A. G. SHERMAN.

PACKING CASE.

APPLICATION FILED MAR. 11, 1908.

946,278. Patented Jan. 11, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

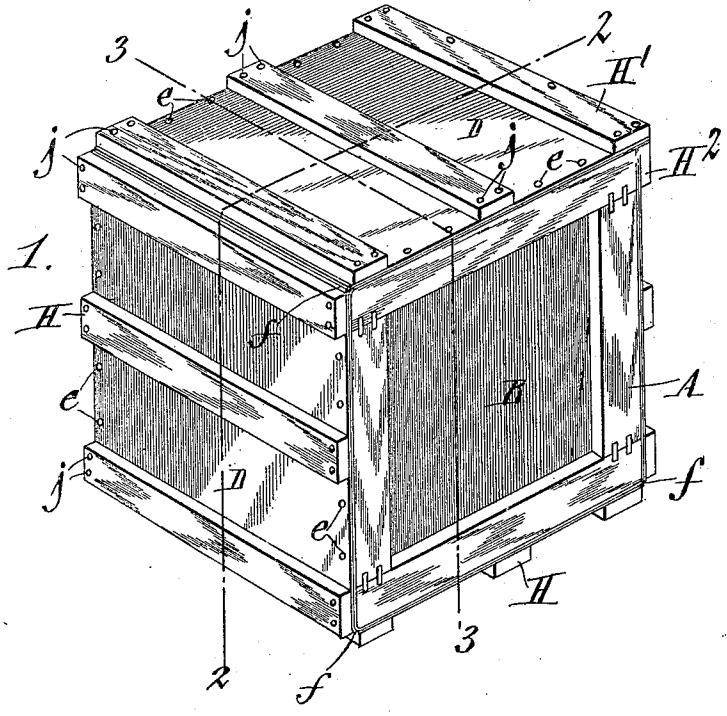


Fig. 4.

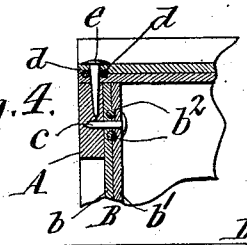


Fig. 2.

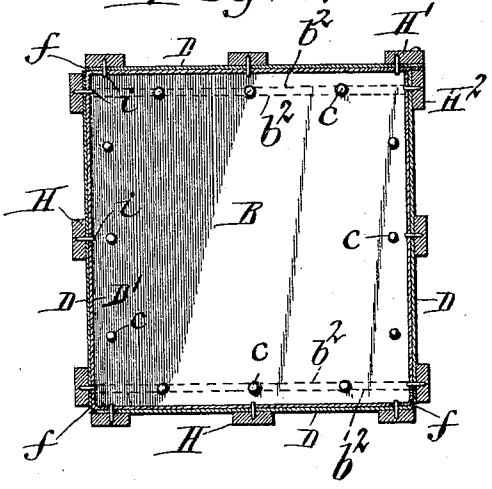
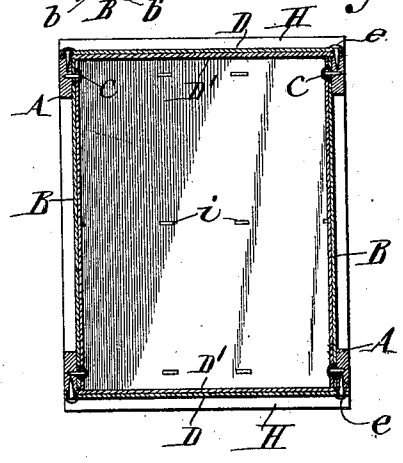


Fig. 3.



