H. J. WILLIAMS.

SHIPPING CASE.

APPLICATION FILED SEPT. 22, 1919.

1,329,032.

Patented Jan. 27, 1920.

2 SHEETS—SHEET 1.

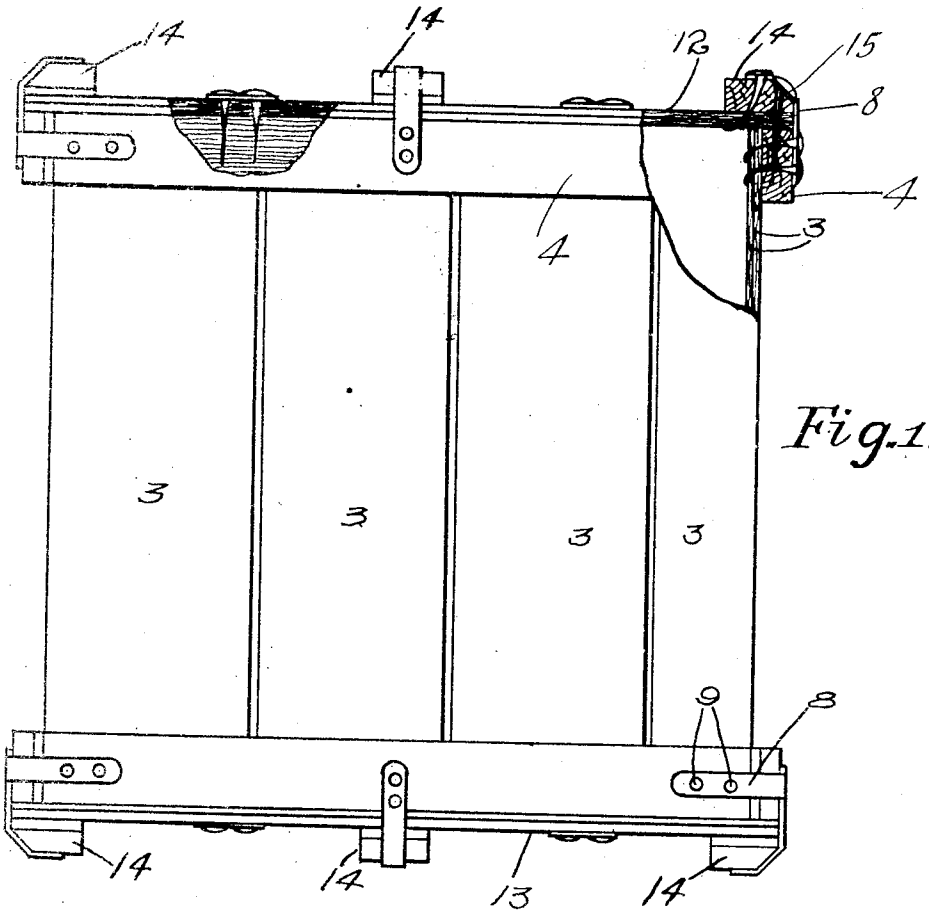


Fig. 1.

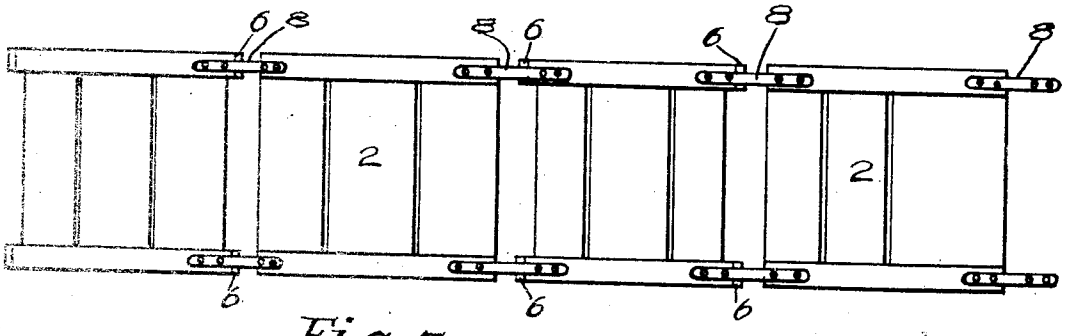


Fig. 3.

