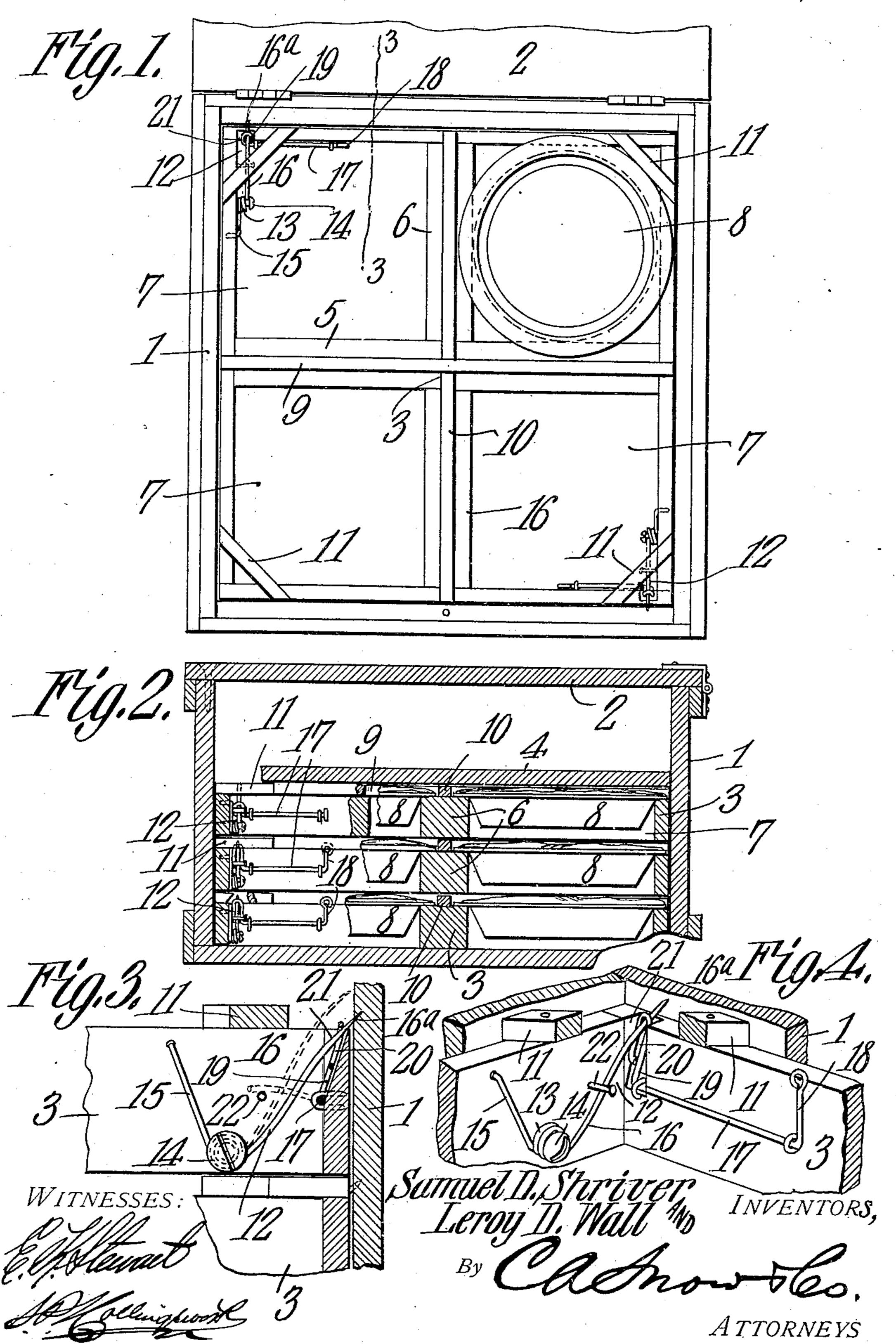
S. D. SHRIVER & L. D. WALL. SHIPPING CRATE.

APPLICATION FILED MAY 23, 1907.

908,159.

Patented Dec. 29, 1908.



UNITED STATES PATENT OFFICE.

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SHIPPING-CRATE.

No. 908,159.

Specification of Letters Patent.

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To all whom it may concern:

States, residing at King City, in the county 5 of Gentry and State of Missouri, have invented a new and useful Shipping-Crate, of which the following is a specification.

This invention relates to a crate for transporting in a safe manner articles liable to be 10 broken or crushed if packed in contact with

one another or with other things.

The object of this invention therefore is to provide a crate in which pies, for example, may be safely packed and shipped without 15 danger of breaking, or spilling their contents unless the crate is overturned.

Another object of the invention resides in the construction of the trays in which the pies are placed and which enables them to be 20 nested one upon another without fear of con-

tact with the pies below or above.

A further object of the invention is to provide a device for fastening each crate securely in place by means of a simple catch | 25 which will permit a certain amount of rough handling of the crate without disturbing its contents.

With these and other objects in view the invention consists of the novel construction, 30 combination and arrangement of parts here-

inafter described and claimed.

In the accompanying drawings: Figure 1 is a top plan view of the improved crate with the cover open. Fig. 2 is a vertical sectional 35 view of the same. Fig. 3 is an enlarged detail view in section on the line 3—3. Fig. 4 is a perspective view of the catch for holding the trays in place in the crate.

Similar numerals of reference are used on 40 all the figures to denote the same parts.

The holding structure or case, indicated by the numeral 1, consists of a rectangular box strongly built to stand rough handling, provided with a hinged cover 2 for closing 45 the case and a suitable fastening means for locking the cover when closed to prevent unlawful tampering with its contents.

