(No Model.) 2 Sheets—Sheet 1.

J. S. & C. W. REID.

PACKING BOX OR CRATE.

No. 532,991. Patented Jan. 22, 1895.

Fig. 1.

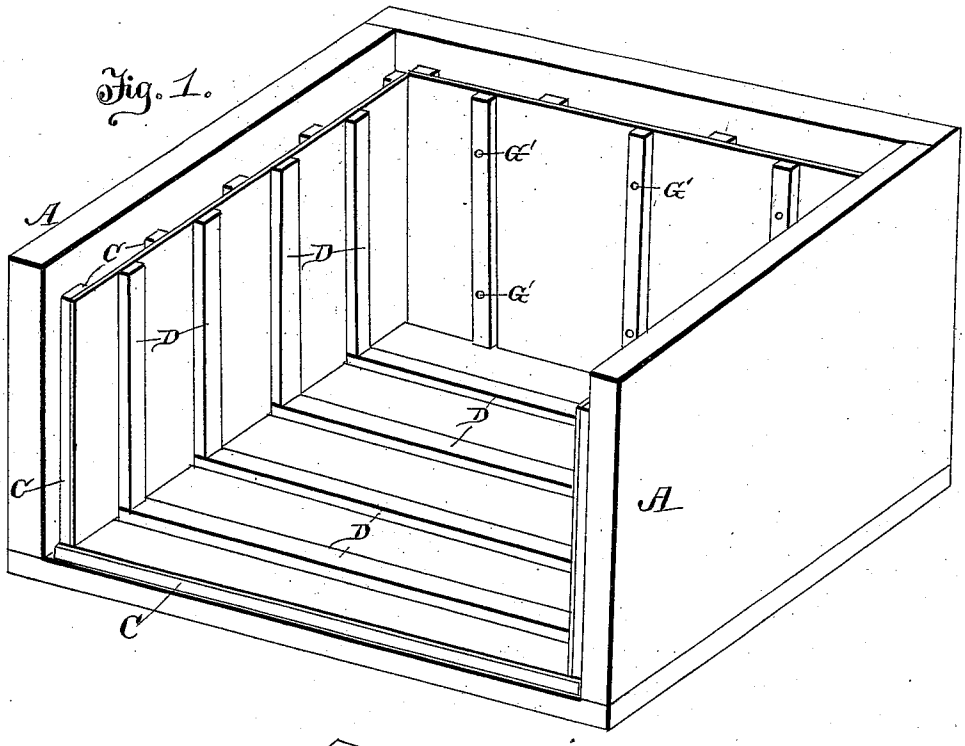
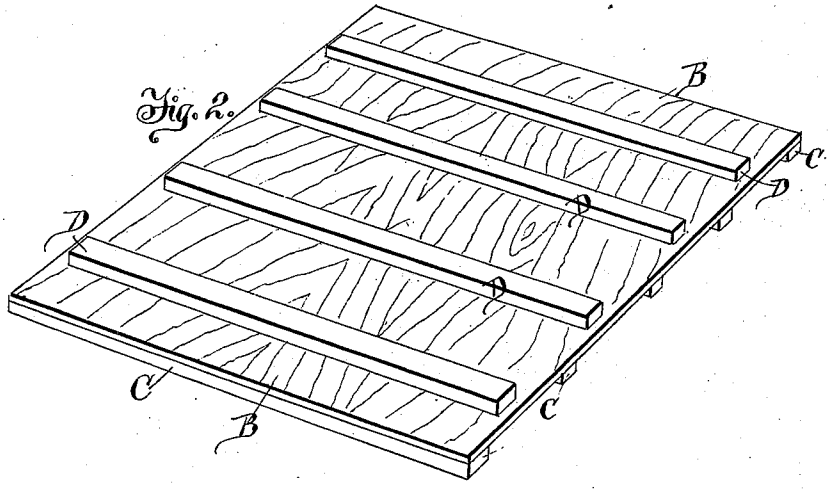


