

No. 827,124.

PATENTED JULY 31, 1906.

A. R. SPEER.
PACKING CASE.
APPLICATION FILED MAR. 28, 1905.

Fig. 1.

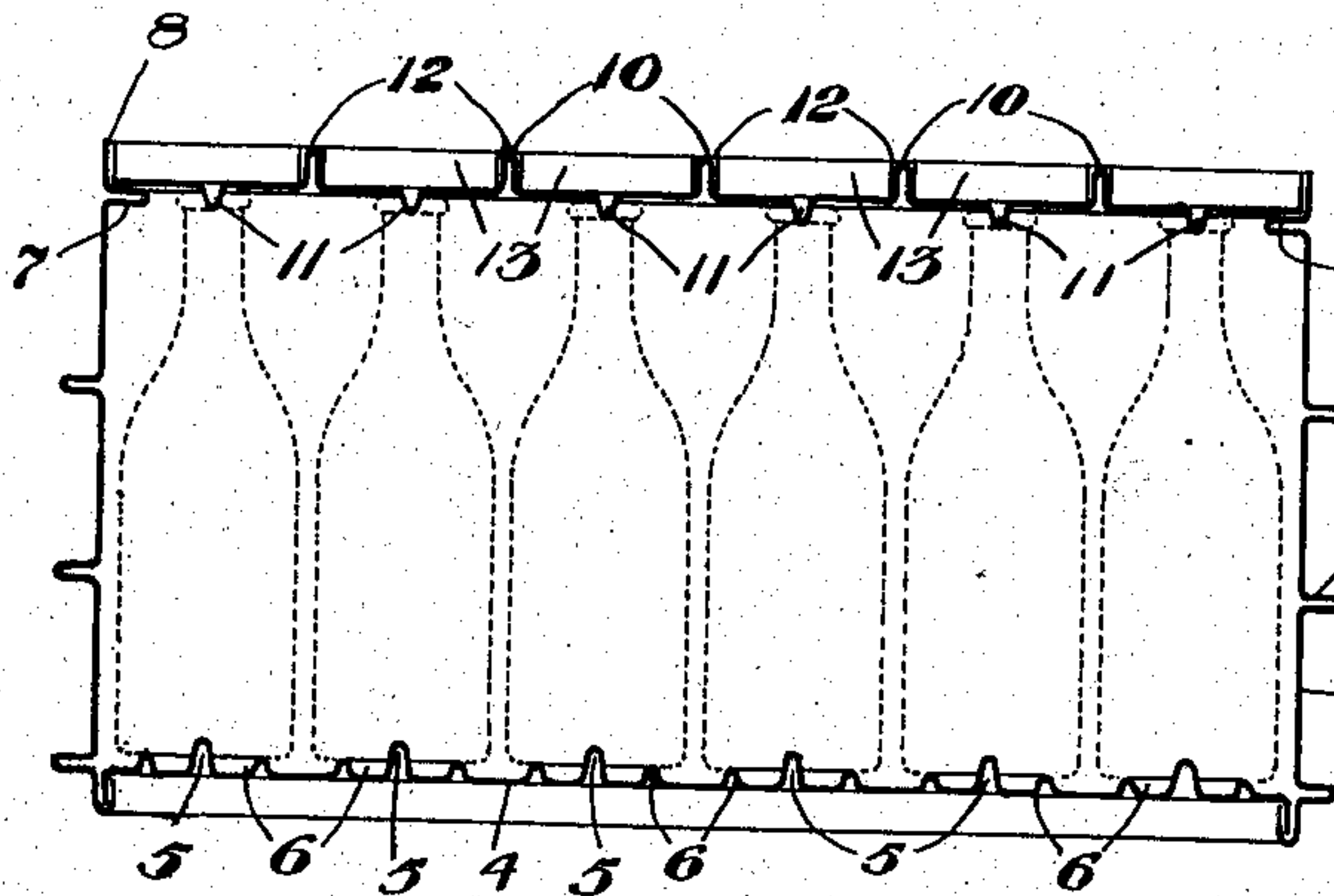


Fig. 2.

