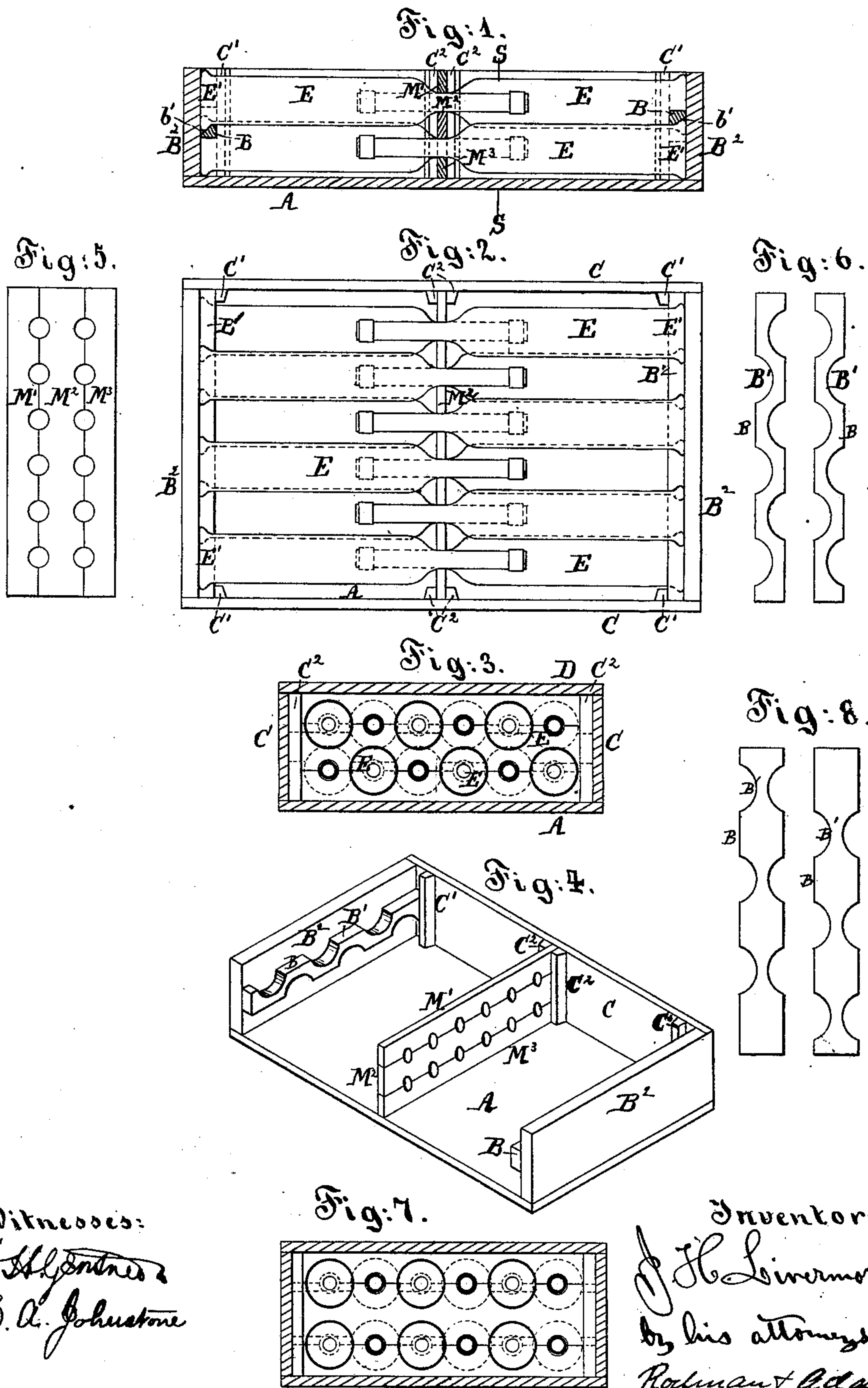


J. H. LIVERMORE.

Wine and Oil Box.

No. 206,588.

Patented July 30, 1878.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

JOSEPH H. LIVERMORE, OF SORRENTO, ITALY.

IMPROVEMENT IN WINE AND OIL BOXES.

Specification forming part of Letters Patent No. **206,588**, dated July 10, 1878; application filed April 6, 1878.

To all whom it may concern:

Be it known that I, JOSEPH HENRY LIVERMORE, late of Barker, in the county of Broome and State of New York, at present of Sorrento, in the Kingdom of Italy, have invented a new and Improved Mode of Packing Bottles; and I do hereby declare that the following is a full and exact description of the same.

I provide a packing-box for bottles containing wines, olive-oil, or other liquids with a perforated sliding partition, consisting of three strips of wood extending from side to side across the center of the box, and having the ends of said partition slide up and down in perpendicular grooves between two cleats. I also provide two additional pieces of wood of the same length as the central partition, shaped as shown, so as to afford a hold or rest for the butt-ends of the bottles by simply extending across between the tiers. The ends of those latter pieces also slide up and down in perpendicular grooves formed by the ends of the box and cleats attached to the sides thereof near such ends.