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2 SHEETS—SHEET 2.

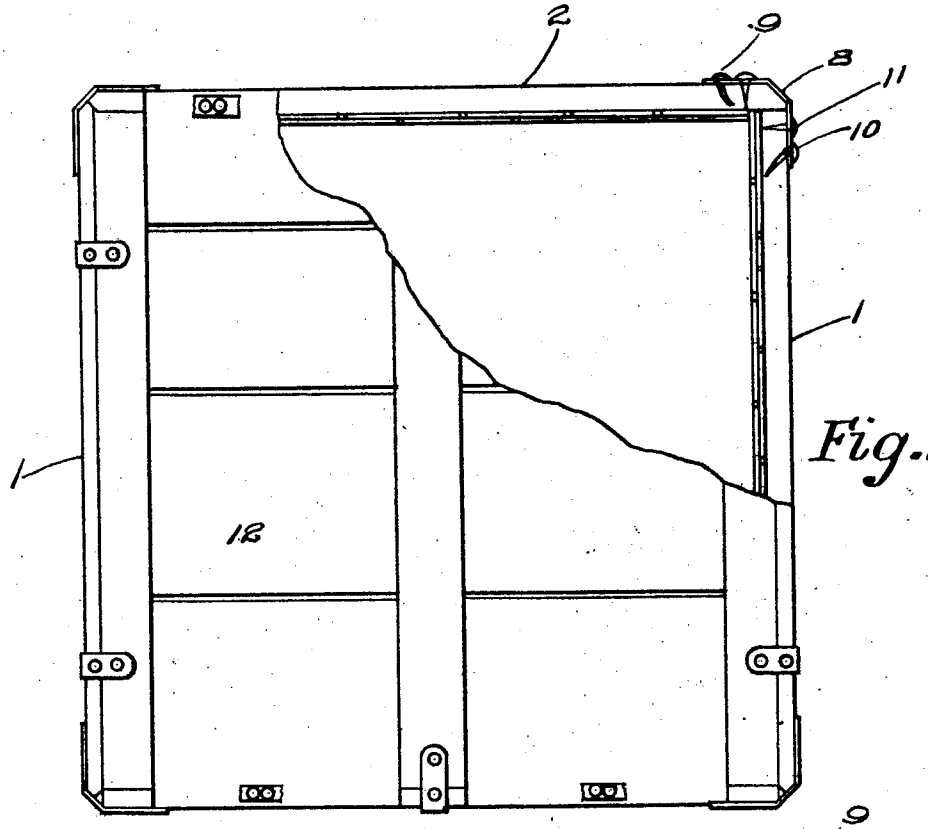


Fig. 2.

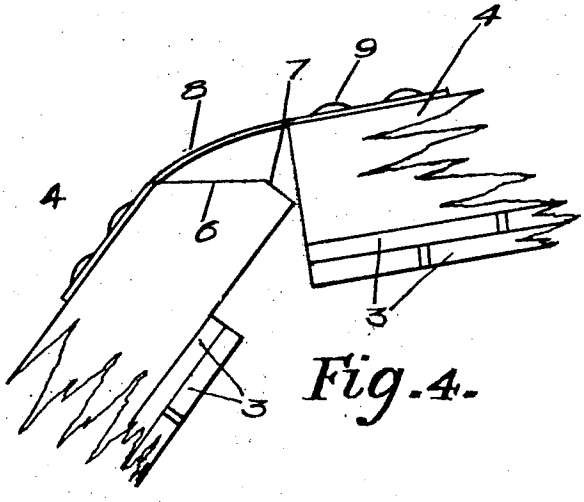


Fig. 4.

