

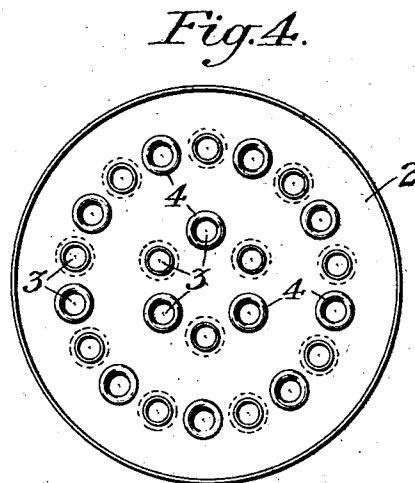
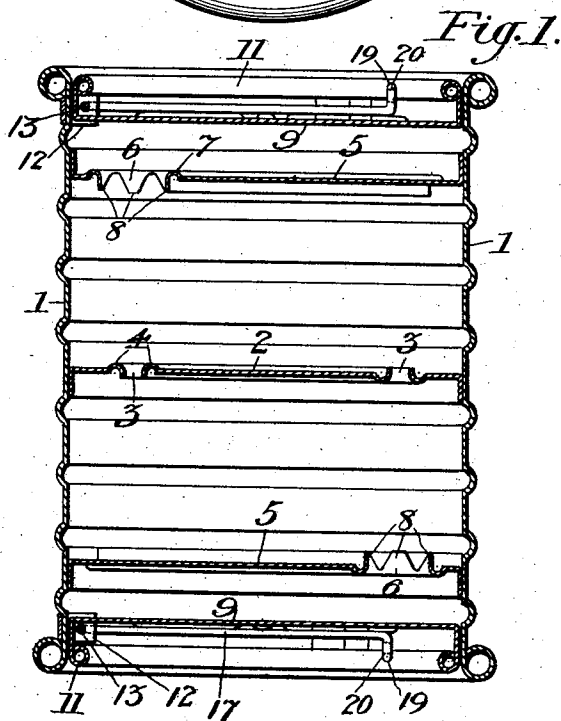
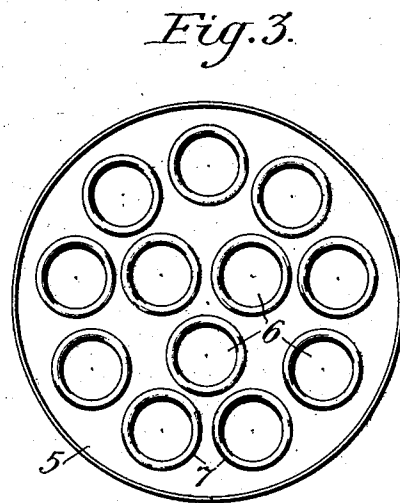
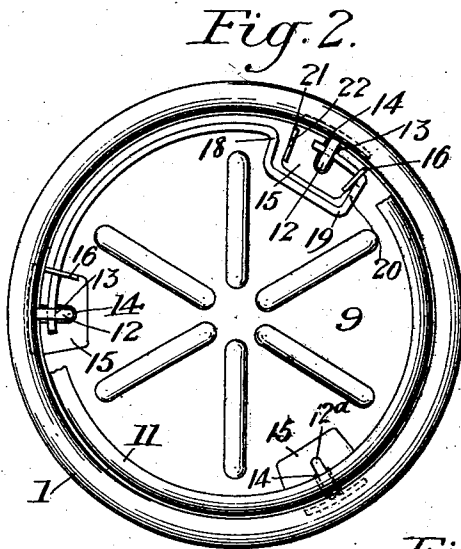
No. 771,372.

PATENTED OCT. 4, 1904.

A. T. KRUSE.
PACKING CASE.

APPLICATION FILED OCT. 13, 1902.

NO MODEL.



Witnesses:
W. W. Gehart.
Horiam Plante

Inventor:
Alfred T. Kruse
By: Obed B. Billman
His Atty.

UNITED STATES PATENT OFFICE.

