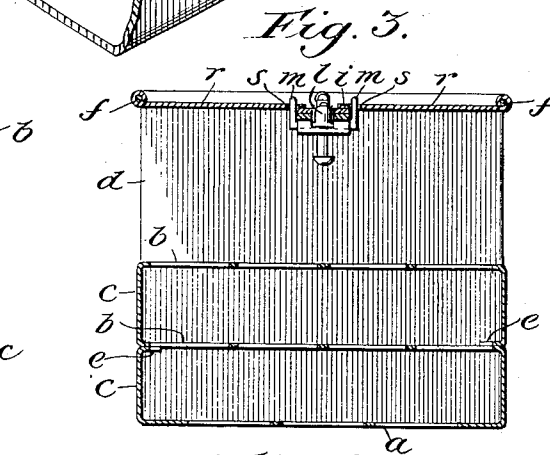
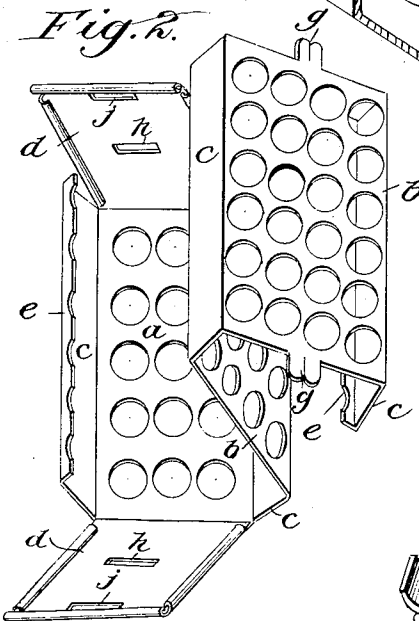
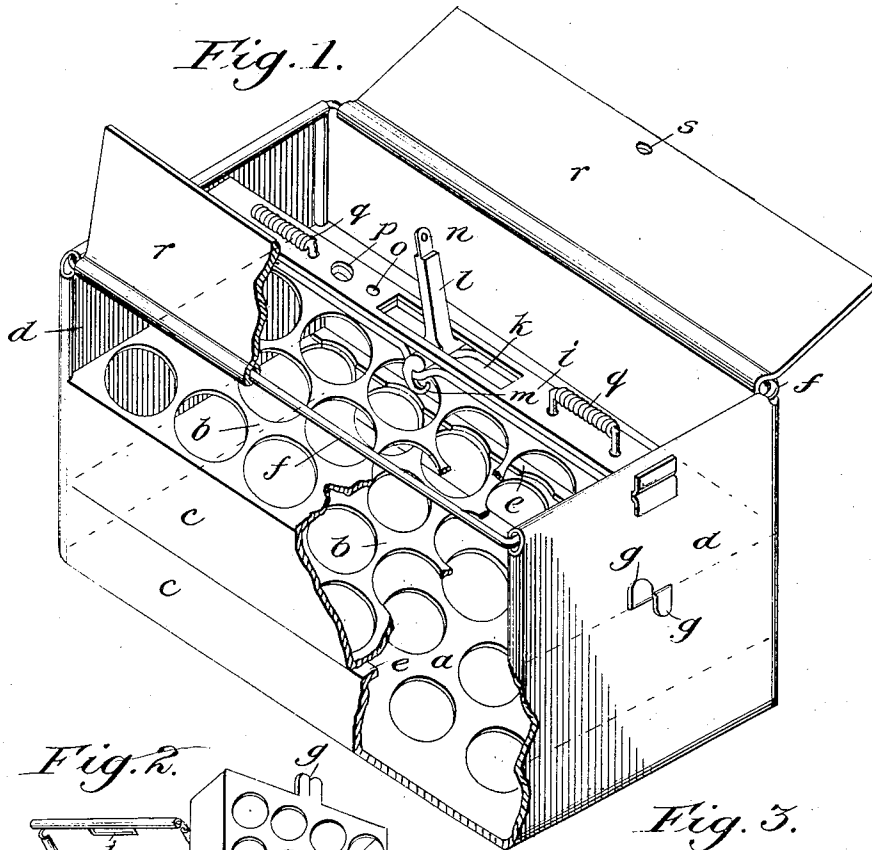


F. RUHNAU.
 PACKING CASE FOR BOTTLED GOODS AND THE LIKE.
 APPLICATION FILED FEB. 24, 1908.

1,054,035.