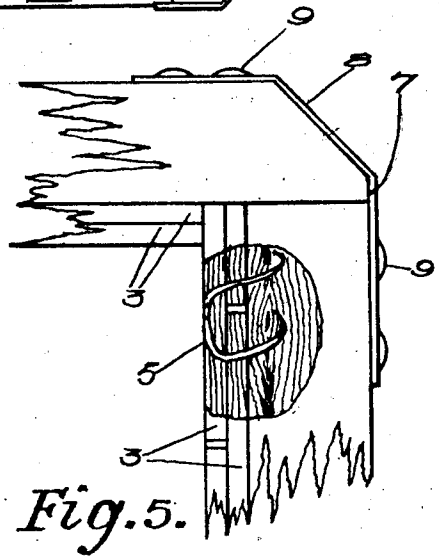


Fig. 5.

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UNITED STATES PATENT OFFICE.

HENRY J. WILLIAMS, OF MOBILE, ALABAMA.

SHIPPING-CASE.

1,329,032. Specification of Letters Patent. Patented Jan. 27, 1920.

Application filed September 22, 1919. Serial No. 325,460.

To all whom it may concern:

Be it known that I, HENRY J. WILLIAMS, a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have invented a new and useful Shipping-Case, of which the following is a specification.

This invention relates to shipping cases or crates especially designed for holding heavy loads, one of its objects being to provide a case of veneer having reinforcing cleats sewed thereto and the ends of which cleats are held together in a new and novel manner whereby the parts of the crate are prevented from breaking apart when the crate or case is subjected to rough handling while full, and whereby opening of the crate and theft therefrom without detection is rendered impossible.

Another object is to provide a shipping case the walls of which can be cheaply but durably made and are dust proof.

A still further object is to provide means whereby the ends of the cleats will bind tightly together thereby making the case rigid when its fastening means are in place.

With the foregoing and other objects in view which will appear as the description proceeds the invention consists of certain novel details of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims, it being understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as set forth in the appended claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings—

Figure 1 is an elevation of a shipping case having the present improvements combined therewith, a portion being shown in section.

Fig. 2 is a plan view, partly in section.

Fig. 3 is a view, on a reduced scale, of the panels forming the walls of the case and laid out flat prior to forming the case.

Fig. 4 is an enlarged view of one corner portion of the case and showing the relative positions of the adjoining portions of two panels while the case is being set up for use.

Fig 5 is a similar view showing the relative positions of said parts when the case is set up for use.

Referring to the figures by characters of reference, 1 designates the end walls and 2 designates the side walls of a shipping case, each of these walls being made of two thicknesses of veneer, the strips of veneer forming one thickness being arranged to lap the spaces between the strips of veneer forming the other thickness. These veneer strips, indicated at 3 are secured together and to reinforcing cleats 4 by staples 5 or the like clenched therein, the cleats being extended along the ends of the veneer strips as shown. The cleats on the end panels 1 project beyond the edges of said panels a distance equal to the combined thickness of the cleats and veneer on the adjacent side panel 2, and the outer corners of these projecting ends of the cleats are beveled as shown at 6, each bevel coming to a narrow end face 7 at right angles to the inner surface of the cleat.

In making a shipping case the several panels after being formed in the manner described are placed in line and spaced apart the proper distance. They are then connected together by metal straps 8 which bridge the spaces between the panels and are fastened in position by good sized cement coated nails 9. The straps may contain the name or private mark of the shipper so that they cannot be removed and others substituted without detection.

After the panels have been connected in the manner described the case can be set up for use by successively erecting the panels at right angles to each other. The beveled ends of the cleats on the end panels will swing into contact with the straps so that when the panels are brought into position at right angles to each other the straps will be taut and the ends of the cleats will lap and be held tightly together, as shown in Fig. 5. In other words each beveled end of a cleat will act as a wedge and will become firmly seated between the bent strap connected thereto and the end of the adjacent

