Aug. 28, 1934. J. DANNER 1,971,395

SHIPPING PACKAGE

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Fig. 1.

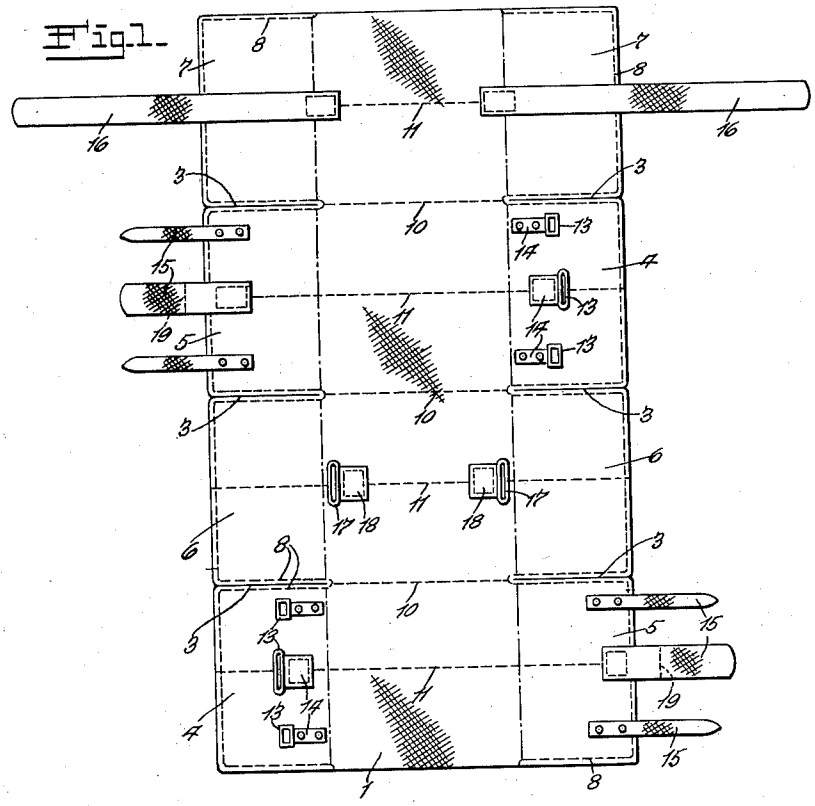
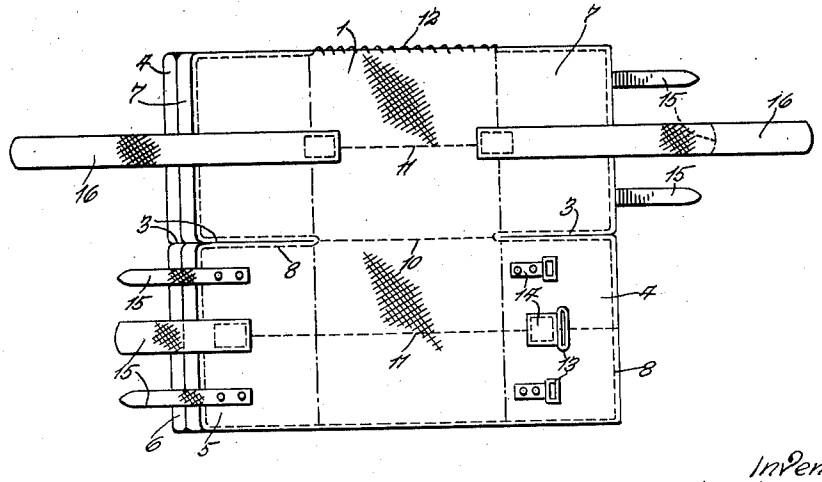


Fig. 2.



Inventor
John Danner
by Rippey & Kingsland
His Attorneys.

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Fig. 3.

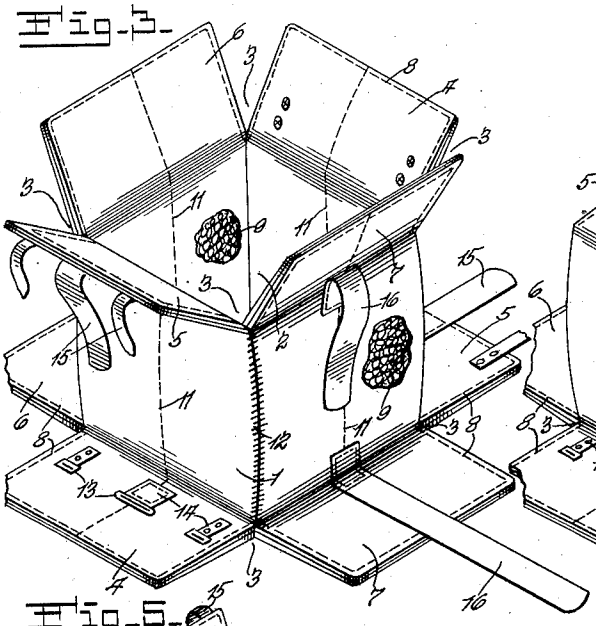


Fig. 4.