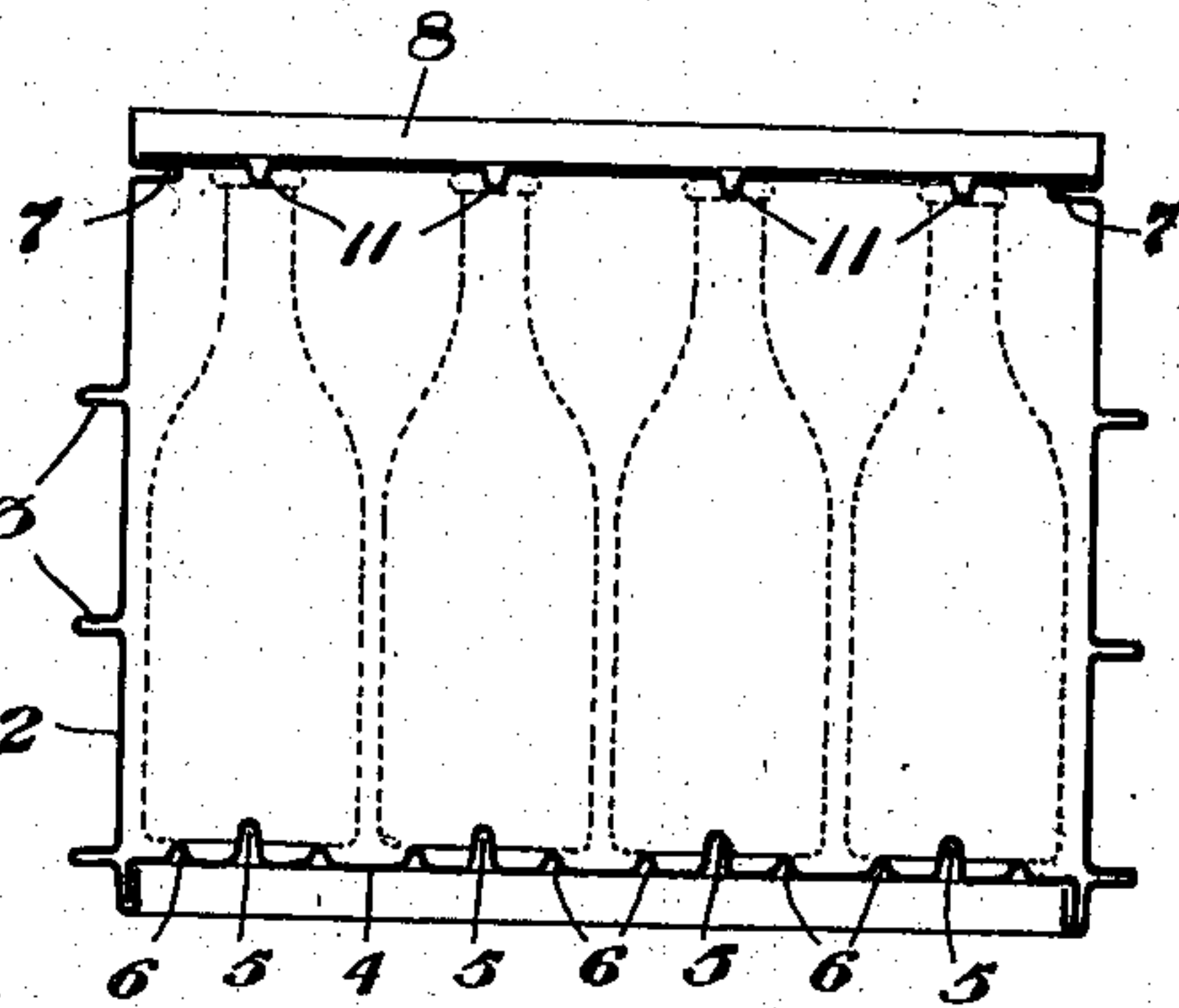


Fig. 3.

