower edge of the windshield W is received within the slots **128.**

With reference to FIGS. **11** and **12,** the upper edge of the windshield W may, if desired, be operatively secured in position within the container **134** by means of two (or more) additional packing devices **132** of the present invention. More particularly, it will be seen that the upper end flaps **146** of the container **134** are folded interiorly of the container **134.** The packing devices **132** are in an inverted configuration with respect to the aforementioned devices **132** located within the lower end of the container **134,** with the result that the slots **126, 128** face downwardly and are adapted to receive the upper edge of the windshield W. In this position, the mounting flaps **70, 72** of the devices **132** extend upwardly and are adapted to be folded along their respective score lines **66, 68** over an upwardly turned end portion **152** of the upper end flaps **146** of the container **134.** Means in the form of suitable staples S or like fastening elements are preferably utilized to operatively secure the mounting flaps **70, 72** to the end portion **152** of the flaps **146** and additional staples S or similar fastening means may be fastened through the outer vertical side walls **136, 138** of the container **134** to operatively secure the uppermost of the devices **132.** The upper flaps **144** may thereafter be folded to their respective closed positions and fastened in place in any manner suitable to such containers, whereupon the windshield W will be positively retained and suspended in place within the container **134.**

It will be seen from the foregoing that the present invention provides a novel packing device for use in storing, shipping or other handling of frangible plate-like materials. The packing device of the present invention will be seen as being of an extremely compact construction that is fabricated of a single piece of dunnage so as to minimize to the extreme the space or volume occupied thereby, as well as simplifying assembly and installation thereof. A particular feature of the present invention resides in the provision of the diagonal truss section which, upon assembly of the device, will be seen to extend diagonally within the device so as to effectively carry the loading applied to the device when frangible plates or the like have been placed within the plate receiving slots **126, 128** thereof. An additional feature of the present invention resides in the fact that the frangible plates supported therein will be firmly retained in place, yet the construction of the packing device allows for the controlled absorption of any shock which may be imparted via the plates to the device, as frequently occurs through the handling, shipping or storage of said plates. Accordingly, damage to the plates occurring during such handling will be minimized to the extreme. Yet another feature of the present invention resides in the fact that the packing devices may be utilized in shipping and storage of frangible plates without consideration of righthandedness or lefthandedness of the devices, whereby to provide for universality of application and minimization of inventory thereof. Additionally, it will be appreciated that by virtue of the simple design of the packing device of the present invention, the same may be economically manufactured and yet will have a long and effective operational life.

While it will be apparent that the preferred embodiment illustrated herein is well calculated to fulfill the objects above stated, it will be appreciated that the present invention is susceptible to modification, variation and change without departing from the scope of the invention.

I claim:

1. A one-piece packing device for use in packing frangible sheet-like materials, comprising,

a pair of spaced apart side wall sections,

a top section extending between said side wall sections and defining at least one recessed area adapted to receive an edge portion of a frangible plate or the like,

an intermediate section disposed interiorly of said top section and extending between said side sections,

said intermediate section being spaced from said top section and located directly below said recessed area, and

a truss section extending generally diagonally between said side wall sections.

2. The invention as set forth in claim **1** which includes means for operatively securing said sections to one another to provide a relatively rigid packing device.

3. The invention as set forth in claim 1 wherein all of said sections are integrally connected to one another and consist of portions of a generally flat foldable material having the sections thereof delineated in part by score lines formed in the material.

4. The invention as set forth in claim 2 wherein said fastening means comprises end flap sections integrally connected to selected of said side wall sections and adapted to be secured in a manner so as to provide a relatively rigid frangible plate supporting structure.

5. The invention as set forth in claim 1 wherein said recessed area comprises a slot formed in said top section and at least partially in said side wall sections, said slot extending generally transversely of the longitudinal axis of said packing device.

6. The invention as set forth in claim 1 wherein said packing device is fabricated of a relatively rigid yet deformable material.

7. The invention as set forth in claim 1 wherein said packing device is fabricated of a single sheet of corrugated fiber board.

8. The invention as set forth in claim 1 wherein the longitudinal edges of said top section are integrally connected to the adjacent edges of said side wall sections, wherein said intermediate section is disposed in spaced parallelism and interiorly of said top section, and wherein said truss section extends generally diagonally between one edge of one of said side wall sections and the intersection of said intermediate section with the other of said side wall sections.

9. The invention as set forth in claim 1 wherein said side wall sections comprise a pair of outer wall sections and a pair of inner wall sections, wherein said top section extends between and is integrally connected to said pair of outer wall sections and wherein said intermediate section extends between and is integrally connected to said pair of inner wall sections, and wherein said truss section extends between one edge of one of said inner wall sections and the intersection of said intermediate section and one of said pair of inner wall sections.

10. The invention as set forth in claim 9 which includes means for securing said device in a relatively rigid configuration, said means including end flap means integrally connected to said top and side wall sections and ancillary fastening means securing said end flap means together.

11. The invention as set forth in claim 9 which includes at least one tab and tab receiving recess formed in selected of said side wall and top sections for fixedly securing said sections in a relatively rigid structural configuration.

12. The invention as set forth in claim 9 wherein said top section and the adjacent portions of said outer side wall sections are formed with said recessed area which is in the form of a plate edge receiving recess.

13. The invention as set forth in claim 12 wherein the intersection of said top section and said outer wall sections are relieved adjacent said recess.

14. The invention as set forth in claim 8 wherein said side wall sections comprise a pair of outer wall sections and a pair of inner wall sections, wherein said top section extends between and is integrally connected to said pair of outer wall sections and wherein said intermediate section extends between and is integrally connected to said pair of inner wall sections, and wherein said truss section extends between one edge of one of said inner wall sections and the intersection of said intermediate section and one of said pair of inner wall sections.

15. The invention as set forth in claim 9 wherein said packing device is fabricated of a single sheet of corrugated fiber board.

16. The invention as set forth in claim 9 wherein said packing device is fabricated of a single sheet of corrugated fiber board material, said material being formed with a plurality of longitudinally spaced laterally extending score lines defining from one end of the material to the other: said truss section, one of said inner wall sections, said intermediate section, the other of said inner wall sections, one of said outer wall sections, said top section, and the other of said outer wall sections; said device including a plurality of end flap sections adapted to be folded into overlying relationship upon assembly of said first mentioned sections and be secured with ancillary fastening means for retaining said sections in a preselected structural configuration.

17. The invention as set forth in claim 16 wherein said outer wall sections and said top section are formed with an elongated longitudinally extending slot constituting said recessed area and adapted to form a frangible plate edge upon assembly of the device.

18. The invention as set forth in claim 16 which includes at least one hook-shaped lock portion integrally connected to one of said sections and a slot formed in another of said sections adapted to nestingly receive said hook-shaped portion for fixedly securing said device in a preselected structural configuration.

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