To enable others skilled in the art to make use of my invention, I will proceed to describe its construction and operation.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a vertical section lengthwise through the box with bottles packed therein. Fig. 2 is a plan view of the box and bottles with the cover removed. Fig. 3 is a cross-section through the case on the line S S in Fig. 1, with the bottles in place. Fig. 4 is a perspective view, showing the construction of the interior parts of the box only. The remaining figures show details attached. Fig. 5 shows the central partition removed. Fig. 6 shows the butt-rests or end rests removed. Fig. 7 is an arrangement of the bottles which is equally successful, and on some accounts preferable. I consider this construction an equivalent of the other. It employs a nearly similar central partition; but the recesses in each end piece are differently arranged, lying opposite to each other instead of diagonally or joggled, as shown in Fig. 6. Fig. 8 shows the butt-end rests with recesses opposite each other.

Similar letters of reference indicate corresponding parts in all the figures.

Assuming the box to be twenty-one and one-eighth inches long by sixteen and seven-eighths inches wide, (outside measurement,) I run a partition across the center and the entire inside width of the box, which partition, to offer greater facilities for packing, is made of three strips of wood. The top strip and the bottom strip are exactly alike, and are constructed each with six semicircular notches in one edge equidistant from each other. The middle strip is constructed of the same length and thickness, and with six corresponding semicircular notches in each edge. When these three strips are conjoined, as shown in Figs. 4 and 5, the parts of circles will coincide and form twelve circular perforations, six above and six below. (See Figs. 4 and 5.) This partition is slipped into and held in its place by means of grooves formed by cleats affixed to each side of the box for that purpose, and the circular perforations receive the necks of bottles. (See Figs. 1, 2, and 3.) Next we proceed to construct the butt-end rests or holds for the bottles. These rests consist of two pieces of board of the same length as the inside width of the box. They may be an inch thick, fifteen inches long, and two inches broad. Each edge has three recesses in it. They are beveled on one side, so that when oil-bottles are packed they will be held by their flanges engaged within the bevels of the butt-pieces.

The invention gives great facility and expedition in packing, perfect security to the bottles without the aid or cost of straw, sawdust, or tan-bark, and superior strength on account of the partition. This box can be made at the same cost as the wine or oil box commonly used.

The butt-end rests, as well as the central partition, are capable of sliding up and down, the groove on each side for the retention of each end piece being formed by a single cleat properly nailed on the interior sides of the box near the ends, as shown.

In packing, the bottles may be placed in position with the central partition, and the butt-end pieces only partially pressed down in their respective grooves, and they are forced down as the job is completed.

No art or particular knowledge is required to pack bottles in my box.

A is the bottom of the box; B² B², the ends; C C the sides, and D the top. All these parts may be of the ordinary construction. C¹ C¹ are vertical cleats nailed to the interior of each side near the ends, and C² C² are similar cleats nailed to the same near the middle of the length. B¹ B¹ are the beveled recesses in the end rests B, and M¹ M² M³ are the three parts of the central partition. The bottles are represented by E, and the enlargement or flange at the base of each, as in the case of the ordinary olive-oil bottle, by E'. The edges of the recesses in the butt-pieces B are chamfered or beveled, as indicated by B¹. These beveled edges embrace the flanges E' of the bottles and hold the whole very firmly.

It will be readily understood that for wine-bottles and for bottles (of whatever contents) which do not have a flange at the base the bevel B¹ is of no advantage; but it is no serious disadvantage.

To pack my improved case, I put in my box or case (properly equipped with the proper cleats and with the lowermost section, M³, of the central partition) six bottles, three on one side and three on the other, their necks resting in the semicircular cavities in the section M³ of the central partition. I then adjust the middle section of my central partition and the two end butt-rests or separators B B¹, being sure that all the bottles enter the cavities B¹. I next lay in the second tier or section of bottles, setting their necks in the recesses in the middle section of the central partition and their bottoms in the end rests or division-pieces B B¹, then adjust the last section M¹ of the

central partitions. The bottom flanges of the last tier of bottles will now bear against the cover of the box when it is put on, and thus be held from shaking.

By constructing the butt-rests B narrow in cross-section, and with recesses B¹ on both of its opposite longitudinal edges to receive the butts of the bottles, I am enabled to substitute for the butt-rests in use, formed of a piece extending from the top to the bottom of the box, and provided with orifices for the reception of the butts of the bottles, my construction, which renders the butt-rest cheaper in construction and the box lighter when packed, and also utilizes the bottom of the box as a support for the butts of the lower tiers of bottles.

Upon taking off the cover of my box the dealer will find no trouble in taking out the bottles packed therein.

I claim as my invention—

1. In a box or case for packing bottles, the central perforated partition M¹ M² M³, working between the cleats C² C², and adapted to engage and hold the necks of bottles, in combination with the removable butt-rests B, guided by the cleats C¹, and having recesses on each edge, as herein specified.

2. A bottle-case having a divided perforated partition, M¹ M² M³, and removable butt-rests B, having the bevels b', adapted to engage and retain bottles by their bottom flanges E', so as to resist end movement thereby, as herein specified.

J. H. LIVERMORE.

Witnesses:

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