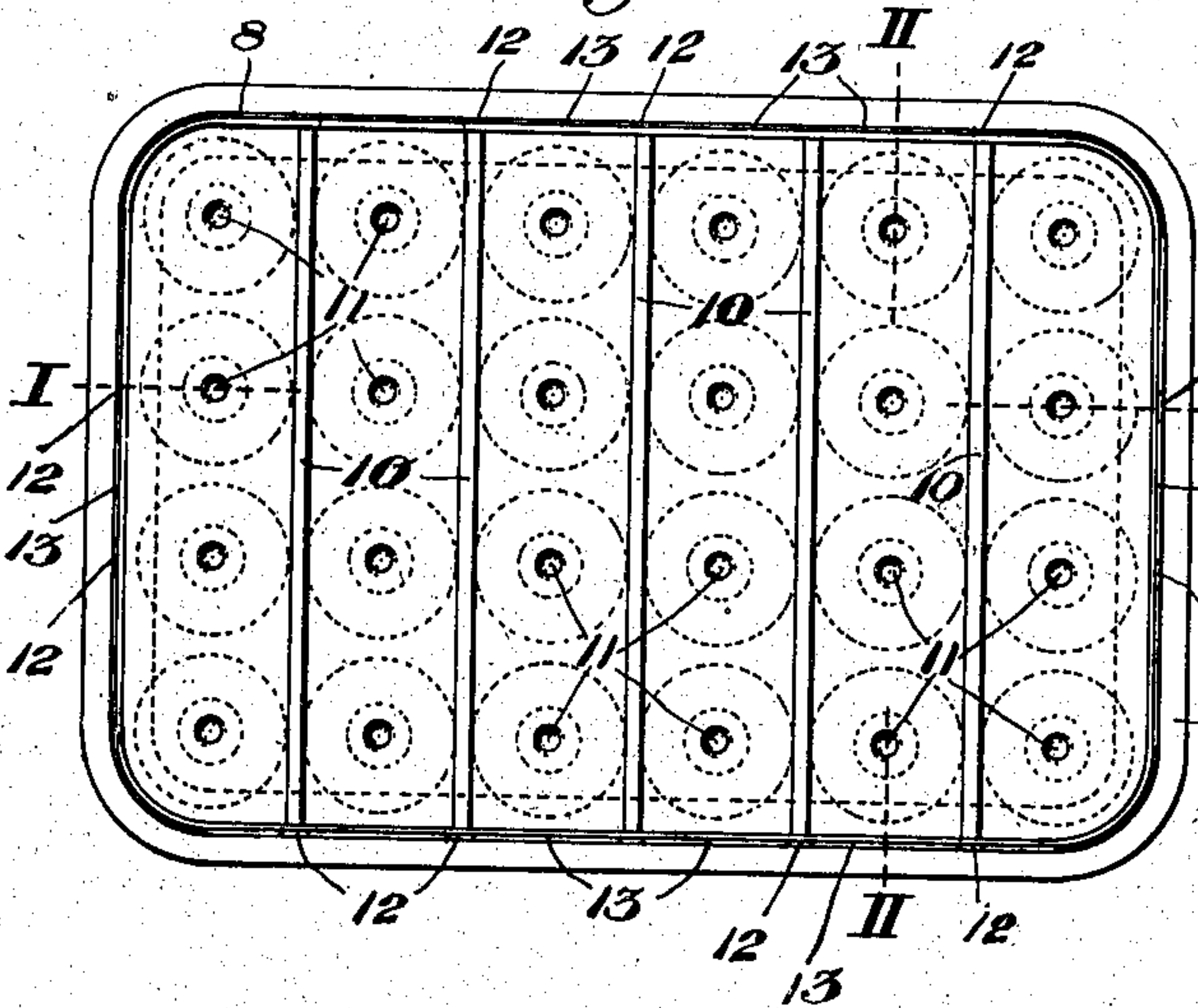


Fig. 4.