cleat. The straps connected to the cleats at the free end of the end panel 2 are bent over the beveled projecting ends brought to lapping position and draw nails are then inserted into the end portions of the straps, as shown at 10 and driven diagonally so as to pull the straps 8 taut and cause the ends of the cleats to bind together. Additional nails 11 are then driven straight into the cleats from the straps and will serve to prevent the pull on the straps from withdrawing the draw nails from the cleats. With all of the corners of the case now secure, the top and bottom panels 12 and 13 can be placed on the case. Each of these panels is made of strips of veneer disposed in lapped relation and secured to cleats 14, the ends of the cleats and the outer edges of the side cleats being beveled, as shown so that additional strips can be secured to the sides and ends of the top and bottom panels and to the top and bottom cleats of the wall panels in the manner hereinbefore described. In small cases each strap, except those receiving the draw nails, may be secured by two nails, one entering each cleat, but in the large cases, two nails are provided in each end of each strap thus to render the structure doubly secure at the joints. It is to be understood that the nails in the end holes of all the straps are driven diagonally so as to draw the straps and to hold the straps most securely, the other nails acting as supplemental means. It has been found in practice that the straps will break before the fastening nails will pull out of place, when the case is subjected to rough handling, and, furthermore, it becomes impossible to extract the nails without so mutilating the seals as to render them unfit for further use. By cutting the straps the case can be opened readily, the nails removed and new straps subsequently used when the case is again to be employed for shipping purposes.

In practice the straps are all fastened in place at the factory and the user only has to fold the panels into proper position, draw and fasten the ends of the free straps, attach the bottom panel, fill the case and then attach the top panel in the manner described.

Particular importance is attached to the use of the tension or draw nails in connection with the supplemental or reinforcing nails, the provision of the beveled ends on the cleats whereby all of the straps are placed under tension, and the particular veneer wall construction.

By referring particularly to Fig. 1 it will be noted that where the straps 8 are secured to the top and bottom panels by two nails extending through each end portion of the strap one of the nails, 15, is driven through the strap 8, the beveled portion of the cleat 14, the veneer marginal portion of the panel, and thence into the side cleat 4 of the case. Thus it becomes impossible to remove either the strap or the nail 15 without cutting or breaking the strap. This feature is of primary importance.

What is claimed is:—

1. A shipping case including opposed panels having cleats terminating flush with the edges of the panels, opposed panels having cleats provided with projecting ends lapping the ends of the cleats on the other panels, said projecting ends having their outer corners beveled, straps bent over the beveled ends of the cleats, draw nails extending through the straps and into the respective cleats engaged thereby to hold the straps taut and supplemental nails extending through the straps and into the cleats.

2. A shipping case including wall panels each having cleats thereon, the cleats on alternate panels projecting beyond the edges of the said panels and lapping and bearing against the ends of the cleats on the other panels, the outer corners of said projecting cleat ends being beveled, bendable straps connecting the cleats of the adjoining panels, said straps being bent over the bevels, draw nails extending through the ends of the straps and into the cleats to draw the straps taut, supplemental nails extending through the straps and into the cleats for holding the straps taut.

3. A shipping case including a series of wall panels each having cleats thereon, the cleats on alternate panels projecting beyond the edges of said panels and having their outer corners beveled, bendable straps connecting the cleats on the adjacent panels, said panels being foldable relative to each other to position the projecting cleat ends upon and in lapping relation with the ends of the cleats on the other panels and to draw the straps taut, straps secured to and projecting from the ends of the cleats at one end of the series of panels, and bendable over the ends of the cleats at the other end of said series, draw nails extending through the free ends of said straps and into the adjacent cleats, for drawing said straps taut and binding the cleats together, and supplemental nails extending through the said straps and into the cleats for holding the straps taut.

4. A shipping case including a series of panels each consisting of strips of veneer arranged in layers, the strips of one layer lapping the meeting portions of the strips of the other layer, and cleats extending across the ends of the strips of veneer and secured thereto, the cleats on alternate panels projecting at their ends and having their outer corners beveled, bendable straps secured to the cleats for connecting the pan-

els, said panels being foldable to bring said projecting cleat ends across and in contact with the ends of the other cleats and to draw the straps taut, straps projecting from the cleats at one end of the series and bendable into engagement with the projecting cleat ends at the other end of the series of panels, draw nails engaging said straps and certain of the cleats for drawing said straps taut, and supplemental nails engaging said straps for holding the straps taut.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HENRY J. WILLIAMS.

Witnesses:
H. G. BRELAND,
E. L. TUCKER.