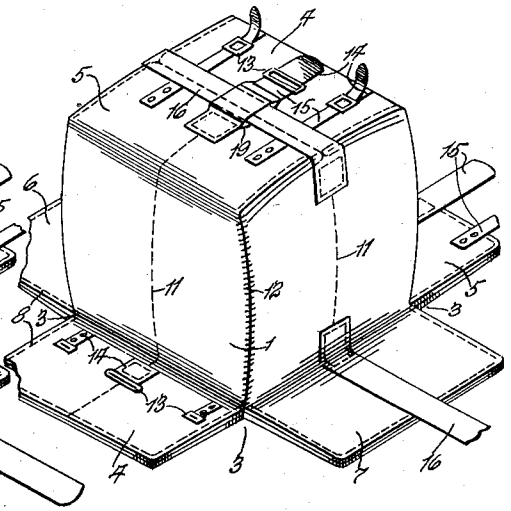


Fig. 5.

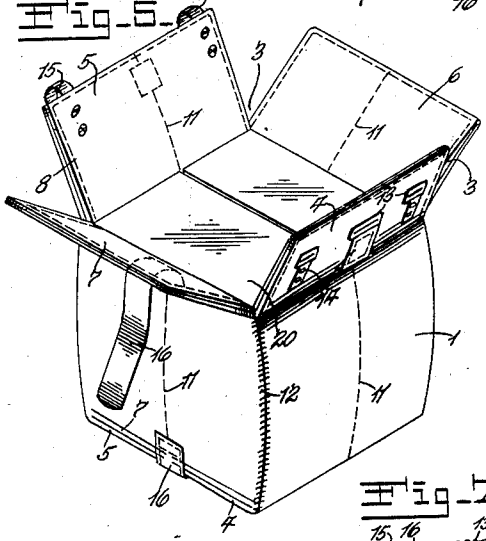


Fig. 6.

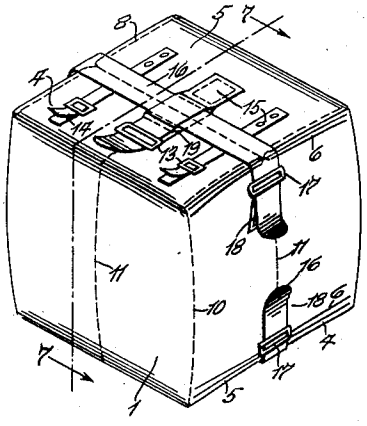
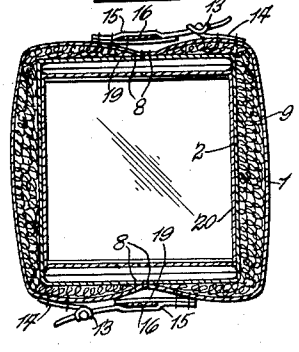


Fig. 7.



Inventor
John Danner
by Rippey & Kingsland
His Attorneys.

Patented Aug. 28, 1934 1,971,395

UNITED STATES PATENT OFFICE

1,971,395

SHIPPING PACKAGE

John Danner, St. Louis, Mo.

Application September 20, 1933, Serial No. 690,202

2 Claims. (Cl. 150—52)

This invention relates to shipping packages, and has special reference to insulating devices for enclosing boxes or cartons containing the merchandise to be shipped or for directly enclosing the merchandise without the use of boxes or cartons; and the device consists of heat insulating means for protecting the mechandise confined thereby.

An object of the invention is to provide a flexible and pliable member having its edges attached together and provided on its opposite ends with flaps adapted to be folded in cooperative relationship to form a package or enclosure for a carton, box, or other articles or merchandise, and to insulate and protect the same.

Another object of the invention is to provide a device of the character mentioned having detachable means for fastening the flaps in proper cooperative relationship, said means being easily detachable to permit all of the flaps to be extended longitudinally and thereby facilitate the folding of the device along two diagonally opposite corners to superimpose one-half of the device upon the other in flat relationship.

Other objects will appear from the following description, reference being made to the annexed drawings, in which—

Fig. 1 is a plan view of the member used to form the package.

Fig. 2 is a plan view of the package collapsed or folded along diagonally opposite corners to superimpose one-half of the device upon the other in flat relationship and thereby obtain one of the principal objects of the invention.

Fig. 3 is a perspective view of the package having all of its end flaps unattached and extended.

Fig. 4 is a perspective view showing the flaps at one end folded and attached together and the flaps at the other end unattached and extended.

Fig. 5 is a view similar to Fig. 4 showing the package inverted from the position shown in Fig. 4 and containing a box or carton.

Fig. 6 is a perspective view of the completed package in which the flaps at opposite ends of the package are attached in cooperative relationship.

