No. 675,961. Patented June 11, 1901.

B. F. MARTIN.

PACKING CASE.

(Application filed Mar. 9, 1901.)

(No Model.)

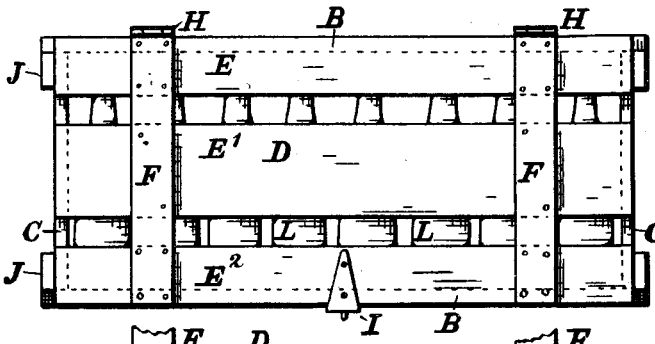

Fig. 1.

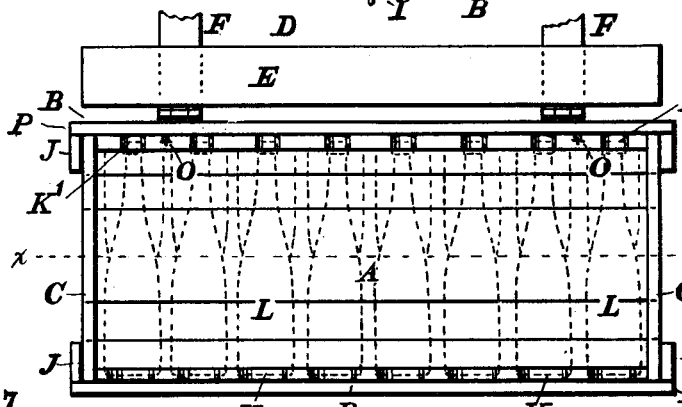

Fig. 2.

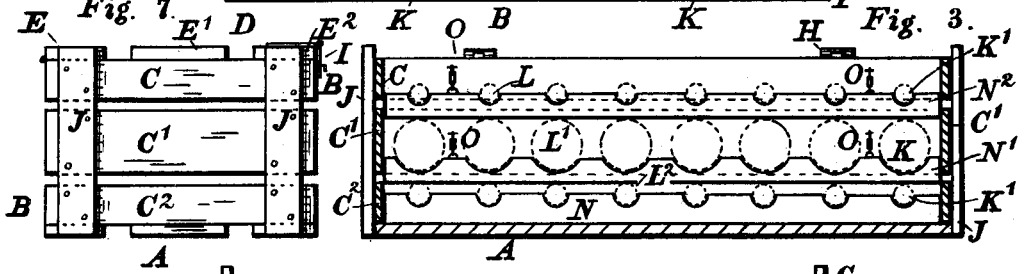

Fig. 7.

Fig. 3.

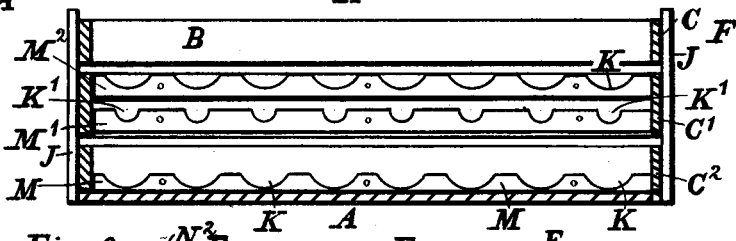

Fig. 4.

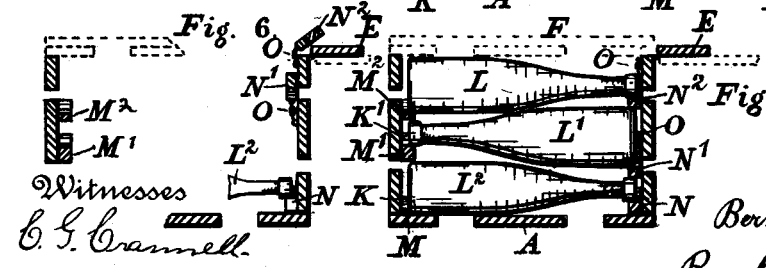

Fig. 6.

Fig. 5.

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BERNARD F. MARTIN, OF ROCHESTER, NEW YORK.

PACKING-CASE.

SPECIFICATION forming part of Letters Patent No. 675,961, dated June 11, 1901.

Application filed March 9, 1901. Serial No. 50,479. (No model.)

To all whom it may concern:

Be it known that I, BERNARD F. MARTIN, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented an Improved Packing-Case, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improved packing-case designed more particularly for use in the shipment of liquids or other substances in bottles without loss or breakage, but capable of being employed for other purposes.

My improvements are fully described and illustrated in the following specification and the accompanying drawings, the novel features thereof being specified in the claims annexed to the said specification.