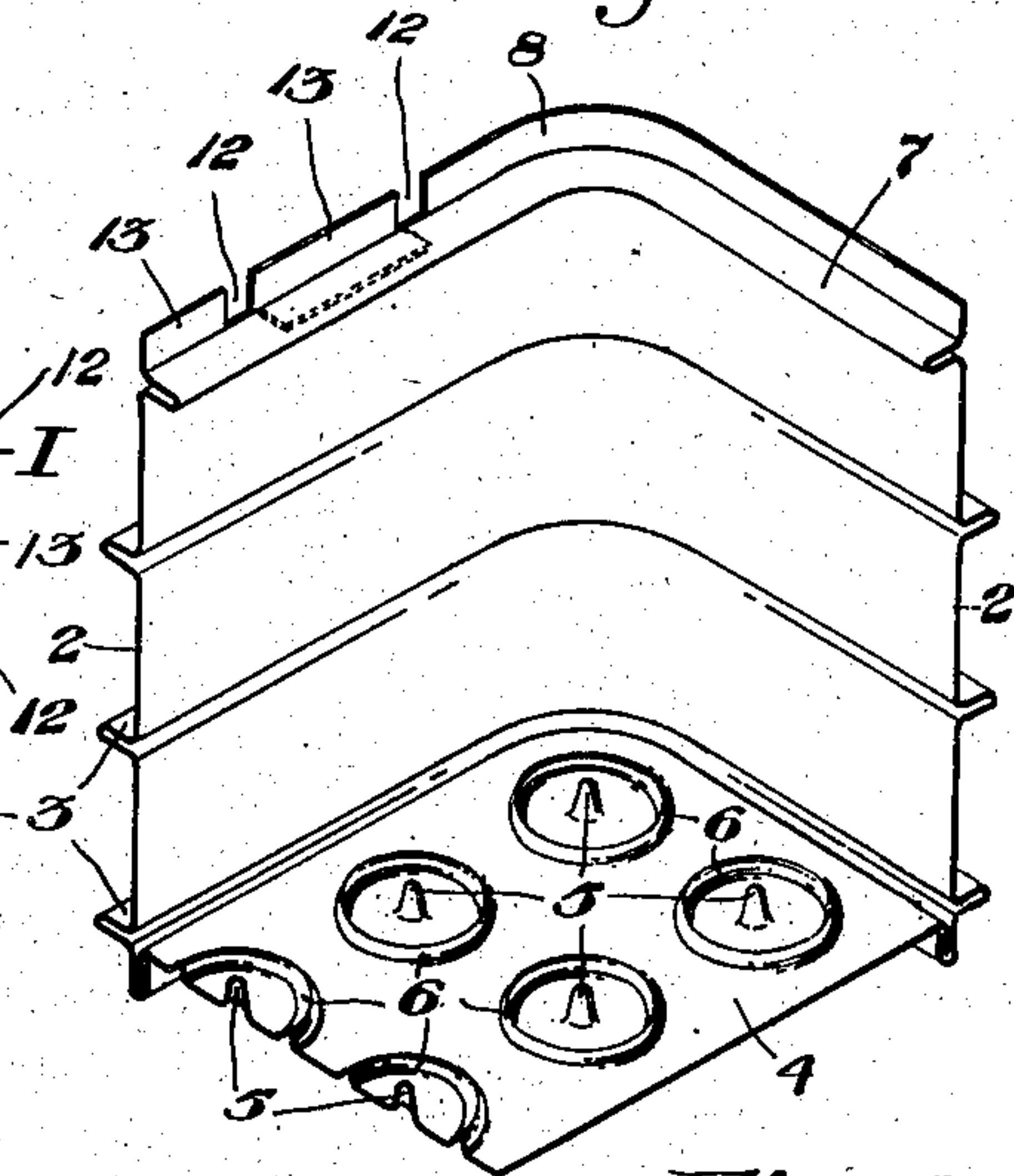


Fig. 5.

