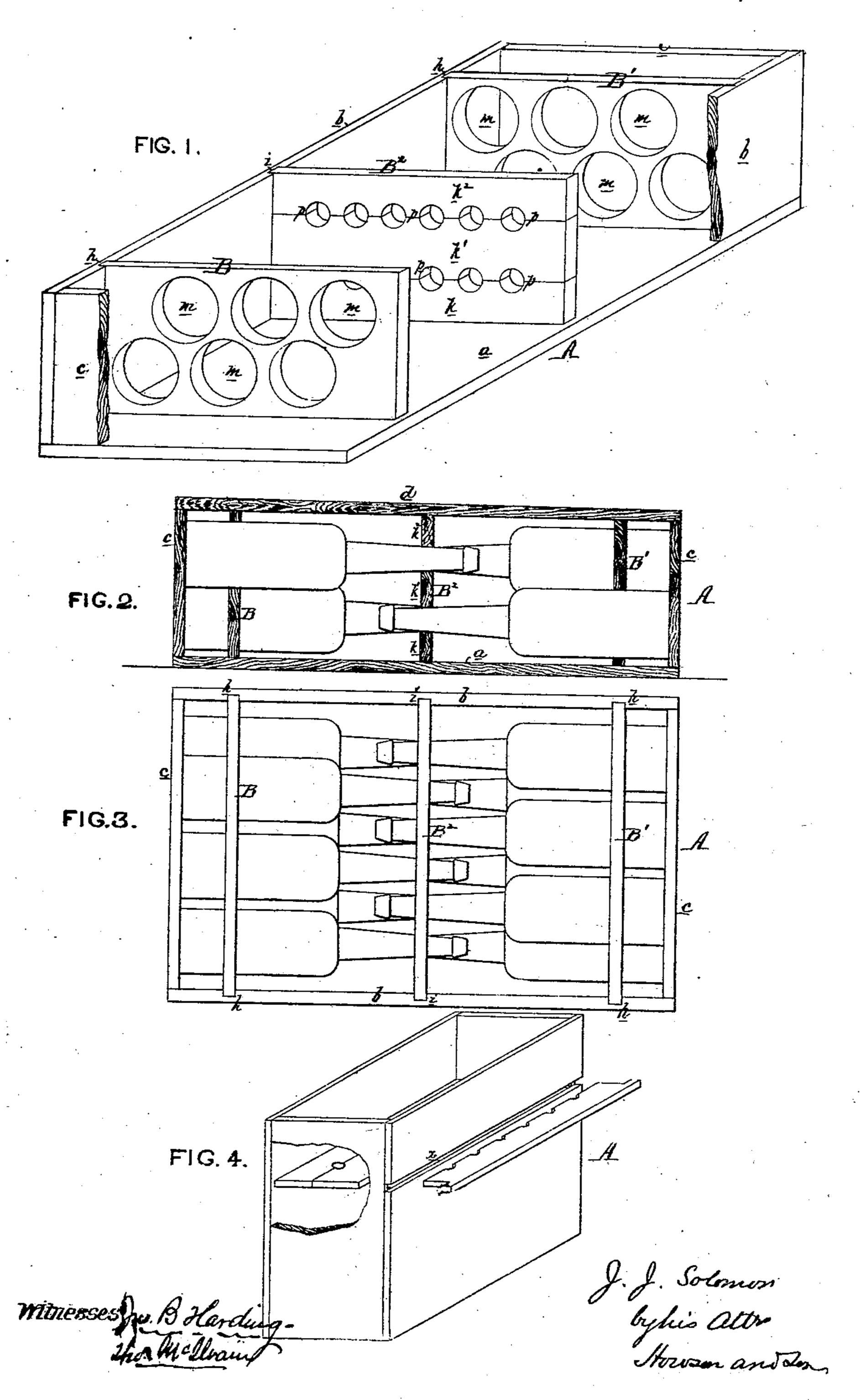
I. Solonton, Bottle Packing Box. No. 109961. Patented Dec. 6.1890.



Anited States Patent Office.

JOSEPH JONES SOLOMON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 109,961, dated December 6, 1870.

IMPROVEMENT IN BOXES FOR PACKING BOTTLES.