ALFRED T. KRUSE, OF LODI, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE AMERICAN STEEL PACKAGE COMPANY, OF DEFIANCE, OHIO,
A CORPORATION OF OHIO.

PACKING-CASE.

SPECIFICATION forming part of Letters Patent No. 771,372, dated October 4, 1904.

Application filed October 13, 1902. Serial No. 127,044. (No model.)

To all whom it may concern:

Be it known that I, ALFRED T. KRUSE, a citizen of the United States, residing at Lodi, in the county of Medina and State of Ohio, have invented certain new and useful Improvements in Packing-Cases, of which the following is a specification.

My invention relates to improvements in packing-cases for packing bottles and similar vessels for storage or transportation.

It is the object of my invention to provide a generally improved device of this class which will be exceedingly simple in construction, easy and cheap of manufacture, and which will afford thorough protection against the breakage of bottles or similar vessels from jars or concussive blows given to the case in which they are packed.

A further object of the invention is to produce a generally improved sheet-metal case or package admirably adapted for the shipping of bottled liquors, and especially bottled beer, which may be handled with greater facility than the boxes in which such bottles are shipped at present and in which the bottles are so packed as to be perfectly safe and not exposed to the danger of getting injured or broken, the bottles being so supported in the case that there is a very small weight on any part of the same. The case may be securely locked and sealed, and the bottles therein are so arranged that every bottle is separated from the remaining bottles and may be taken out without disturbing the rest. The improved packing-case is also adapted to contain more bottles in less space than is occupied by the ordinary boxes in transportation and storage.

With these ends in view my invention consists in the novel construction, arrangement, and combination of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

Referring now to the drawings forming a part of this specification, Figure 1 is a sectional view of the improved packing-case

complete, adapted to contain in the present instance two dozen bottles. Fig. 2 is a top plan view of the same. Fig. 3 is a top plan view of one of the end supporting-disks provided with a series of perforations or openings adapted to receive and support the bodies of the bottles. Fig. 4 is a top plan view of the middle or central supporting-disk provided with a series of perforations or openings adapted to receive and support the necks of the bottles.

Similar numerals of reference indicate like parts throughout all the figures of the drawings.

In the drawings, 1 designates the main body portion of the case, of cylindrical form, made of sheet metal and creased in any suitable and convenient manner for the purpose of strengthening the same. Mounted within the cylindrical-shaped main body portion intermediate the end portions thereof and attached to the walls thereof in any suitable and convenient manner is a central supporting-disk 2, provided with a series of perforations or openings 3, provided with annular beadings 4, arranged around their peripheries and adapted to receive and support the necks of the bottles. This central supporting-disk 2 is mounted and arranged in such a manner with reference to the perforations or openings in the end supporting-disks, to be hereinafter described, as to be adapted to receive alternately in its openings 3 the neck of a bottle on each side of the same.

5 designates the end supporting-disks, secured to the walls of the cylindrical portion 1 in any suitable and approved manner and provided with a series of perforations or openings 6, provided with annular beadings 7, arranged around their peripheries and adapted to receive and support the main body portion of the bottles.

8 designates a series of substantially V-shaped tongues integral with the annular beadings 7 and arranged around the peripheries of the openings 6, formed by the displacement of the tongues 8.

The packing-case shown in the present instance is adapted to receive two dozen bottles, one dozen bottles being arranged on each side of the central supporting-disk. It will be understood, however, that cases of varying capacities may be constructed on the same principles of construction.

As shown in Fig. 3, there are twelve perforations or openings 6 in each end supporting-disk—nine in the outer circle and three on the inner circle.

The end supporting-disks 5 are not arranged or mounted in the cylindrical portion 1 so that their perforations or openings 6 will register or be in alinement with each other, but, on the contrary, are so mounted as to bring the two tiers of bottles in such a position as to cause the necks of the bottles from each tier to be received alternately in the openings 3 of the central supporting-disk 2, as clearly shown in Fig. 1 of the drawings.

9 designates the removable heads or lids of the case, provided with a peripheral flange 10, terminating in an annular beading 11. The heads or lids 9 are securely attached and locked to the main body portion of the case by means of devices hereinafter described.