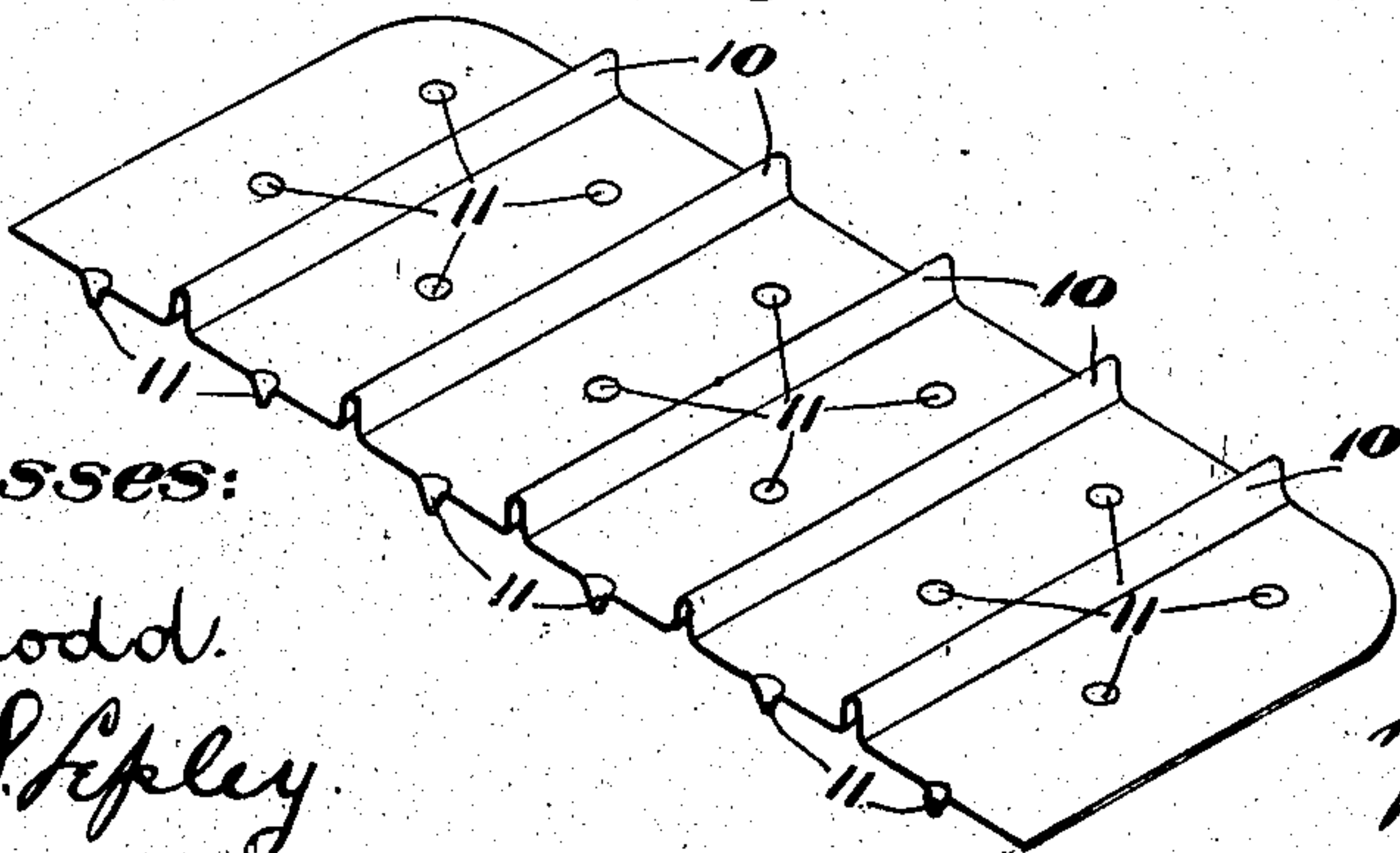
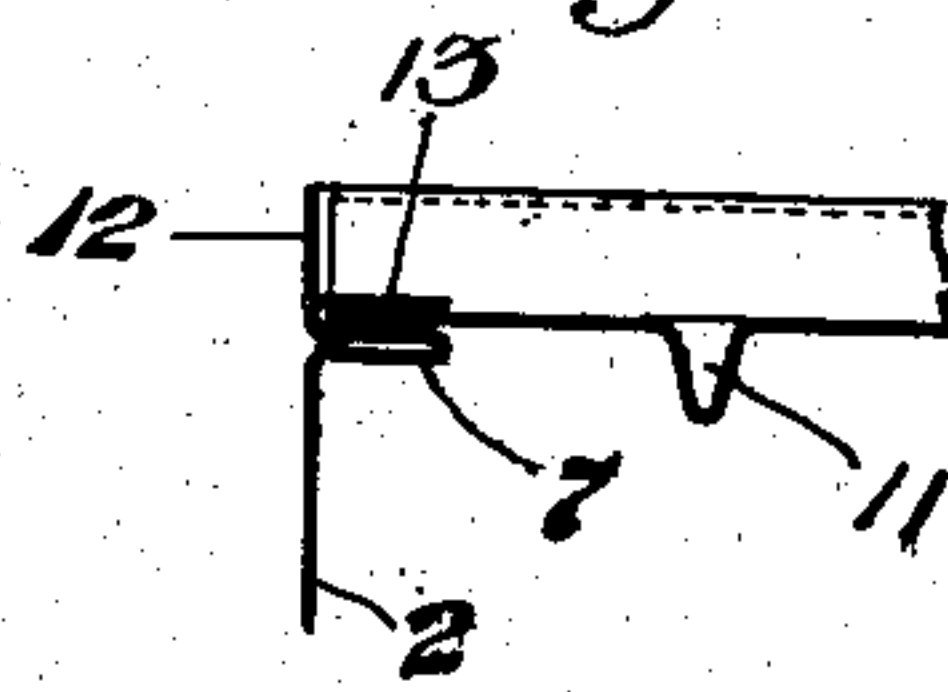