Patented Feb. 25, 1913.



Witnesses:
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UNITED STATES PATENT OFFICE.

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PACKING-CASE FOR BOTTLED GOODS AND THE LIKE.

1,054,035.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed February 24, 1908. Serial No. 417,606.

To all whom it may concern:

Be it known that I, FRANK RUHNAU, a subject of the German Empire, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Packing-Cases for Bottled Goods and the Like, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

This invention relates more particularly to improvements in metal boxes, crates or cases for packing, storing, delivering and shipping bottled beverages or goods contained in bottles, jars, cans or the like. Its main objects are to provide cases for this purpose which are light, strong and durable, which can be conveniently handled and which cannot be conveniently used for other goods or purposes than those for which they are designed; and generally to improve the construction of devices of this class.

It consists in the construction, arrangement and combination of parts as hereinafter particularly described and pointed out in the claims.

In the accompanying drawing like characters designate the same parts in the several figures.

Figure 1 is a perspective view of a packing case embodying the invention; Fig. 2 is a perspective view showing the method of forming the several parts of the case from a single piece of sheet metal; Fig. 3 is a cross section of the case; and Fig. 4 is a detail view in perspective of the cross strip or bar for centrally connecting the ends of the case, and forming a cover seat or jamb and handle.

The body of the case comprises a perforated bottom *a*, perforated shelves or spacing racks *b*, connecting side strips or sections *c*, and end sections *d*, all formed in one piece of sheet metal, as shown in Fig. 2. The sides of the blank from which the case is made are bent to form flanges *e*, along the upper edge of one of the lower side sections *c* and along the lower edge of the upper side section *c* on the opposite side of the case, and these flanges are soldered or otherwise attached to the lower shelf or spacing rack *b*, as shown in Figs. 1 and 3.

The end sections *d*, which are formed integrally with the bottom *a* of the case, are

preferably rolled, beaded or flanged along their side and top edges to stiffen and strengthen them, and in their top edges which extend above the upper shelf or rack *b*, is rolled a rod or wire *f*, which extends across the sides of the case, binding the ends together at the top and stiffening the structure as well as serving as means for hinging the lids or covers to the sides of the case, as hereinafter explained. The upper shelf or rack *b* is formed at the ends with ears *g*, which are inserted through slits *h* in the ends of the case and bent in opposite directions against the outer faces of the ends, as shown in Fig. 1.

A strip or bar *i*, which may be conveniently made of two metal bands or strips of heavy sheet metal placed face to face as shown in Figs. 1 and 4, is inserted through slots *j* in the ends *d* just below their wired upper edges, and the ends of the component sections of the strip or bar are bent in opposite directions against the outer faces of the ends of the case. This strip or bar *i* which serves as a jamb or rest for the lids or doors to close against and also may serve as a handle for lifting and carrying the case with one hand, is formed with a central elongated opening *k*, in which is pivoted a T-shaped latch *l*, formed at the ends of its cross piece with hooks or catches *m*, the lower band or section of the strip or bar *i* being bent downwardly to receive and form pivot bearings for the cross piece of the latch. The stem of the latch, which serves as a handle therefor and which fits in closing partially into the opening *k*, is reduced in thickness at its outer or free end and formed with a hole *n* to register with a hole *o* in the strip or bar *i* for sealing the latch in its locked position with the lids or covers closed. The strip or bar *i* is formed adjacent to the hole *o* with a larger hole *p*, to receive and protect the seal which connects the ends of the wire passing through the holes *n* and *o*, so that the seal will not be accidentally broken or detached by contact with other cases or articles.

The strip or bar *i* is provided with handles *q* having parallel stems passing loosely through holes in said strip or bar and formed below the same with heads to prevent their withdrawal therefrom. When the handles are released and not in use, their grips will drop and rest against the upper side of the strip or bar *i* below the top of

the case, so as not to interfere with stacking a number of cases one upon another.