The Schedule referred to in these Letters Patent and making part of the same.

I, Joseph Jones Solomon, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a Packing-Box for Bottles, of which the following is a specification.

Nature and Object of the Invention.

My invention consists of a packing-box for bottles, in which partitions having openings for the reception of the butts and necks of the bottles are arranged in a manner which will be fully described hereafter, the object of my invention being to provide a box in which bottles can be securely packed much more readily than by the usual methods.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of my improved packing-box for bottles, with the lid and a portion of two sides removed;

Figure 2, a vertical section of the same;

Figure 3, a plan view with the lid removed; and Figure 4, a perspective view, showing a modification of my invention.

General Description.

In preparing bottles for transportation they are usually wrapped separately in straw, and then laid closely together within a box or case, or else are packed in saw-dust or similar loose material, with which the box is filled.

The former of these methods adds considerably to the expense of packing, owing to the time required in preparing each bottle, while the latter plan is objectionable owing to the fact that the loose material is apt to become scattered around the box when the bottles are unpacked.

A greater objection, however, is that neither of these plans prevents the bottles from occasionally striking together and becoming broken during the handling of the boxes.

In my improved box the bottles require no previous wrapping; they can be cheaply and rapidly packed, and they are held firmly without being in contact with each other, so that there can be no risk of breaking, even during the most careless handling. On reference to the drawing—

A represents a box of the size and shape in common use for containing a dozen bottles, a being the bottom of the box, b b the opposite sides, c c the ends, and d the detachable lid.

In the sides of the box, at points directly opposite to each other, are formed vertical grooves h h and i, at points a short distance from the opposite ends of the box, and midway between the same.

To these grooves are adapted detachable slides or partitions B, B¹, and B², the two former of which are

formed in one piece, while the latter consists of three separate sections, k, k, and k.

In each of the partitions B and B^1 are six circular openings m, of the same diameter as the bodies of the bottles which are to be packed in the box, these openings being arranged in two staggered rows of three each, in the manner plainly shown in fig. 1.

The central partition B^2 has twelve openings, b, of the same diameter as the necks of the bottles, and arranged in two rows of six each, the openings of each row being alternately opposite the openings m of the corresponding rows of the partitions B and B^1 .

The openings in the central partition are formed on the division lines between the sections k, k^{I} , and k^{2} of the said partition, so that one-half of each opening shall be in one section and the other half in the adjacent section.

In packing the bottles, the partitions B and B¹ are adjusted within the box, together with the lower section of the central partition B².

The butts of three of the bottles are then passed through the lower row of openings of one of the partitions B and B^1 until they are brought in contact with the adjacent end of the box, while the necks of the bottles are permitted to rest in the half-openings of the section k of the central partition.

Three other bottles are in like manner introduced into the box with their butts in contact with the opposite end of the same, and their necks overlapping those of the first three, and resting in the intermediate half-openings of the section k. The section k^1 is then adjusted to its place so as to clamp the necks of all of the bottles of the first row, when six more bottles are in like manner introduced into the box to form an upper row, after which, the section k^2 is fitted to its place and the lid of the box secured, which completes the packing.

The lid effectually prevents any movement of the end partitions, and clamps down the sections of the central partition upon the tapering necks of the bottles, the latter being thus firmly held and prevented from moving about or striking each other during the transportation or handling of the box.

The box can be adapted for the reception of any number of bottles, and the end partitions might be permanently fastened in their places, as it is only necessary that the central partition should be movable.

The modification, fig. 4, shows a form of box in which one or more rows of bottles can be arranged vertically.

In this case, the partition in which the openings are formed for the passage of the butts of the bottles is secured close to the bottom of the box, while the sectional partition for clamping the necks

is adapted to grooves, as above described, and is introduced through a slit, x, on one side of the box, and secured by nails or otherwise after adjustment.

In some cases, the partitions in which the openings are formed for the butts of the bottles might be dispensed with, and the box furnished with recessed ends in place of the same.

Claim.

A packing-box for bottles, having a partition with

openings for the reception of the bodies of the bottles, and a divided partition with openings for the reception of the necks, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JOS. J. SOLOMON.

Witnesses:

WM. A. STEEL, HARRY SMITH.