Fig. 6.



Witnesses:

C. R. Rodd.

Chas. S. Siple.

Inventor:

Arthur R. Speer

by C. M. Clarke
his attorney

UNITED STATES PATENT OFFICE.

ARTHUR R. SPEER, OF PITTSBURG, PENNSYLVANIA.

PACKING-CASE.

No. 827,124.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed March 28, 1905. Serial No. 252,445.

To all whom it may concern:

Be it known that I, ARTHUR R. SPEER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Packing-Cases, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of the specification, in which—

Figure 1 is a vertical longitudinal section through my improved bottle-case on the line I I of Fig. 3, Fig. 2 is a similar section at right angles to Fig. 1 on the line II II of Fig. 3, Fig. 3 is a top plan view of the case, all of said figures indicating bottles located in the interior and in engagement with the top and bottom portions. Fig. 4 is a perspective view of a portion of the case with the top removed. Fig. 5 is a similar view of a portion of the top. Fig. 6 is a sectional detail view showing the manner of securing the top in place.

My invention refers to improvements in packing boxes or cases for bottles; and it has for its object to provide a case in which the bottles may be compactly packed for shipment or storage, whereby each bottle is securely held within the case independent of the others. The entire case is preferably made of thin sheet metal consisting of a bottom, sides, and ends connected together and constructed in any suitable or preferred manner so as to provide strength, the corners being preferably rounded, as clearly shown in Fig. 3.

The particular object of the invention is to provide a case in which the tops and bottoms of the bottles may be engaged by inwardly-projecting lugs or abutments entering corresponding recesses in the bottles and also to provide a construction having the necessary cheapness, strength, and lightness with an easily attachable and detachable cover or top.

Referring now to the drawings, 2 represents the sides and ends of the case, which may be made of one continuous sheet of metal bent into rectangular form and provided, if desired, with reinforcing surrounding ribs 3.

4 is the bottom incorporated with the sides and ends in any suitable manner, as by the construction shown in Figs. 1 and 2, the bottom having a series of upwardly-projecting lugs or projections 5, formed by pressing the metal in a suitable die, while an annular ridge