Fig. 2.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

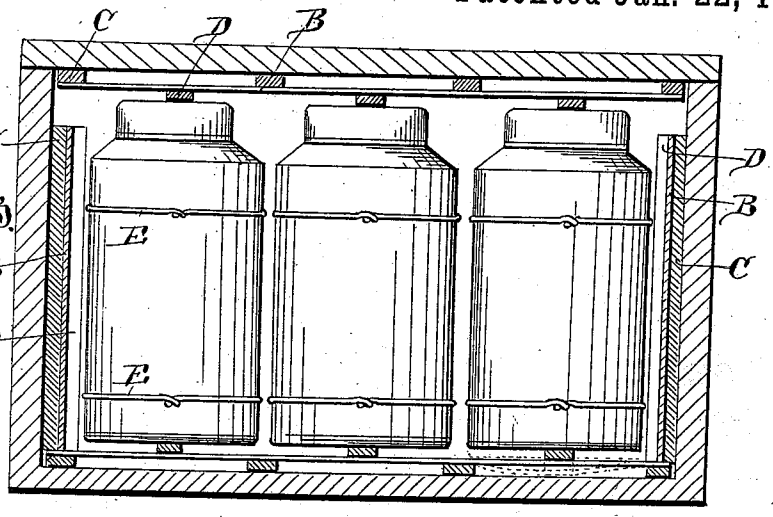
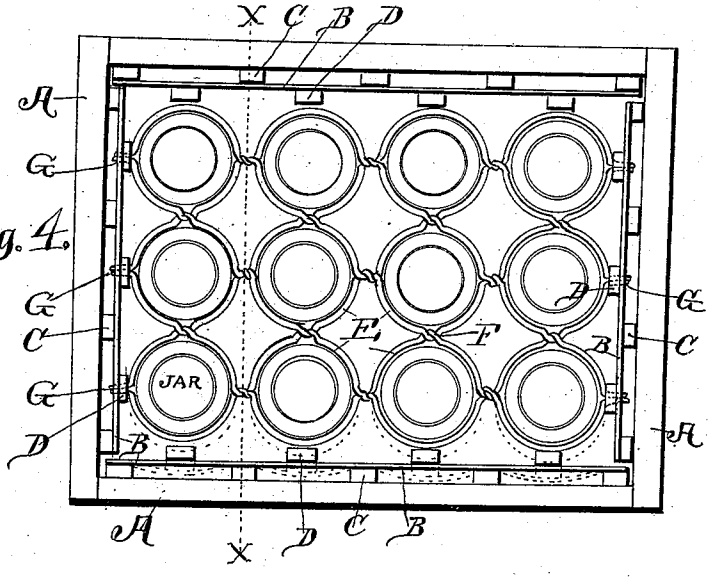


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN STERETT REID AND CARY WILSON REID, OF MUNCIE, INDIANA.

PACKING BOX OR CRATE.

SPECIFICATION forming part of Letters Patent No. 532,991, dated January 22, 1895.

Application filed May 1, 1894. Serial No. 509,640. (No model.)

To all whom it may concern:

Be it known that we, JOHN STERETT REID and CARY WILSON REID, citizens of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Packing Boxes or Crates; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in the class of packing boxes or crates that are used for packing and shipping glass fruit jars and such articles, and the objects are to construct a cheap, simple, and durable packing box for such purposes, and one in which the jars are not liable to get broken. We attain these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of an empty box with one end and top removed. Fig. 2 is a perspective view of one of the cushion boards or sections. Fig. 3 is a vertical cross section of a complete box as if taken on line X X in Fig. 4, and the said Fig. 4 is a top plan view of a box with the lid removed and fitted with the cushion boards, wire diaphragms, and glass jars.

Similar letters refer to similar parts throughout the several views.

The box A is of an ordinary construction, being made of wood and of a size suitable to hold a dozen ordinary glass fruit jars. In making the boxes for bottles or other articles, they may be made in any size most suitable for the purpose.

The box A is provided with an inside lining or cushion, which is so constructed as to give a spring or cushioned bearing at all places where the jars touch it, and which consists of a very thin board B preferably of such a material as veneer. These boards B are stiffened crosswise of the grain of the wood by narrow strips C and D and the arrangement of these strips is the important part of our invention.

In placing the strips C and D on the boards, they are arranged as follows: The bottom board B as shown in Figs. 1 and 2, has five strips C on the under side and four strips D on the upper side. The upper strips D are placed so as to come directly under the center of the bottom of each jar or row of jars over it, as shown in Fig. 3. Each strip D comes directly between and above two of the bottom strips C in order to allow the board A to give or spring down in case the box is dropped or thrown down as is often the case in handling the boxes in shipping. The sides and top boards are made in the same manner and with the same number of strips, but in making a box to hold a dozen jars, the end boards are only arranged to cushion the three end jars and therefore they have only three strips on one side and four on the other. The inside strips C on all the side and end boards are placed so as to stand parallel with and directly opposite the sides of the jars at a point where the said jars come the nearest touching the said boards B, all as shown in Figs. 3 and 4. The top and bottom boards have their inside strips arranged so as to come directly over the top and under the center of the bottom of the jars as shown in Fig. 3, thereby forming a complete spring cushion all around the interior of the box.

When the box is so handled as to throw the jars against any one of the cushion boards, the said board will give back or spring the board B, as indicated in dotted lines in Figs. 3 and 4, and thereby prevent the jars from breaking. Each jar is separated and held to itself by the wire diaphragms E. This diaphragm consists of wires arranged in pairs woven or twisted together, as shown in Fig. 4, running lengthwise of the box, and separated at intervals to form loops for encircling each jar. The adjacent wires of the adjacent pairs of wires are twisted together at the loops as shown at F. The ends of the wires are passed through apertures G′ in the end strips and secured to the inner face of the end boards B. By this construction we provide a light but strong wire diaphragm for holding the jars or bottles in position, and in which the ends of the wires do not protrude beyond the outer surface of the box.

We do not claim the wire diaphragms broadly, but

What we do claim, and desire to secure by Letters Patent, is—

1. The combination with a packing box, of thin resilient lining boards for the box, strips

interposed between the lining boards and the inner faces of the box and strips on the opposite sides of the lining boards located between the strips interposed between the lining boards and box, substantially as described.

2. The combination with a packing box, of thin resilient lining boards for the box, strips interposed between the lining boards and box, strips on the opposite sides of the lining boards located between the strips interposed between the lining boards and box and a diaphragm within the box secured to the lining, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN STERETT REID.
CARY WILSON REID.

Witnesses:
CARY FRANKLIN,
WILLIAM EDGINGTON.