Fig. 7 is a vertical sectional view approximately on the line 7—7 of Fig. 6.

The device comprises two duplicate flexible and pliable wall members 1 and 2 having at each end three longitudinal slits 3, thereby forming at each end four end flaps 4, 5, 6 and 7.

These walls 1 and 2 are attached together along their marginal edges and at each side of the slits 3 by stitches 8 and the space between the walls is filled with a layer 9 of kapok, which constitutes the highly satisfactory insulating material superior even to cotton or felt.

Longitudinal rows of stitches 10 extend from the inner ends of the slits 3 at one end of the device to the inner ends of the slits 3 at the opposite end, and longitudinal rows of stitches 11 extend from end to end of the device between the rows of stitches 10.

The ends of this device are attached together by stitches 12, or other fastening means, so as to form a tubular member that may be opened in approximately rectangular form, the lines between the inner ends of the respective slits 3 constituting convenient fold lines for the corners of the device.

When in this form and when the flaps at opposite ends are unattached, the device may be folded easily along two diagonally opposite lines 10 or along one of the lines 10 and along the line 12 so as to superimpose one-half of the device flatly upon the other, as should be clearly understood by reference to Fig. 2 of the drawings.

When open in rectangular form, the flaps 7 and 6 at one end are folded inwardly to position in which their ends are adjacent to each other and then the flaps 4 and 5 are folded inwardly upon and against the flaps 6 and 7 to position in which the ends of said flaps 4 and 5 are adjacent to each other.

Buckles or fasteners 13 are attached to the flaps 4 by fasteners 14 and straps 15 are attached to the flaps 5 at each end of the device. When the flaps 4 and 5 are folded inwardly upon the flaps 6 and 7, the straps 15 are engaged with the buckles 13 to fasten the flaps together in the cooperative relationship indicated and thereby hold the device in the form of a rectangular box or package open at one end and closed at the other.

A strap 16 is attached to each flap 7 and a buckle or fastener 17 is secured by an attaching device 18 to the wall, of which the flap 6 is an extension. When the flaps 6 and 7 are folded inwardly upon the flaps 4 and 5, the strap 16 is passed through a loop 19 in connection with the middle strap 15 and is then extended and engaged with the buckle or fastener 17 in the manner clearly shown in Fig. 4.

Then the package is inverted from the position shown in Fig. 4 to the position shown in Fig. 5 in which the open end of the package is upward. Any box or carton 20, or other articles, may then be placed in this package, or other merchandise may be placed in the package without using a carton or box to confine the same. After the package is filled, the flaps 4 and 5 at the upper end of the package are folded inwardly

to endwise abutting relationship upon or adjacent to the box or carton 20, or other merchandise confined in the package, and the straps 15 in connection with the flap 5 are engaged with the buckles or fasteners 13 attached to the flap 4. Then the flaps 6 and 7 are folded inwardly upon and against the flaps 4 and 5 and the wide and elongated strap 16 that is in connection with the flap 7 is passed through the loop 9 that is in connection with the strap 15 and said strap 16 is engaged with the buckle or fastener 17, thereby completing the assembly and closing of the package.

This device is absorbent and may be saturated or not, as desired, in order to condition the same for various insulating uses. After the merchandise has been removed from this package, the flaps at the opposite ends may be disconnected from each other and the device folded with one-half flat upon the other half, as shown in Fig. 2, and thus given a form that occupies comparatively little space and largely reducing shipping and transporation costs and charges.

It must now be clear that this invention is a device of a highly simplified construction that possesses numerous advantages over insulating packages or devices heretofore constructed for application to similar uses. One of the principal advantages is the very considerable reduction in shipping and transportation charges and costs in returning the articles to the source of shipment for further use. The device may be folded into small space with much greater convenience than other devices with which I am familiar. I do not restrict myself in any unessential particulars, but what I claim and desire to secure by Letters Patent is:

1. A device of the character described comprising walls of insulating material forming an open ended rectangular enclosure, flaps in connection with the ends of each wall, there being four of said flaps at each end of the enclosure and the two opposite flaps at each end being folded inwardly toward each other and the remaining two opposite flaps at each end being folded inwardly toward each other and superimposed upon said first two flaps, straps each having one end attached to one of said walls at each end of the wall and extending across and covering the edges of said two last named flaps at each end, and means for attaching said straps to the opposite wall.

2. A device of the character described comprising walls of insulating material forming an open ended rectangular enclosure, flaps in connection with the ends of each wall, there being four of said flaps at each end of the enclosure and the two opposite flaps at each end being folded inwardly toward each other and the remaining two opposite flaps at each end being folded inwardly toward each other and superimposed upon said first two flaps, straps each having one end attached to one of said walls at each end of the wall and extending across and covering the edges of said two last named flaps at each end, means for attaching said straps to the opposite wall, and means connecting said two last named flaps at each end and engaging said straps.

JOHN DANNER.