6 of less height is also preferably forced slightly above the main level of the bottom, so as to provide a good bearing for the base of the bottle while still holding it away from the lower level. The case is provided around the inner top portion with a lid-supporting flange 7 and an upwardly-extending terminal edge 8, within which the lid 9 is placed, resting on the flanges 7. The lid, also of sheet metal, is preferably provided with a series of laterally-arranged bracing-ribs 10, formed by doubling the metal upon itself, thus providing stiffness, while its under portion is also provided with a series of downwardly-extending projections 11, corresponding in location to the bottom lugs 5 and adapted to enter within the upper neck of the bottle when the lid is in place, as clearly shown. The surrounding flange 8 is cut out at intervals, as indicated at 12, at positions along the sides corresponding with the ends of the ribs 10, while the end flanges are preferably being cut in a similar manner at two or more places. By this construction the segregated sections 13 of the upper rim may be bent over the top between the ribs 10, as indicated in dotted lines in Fig. 4, at various positions, thereby tightly clamping the lid down into place and securely holding it against removal.

When filled with bottles and the lid is located in position as just described, the bottles will be securely held against movement in any direction and independent of contact with each other.

The case may be stored, shipped, or handled without danger of breakage, while the lid may be readily removed by merely bending up the sections 13 and, if desired, may be used several times.

The advantages of my invention will be appreciated by all users of bottle packing or shipping cases, and it insures safe economical handling while utilizing the greatest proportion of the interior space, while being easily cleaned and kept in order.

Changes or variations may be made by the skilled mechanic in the various details or construction or other features of the invention; but all such changes are to be considered as within the scope of the following claims.

What I claim is—

1. A sheet-metal bottle-case having a series of inwardly-pressed pier-like centering projections extending at substantially right angles to the general plane of the sheet-metal

bottom portion, and provided with a top having corresponding holding portions, substantially as set forth.

2. A sheet-metal bottle-case having a series of inwardly-pressed pier-like centering projections extending at substantially right angles to the general plane of the sheet-metal bottom portion, with surrounding inwardly-pressed bearing-ridges, and provided with a top having corresponding holding portions, substantially as set forth.

3. A sheet-metal bottle-case having a series of inwardly-pressed centering projections upon its bottom portion and provided with a removable top having a corresponding series of centering devices, substantially as set forth.

4. A sheet-metal bottle-case having a series of inwardly-pressed projections and surrounding bearing-ridges in its bottom, and provided with a top having a corresponding series of centering projections, substantially as set forth.

5. A packing-case composed of sheet metal provided with an inwardly-extending flat top flange at its upper portion and an upwardly-projecting rim divided at intervals by cuts extending down to said flange, with a top adapted to fit upon the flange and to be secured thereon by bending down sections of said rim, substantially as set forth.

6. A packing-case composed of sheet metal provided with inwardly-extending flanges formed by doubling the metal to form flat horizontal ledges at right angles to the sides and end walls, with integral terminal top edges constituting upwardly-extending rims of the case, said top edges being divided at intervals by vertical cuts extending downwardly to said flange, with a lid formed of sheet metal closely doubled upon itself to provide a series of transverse vertical strengthening-ribs, said lid being adapted to rest upon said flanges and to be secured there-

on by bending down the separated portions of the divided rims upon the upper flat edges thereof between said ribs, substantially as set forth.

7. In a packing-case the combination of a sheet-metal box provided with a series of upwardly-extending centering projections on the bottom and having an inwardly-extending lid-supporting flange with an upwardly-projecting sectional rim; of a lid provided with corresponding downwardly-extending centering projections and a series of lateral bracing-ribs, adapted to be supported upon the lid-supporting flange and to be secured thereon by bending down the sectional rims, substantially as set forth.

8. In a packing-case, the combination of a sheet-metal box provided with a series of upwardly-extending circular bottle-supporting projections on the bottom, an inwardly-extending lid-supporting flange, and a lid provided with corresponding downwardly-extending centering neck projections, said projections being pressed inwardly beyond the normal plane of the sheet metal, substantially as set forth.

9. In a packing-case, the combination of a sheet-metal box provided with a series of upwardly-extending circular bottle-supporting projections on the bottom, an inwardly-extending lid-supporting flange having an upwardly-projecting sectional rib, and a lid provided with corresponding downwardly-extending centering neck projections, said projections being pressed inwardly beyond the normal plane of the sheet metal, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR R. SPEER

Witnesses:

CHAS. S. LEPLEY,
C. M. CLARKE.