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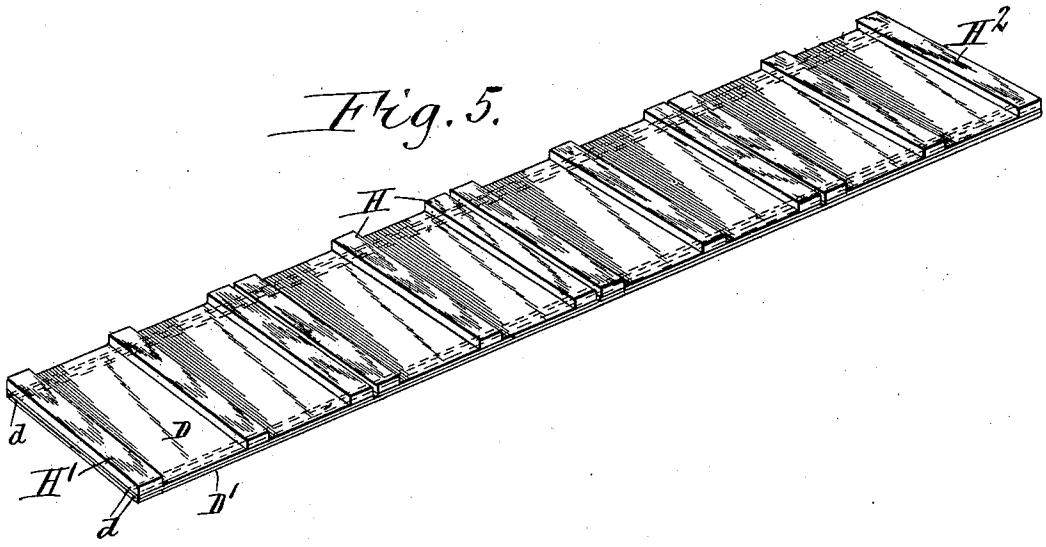
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2 SHEETS—SHEET 2.

Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT G. SHERMAN, OF BUFFALO, NEW YORK.

PACKING-CASE.

946,278. Specification of Letters Patent. Patented Jan. 11, 1910.

Application filed March 11, 1908. Serial No. 420,318.

To all whom it may concern:

Be it known that I, ALBERT G. SHERMAN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Packing-Cases, of which the following is a specification.

This invention relates to a case for packing or shipping merchandise for storage or transportation and more particularly to a case which protects its contents from the weather and vermin.

The object of this invention is to produce a case for this purpose which is strong and durable in construction, which can be produced at comparatively low cost and which can be shipped compactly in knockdown condition and readily assembled for use.

In the accompanying drawings consisting of 2 sheets: Figure 1 is a perspective view of a packing case embodying my invention. Fig. 2 is a vertical longitudinal section of the same taken in line 2—2, Fig. 1. Fig. 3 is a vertical transverse section in line 3—3, Fig. 1. Fig. 4 is a fragmentary transverse section, on an enlarged scale, of the packing case, showing the construction at one corner thereof. Fig. 5 is a perspective view, showing the sheathing in the flat condition in which the cross bars are affixed to the outer sides of the sheets preparatory to winding the same around the heads of the case or box.

Similar letters of reference indicate corresponding parts throughout the several views.

In its general organization, my improved packing case consists of end heads, and side walls secured to the end heads and the same may be constructed to form a rectangular or square case, as shown in Fig. 1, or a case of any other suitable shape.