Within the case I which is free from all obstruction, are to be placed, one upon another, 50 a plurality of trays 3, alike in size and shape, each tray supporting one or more pies. The cases 1 will be made in different sizes to hold, when full, a greater or lesser number of trays; but if it be found necessary to use | of trays; but if it be found necessary to use adjoining side of the tray and slightly 110 a larger case than required to ship a certain beyond its outer vertical side. Pivoted in number of pies, or if other articles are to be la horizontal plane on that side of the tray

delivered at the same time and to the same Be it known that we, Samuel D. Shriver | place, a false bottom or partition 4 will be and Leroy D. Wall, citizens of the United | placed over the uppermost tray and fastened if necessary. Other pastry goods 60 such as cakes, cookies, buns, etc., may then be arranged on the false bottom without fear of injuring the pies below. Each tray 3 comprises an outside rectangular frame of such size as to be easily placed within the 65 box but fitting sufficiently snug to prevent side movement. The tray may be of such size as to hold one, two, four or more pies. In the drawing a four pie tray is shown and the description will be confined to this 70 size. The tray 3 is divided centrally in both directions by cross pieces 5 and 6 at right angles to each other forming square cells 7 into each of which a plate 8 containing a pie is to be placed, the rim of the plate 75 resting on the upper edges of the frame and the cross pieces 5 and 6. Fastened centrally to the upper sides of the cross pieces 5 and 6 are narrow strips 9 and 10 respectively, while diagonally across each corner 80 of the tray is a smaller strip 11. These strips are approximately tangential to the rims of the pie plates and prevent them from moving laterally as the crate is carried from place to place. The upper surfaces of 85 the strips 9, 10 and 11 are extended slightly above the top crusts of the pies and afford a firm support for the tray next above. It may be well to state here that the pies must be shipped in pie tins, or in a substitute 90 therefor as it would be impossible for the pies to support themselves by their edges in the cells 7.

When a crate is sent out only partly filled, or even when wholly filled, it will be found 95 desirable to fasten each tray securely in place. For this-purpose, a spring catch 12 is placed in each corner, or in diagonally opposite corners of the tray to engage the sides of the case and prevent any upward 100 movement of the tray. In Figs. 3 and 4 one form of the catch is illustrated and as there shown, it comprises a length of spring wire bent into several coils 13 intermediate its ends and fastened to the tray near the cor- 105 ner by a screw 14 passed through the coil. One end 15 of the wire is fixed to the tray in any suitable manner, the other end 16 sharpened to a point 16^a, extends above the

above which the point 16^a extends, is a rod 17 having its ends turned at right angles to the bar, one of which ends 18 serves as a finger piece to rock the rod, while the other 5 end 19 is formed into an elongated eye 20, resting in an inclined slot 21 in the side of the tray, through which eye the end 16 of the catch passes. When the rod 17 is turned to bring the eye 20 into the position indi-10 cated by dotted lines in Fig. 3, where it will be stopped by a pin 22, the spring arm 16, which passes through the eye, will be forced back until its point 16a is within the plane of the outer side of the tray, the 15 latter may then be placed within or withdrawn from the case and when in position, if the catch arms 16 be released by raising the several finger pieces 18, they will, under the force of the coils 13, spring out-20 wardly, burying their points in the sides of the case and holding the tray against all movement. The points 16a are easily released by turning down the finger pieces 18 on the rods 17. The height of the crate 25 should be less than its width so that it will have a firm base and not liable to be overturned.

Having thus described the invention what

is claimed is:—

1. A shipping crate comprising an outer case, a plurality of trays superposed one upon another in said case and divided by partitions into cells, a guard strip on each of said partitions adapted to support the tray above it, and an automatic fastening means mounted on each tray for locking the same

against withdrawal.

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2. A shipping crate comprising an outer case, a plurality of removable trays super40 posed one upon another within said case and divided by rigid partitions into cells, a guard strip attached to the top of each partition, a guard strip of like height fastened to the top of each tray across the corners, and a fasten45 ing means carried by each tray adapted to automatically lock the tray in position in the outer case.

3. A shipping crate comprising a case, a plurality of superposed rigid trays each tray being subdivided into unyielding square

cells, fixed elevated guard strips around each cell automatic means on each tray for securing it within the case, and manual means for disengaging said fastening means.

4. A tray for a shipping crate comprising 55 a rigid rectangular frame subdivided into unyielding cells for holding articles to be

shipped, and fixed raised guard strips around each cell to prevent said articles from shifting and to form a support for the tray next above. 60

5. A tray for a shipping crate comprising a rectangular frame, cross pieces for subdividing said frame into a plurality of cells for containing articles to be shipped, guard strips around said cells to hold said articles 65 from moving and to form a support for a superposed tray, and a catch in two or more corners of said tray.

6. A shipping crate comprising an outer case, one or more trays within said case, 70 guard strips on each tray, means on each tray for independently securing it within said case, and a false bottom adapted to be supported on the guard strips of the upper

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7. A shipping crate comprising an outer case, a plurality of independent trays adapted to be inserted thereinto one above the other, an automatic lock on each tray to engage the case and prevent the removal of 80 said tray, and means for disengaging said lock.

8. A shipping crate comprising an outer case, a plurality of independent removable trays adapted to be superposed within said 85 outer case each tray being subdivided into cells and having guard strips to steady the contents of the cells and form a rest for the tray next above, an automatic locking device on each tray for holding it in place, and 90 manual means for disengaging said lock.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

SAMUEL D. SHRIVER. LEROY D. WALL.

Witnesses:

FRANKLIN HOLMES, FRED. WINTER.