Near the ends of the cylindrical-shaped body portion 1 of the case there are mounted and secured by riveting or other suitable means inwardly-projecting lugs 12, two of which are provided with openings 13, adapted to receive a locking-bolt hereinafter described.

14 designates recesses formed around the periphery of the head or lid 9 and adapted to register with and take over the inwardly-projecting lugs 12.

15 designates plates secured about the recesses 14, formed about the periphery of the head or lid 9, two of which are provided with an upwardly-extending flange or arm 16, provided with an opening adapted to receive and form a bearing for a locking-bolt 17, slidably mounted therein. The slidably-mounted locking-bolt 17, as clearly shown in Fig. 2 of the drawings, is bent to conform to the contour of the inner side of the peripheral flange 10 of the head or lid 9 of the case and is then bent to form a stop 18 to limit the movements of the same, terminating in an upwardly-extending handle 19, provided with an opening or eye 20.

21 designates an upwardly-extending flange or arm integral with the plate 15 adjacent to the handle 19 of the bolt 17 and is provided with an opening 22, designed to receive the wire of a seal passing through the same and through the opposite opening or eye 20 of the handle 19 of the bolt 17 when it is desired to fully protect the contents of the case from being tampered with *in transitu*. When it is desired to remove a head or lid 9, the seal may be broken and the locking-bolt 17 moved so as to withdraw its ends from the openings

13 of the lugs 12, when the head or cover may be lifted upwardly and finally withdrawn from the lug 12^a.

In order to prevent the losing of lids, a short chain (not shown in drawings) is secured to the under side of the lid near the lug 12^a and is then fastened to the inner side of the cylindrical-shaped main body portion 1 near the end supporting-disk 5.

When the case is in upright position, the bottles in the upper part thereof rest on the central supporting-disk, which then supports the same in connection with the end supporting-disk, the bottles in the lower half of the case resting on the bottom lid, so that thereby the weight of the bottles is distributed and not thrown entirely on one part of the case. When it is desired to take out the bottles, one of the lids is removed and the bottles of one section of the case are first taken out. The case is then turned upside down and the opposite lid removed and the bottles taken out from the other half of the case.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principles or sacrificing any of the advantages of this invention.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without having attempted to set forth all the forms in which it may be made or all the modes of its use, I declare that what I claim is—

1. In a packing-case for bottles, the combination with a cylindrical-shaped main body portion, and heads or lids secured to the ends thereof and means for securing and locking said heads and lids therein; of end supporting-disks mounted therein, and provided with a series of openings arranged in circular form near the peripheries and centers of the same and adapted to receive and support the bodies of the bottles, and a central supporting-disk mounted intermediate the said end supporting-disks and provided with a series of smaller openings concentric with the openings of said end supporting-disks and adapted to receive alternately the necks of the bottles mounted in said end supporting-disks.

2. In a packing-case, in combination, a cylindrical-shaped main body portion, heads or lids secured to the ends thereof, means for securing said heads or lids thereto, end supporting-disks mounted therein and provided with a series of openings arranged in circular form and adapted to receive and support the bodies of the bottles, and a central supporting-disk suitably mounted and having a series of registering openings, of smaller diameter, concentric with the openings of the end supporting-disks and adapted to receive alternately the necks of the bottles mounted in said end supporting-disks.

3. A packing-case for bottles, consisting of
a cylindrical-shaped main body portion pro-
vided near its end with inwardly-projecting
lugs two of which are provided with openings
5 adapted to receive a locking-bolt, a head or
lid mounted in the end of said main body
portion and provided with a series of recesses
arranged around its periphery and adapted to
register with and take over said inwardly-pro-
10 jecting lugs, and plates secured about said re-

cesses two of which are provided with an up-
wardly-extending flange or arm carrying a
locking-bolt slidably mounted therein.

In testimony whereof I have affixed my sig-
nature in presence of two witnesses.

ALFRED T. KRUSE.

Witnesses:

ALBERT FOYER,
HARRY F. PLANK.