For a square packing case the parts employed are constructed and assembled as follows:—Each end head consists of a rectangular frame A and a sheathing B secured to the inner side of said frame. This sheathing preferably consists of two sheets of paper board b, b^1 and reinforcing wires b^2 arranged between the sheets adjacent to and parallel with the edges thereof, the sheets being secured to each other and to opposite sides of the wires by a suitable glue, cement or adhesive. As shown in the drawings, two reinforcing wires are arranged between the marginal parts of the two sheets, thereby forming a firm, strong and durable fastening or nailing edge on the sheathing which is not liable to tear or pull away from the head when secured thereto. The means for fastening the reinforced edge of the head sheathing to the frames preferably consist of nails *c* which are driven through the sheets from the inner side of the same and between the wires and into the frame, so that the heads of the nails overhang the wires, as shown in Fig. 4, whereby a reliable and durable connection between the sheathing and frame is obtained. The side walls of the packing case each comprise two sheets of paper board D, D^1 and reinforcing wires *d*, *d* arranged between the sheets adjacent to and parallel with the edges thereof, the sheets being secured together and against opposite sides of the interposed reinforcing wires by a suitable adhesive, such as glue or cement. A pair of such reinforcing wires *d* is preferably arranged between the sheets D D^1 adjacent to each edge thereof, whereby the same is strengthened and prevents the same from tearing or pulling away from the head to which it is secured. The edges of the walls are secured with their inner sides to the outer edge of the heads of the frames, preferably by nails *e* or similar fastenings which pass through the sheets D, D^1 from the outer side thereof and between the wires *d* of each pair and into the head frames, so that the head of each nail overhangs both wires of the adjacent pair, as shown in Fig. 4. By this means a very strong and efficient connection is produced between the walls and the heads of the packing case which is not liable to be broken or loosened by the severest handling to which packing cases are usually subjected.

The several walls of the packing case are preferably constructed in the form of one continuous piece of sheathing of the above described character, which sheathing is wound around the heads with the inner sides of its edges engaging the edge of the head frames. In constructing the case or box, three of its walls are preferably nailed to the head frames while the fourth is left loose so as to form a lid which may be opened to permit of filling the case with goods after which the same is nailed to the head frames the same as the other walls. To facilitate bending the sheathing in line with the corners of the head frames, the outer sheet of the sheathing is scored transversely at these points, as shown at *f*, whereby the sheathing may be bent to produce square and finished

corners. For the purpose of stiffening the case or box a plurality of stiffening bars or braces H, H^1, H^2 of wood or other suitable material are arranged transversely on the outer side of the sheathing at suitable intervals and where required. As shown in Fig. 1, each wall is provided with three of such bars, two adjacent to the respective corners of the case and one between the corners. These stiffening bars are secured to the outer side of the sheets of the side wall sheathing by means of staples *i* or similar fastenings passing through the sheets from the inner side thereof and into the bars, and the ends of the latter are secured to the edges of the head frames by nails *j* or other suitable fastenings passing through said bars from the outer side thereof and into the head frames. The free end of the lid portion of the side wall sheathing and the cross bar H^1 attached thereto preferably overlap the opposing end of the adjacent fixed side wall sheathing and the adjacent fixed cross bar H^2, as shown in Figs. 1 and 2, thereby enabling this end of the lid to be fastened securely and also serving as an indicator as to where the case should be opened.

In the manufacture of this packing case the cross bars H, H^1, H^2 are fastened to the side wall sheathing and the scoring is effected while the sheathing is in a flat or unfolded condition, as shown in Fig. 5, it being possible to fasten these parts together at this time more easily, economically and expeditiously either by hand or by suitable machinery than would be possible if the sheathing were first applied to the end heads and thereafter the cross bars applied to the sheathing. Furthermore, by fastening the cross bars to the sheathing preparatory to applying the wall sheathing and bars to the end heads, it is possible to ship the case in three pieces in very compact knockdown form, thereby reducing shipping charges.

I claim as my invention:

1. A packing case comprising two end heads, a sheathing forming the side walls of the case and having two sheets of paper board and a pair of wires arranged between said sheets adjacent to each fastening edge, said sheets and wires being united by an adhesive, and fastenings passing through each fastening edge of said sheets and between the respective wires between the same and into said heads.

2. A packing case comprising two end heads and side walls, said walls being constructed of a continuous piece of sheathing wound around said heads and composed of two sheets of paper board, reinforcing wires arranged between the marginal parts of the sheets and bars arranged on the outer side of the sheets, said sheets and wires being secured together by an interposed adhesive, said bars being secured to the sheets by fastenings passing through the sheets from the inner side thereof and the sheets and bars being secured to the heads by fastenings passing through the same from the outer side thereof.

Witness my hand this 9th day of March, 1908.

ALBERT G. SHERMAN.

Witnesses:
THEO. L. POPP,
ANNA HEIGIS.