In the accompanying drawings, Figure 1 is a plan view with the cover closed. Fig. 2 is a plan view with the cover open. Fig. 3 is a longitudinal section on the line $x\,x$, Fig. 2, looking toward the upper side of the case. Fig. 4 is a longitudinal section on the line $x\,x$, Fig. 2, looking downward. Fig. 5 is a transverse section. Fig. 6 is a partial transverse section showing the supporting-slats folded upward to permit the insertion or removal of the bottles. Fig. 7 is an end view.

In the manufacture of my improved packing-case I form the bottom A, the sides B, and the ends C of suitable wooden slats secured together in any suitable way. The top or cover consists of the longitudinal slats E E′ E^2, attached together by the transverse bars F F, hinged to one of the sides at H H. I represents any suitable hasp or locking device. The end consists of the slats C C′ C^2, secured to the horizontal slats forming the sides and attached together by the vertical bars J. The cover shuts down inside the upper ends of the bars J, so that it is protected from being displaced by pressure or blows on the corners of the case, thereby relieving the hinges and lock from strain. It will be observed also that the side slats B project along the bars J, as indicated at P, Fig. 2, being nailed or otherwise fastened to the bars, whereby the latter are protected and the case strengthened.

The bottles L are arranged across the case in two or more horizontal series, the necks of the bottles in one series projecting in one direction, while those of the next series project in the opposite direction. This arrangement will be clearly understood from Fig. 5, in which there are shown three series of bottles, the upper series L and the lower series L^2 of which have their small ends pointing in the same direction, while the intermediate series L′ point in the opposite direction. In order to support the bottles, I arrange along the inside of the case on the opposite sides the notched slats M M′ M^2 and N N′ N^2, one or more of these slats being movable to facilitate the filling and the unpacking of the case. In the construction shown, in which the case is adapted to carry three rows or series of bottles, the lower slat M, Figs. 4 and 5, is provided with a series of notches K for the large ends of the bottles. The next slat M′ is provided with the smaller notches K′ for the necks of the bottles. The upper slat M^2 has the larger notches. On the other side of the case the slats N N′ N^2 are provided with similar notches, but alternating in size with those opposite. The slats M M′ M^2 are fastened to the side of the case; but one or more of the slats at the opposite side are made movable, so that they may be taken out when filling or emptying the case. The slats N′ N^2 are hinged or attached to the side of the case by the links or chains O, so that they may be swung upward, as indicated in Fig. 6, out of the way of the bottles, but so that they still remain attached to the case, so that they cannot become lost. The links or chains O are attached to the side bars and the notched slats by staples or other suitable devices. Another result is also secured by this construction, and that is that since the slats N′ and N^2 are not attached to the case they rest on the bottles below them and secure them in place, and consequently when the cover is shut down, bearing with some force on the upper row, all of the bottles in the case are held firmly in place and prevented from being jarred or displaced during transportation. The bottles are somewhat shorter than the distance between the sides, so that they are not rigidly held endwise, but can shift lengthwise whenever the case receives during transportation an unusual shock or blow upon the outside, an arrange-

ment which I have found in practice materially reduces the danger of breakage.

It will be understood that my improved packing-case may be made of any suitable size or carrying capacity. My improved case is also cheap and durable and very economical in practical use.

I am aware that packing-boxes have been provided with partitions made in detachable sections and that such partitions have been provided with openings of suitably-different sizes to receive the upper and lower parts of bottles alternately. My improvement is characterized by bottle-supporting slats permanently attached to the case in two oppositely-situated series, the slats of one series having a pivotal connection with the case, whereby each can be turned upwardly and backwardly against the adjacent wall of the case to permit the introduction of bottles, said pivoted slats being in use turned down to bear on the bottles and all pressed down by the cover when closed.

One of the main advantages of a pivoted slat such as set forth herein is that it can be turned up against the interior of the case to permit the insertion of bottles to a suitable position on lower bottle-supports and then returned to an operative situation for coöperating in the support of other bottles, the said pivoted slat after removal of the bottles partly supported by it being adapted to be turned up for the removal of the bottles supported below. Further, the slight movement permitted by the slat-pivots when the case is packed and its cover closed lessens the danger of breakage from a sudden shock imparted to the case.

I am aware that cannon-shot have been held in a case or open frame by an exteriorly-pivoted bar that could be moved outwardly about its pivots to permit the shot to be inserted or removed from the frame and to hold them in the frame when desired, and I do not broadly claim a locking-bar for such or other uses.

I claim—

1. The combination of the case, the slats fixed interiorly to one side thereof, and the slats pivotally attached interiorly to the opposite side thereof, all of said slats being suitably notched to receive bottles, substantially as set forth, whereby the pivoted slats can be turned back against the adjacent side of the case to permit the introduction or removal of bottles below each pivoted slat.

2. A bottle-case having on one side an interiorly-situated slat to support the end of a bottle and a support for the opposite end of said bottle, said slat being pivoted to the case whereby it may be turned back against the interior of the case to admit a bottle to be placed upon a lower bottle-support and then returned to a stable position to support a bottle above it, and said lower support.

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