On the rod or wire *f* at the sides of the case and between its ends *d*, are hinged
5 lids or covers *r* which may be made of sheet metal as shown, and rolled at their outer edges around said rod or wire so as to close at their inner edges against the strip or bar *i* and when opened, to hang loosely
10 down over the openings in the sides of the case above the upper shelf or rack *b*. Adjacent to their edges opposite their hinges, the lids or doors *r* are formed with holes *s*, which are arranged to automatically en-
15 gage with the hooks *m* of the latch *l* when the lids or covers are closed, the ends of the hooks being located on the opposite side of the latch pivots from the stem or handle *7*, the weight of which throws the
20 hooks into engagement with the holes *s* of the lids or doors when they are closed.

When the case is set up, as shown in Figs. 1 and 3, the openings in the shelves or racks
25 *b* are in vertical alinement to receive and hold bottles or the like, out of contact with one another while the holes in the bottom *a* are out of alinement with the holes in said shelves or racks, thus permitting any
30 litter or foreign matter which may get into the case, to freely escape while the bottles or the like rest upon the connecting parts of the bottom between the holes therein.

The sides of the case above the upper shelf or rack *b* being open, and the shelves
35 or racks being integral with other parts of the case so that they cannot be removed, it is impracticable to use the case, except for the class of articles for which it is intended, so that it less apt to be misappropriated or
40 diverted from its intended use.

While for shipment to distant places, the lids or covers will ordinarily be closed and sealed to prevent abstraction of or inter-
45 ference with the contents of the case, for local delivery they may be left open, hanging loosely at the sides of the case out of the way; or when the case is made for local delivery or use, the lids or covers may be altogether omitted.

50 Various changes in details of construction may be made without departing from the principle and intended scope of the invention.

I claim:

55 1. A packing case for bottled goods and the like, comprising a bottom, a perforated shelf or spacing rack above and parallel with the bottom, and connecting side sections, all made in one piece of sheet metal,
60 one of the side sections being formed with a longitudinal flange which is fastened to the adjacent side of said shelf or rack.

2. A packing case for bottled goods and the like, comprising a bottom, perforated
65 shelves or spacing racks arranged one above

another parallel with the bottom, and connecting side sections, all made in one piece of sheet metal, one of the side sections on each side of the case being formed with a longitudinal flange which is fastened to the
70 adjacent side of the lower shelf or rack.

3. A packing case for bottled goods and the like, comprising a bottom, end sections formed with transverse slits, perforated shelves or spacing racks arranged one above
75 another parallel with the bottom, and connecting side sections, all formed of sheet metal in one piece, one of the side sections on each side of the case being formed with a longitudinal flange which is permanently
80 secured to the adjacent side of the lower shelf or rack, and one of the shelves or racks being formed at the ends with ears which are inserted in said slits and bent back against the ends of the case.

4. A packing case for bottled goods and the like, comprising a bottom, perforated shelves or spacing racks arranged one above
85 another parallel with the bottom, and connecting side sections, all made in one piece of sheet metal, the lower shelf or rack being integral on one side with the lower side section on that side of the case and perma-
90 nently attached on the opposite side to the other lower side section, and the upper shelf or rack being integral with the two upper
95 side sections, one of which is permanently attached to that side of the lower shelf or rack which is integral with one of the lower side sections.

5. A packing case for bottled goods and the like, comprising a bottom, a perforated shelf or spacing rack above and parallel
100 with the bottom, and end and side sections, all formed of sheet metal in one piece, the end sections being integrally joined with the ends of the bottom and extending above the shelf or rack and one of the side sections being formed with a longitudinal
105 flange which is secured to said shelf or rack, and a rod or wire reinforcing and connecting the upper edges of the end sections.

6. A packing case for bottled goods and the like, comprising a perforated bottom, a
115 perforated shelf or spacing rack above and parallel with the bottom and having holes for bottles and the like out of alinement with the holes in the bottom, end and side sections all formed of sheet metal in one
120 piece, the end sections being integrally joined with the ends of the bottom and extending above said shelf or rack and the sides of the case being open above said shelf or rack and a reinforcing rod or wire span-
125 ning the sides of the case and connecting the upper edges of the end sections.

7. A packing case for bottled goods and the like, comprising a bottom, a perforated
130 shelf or spacing rack above and parallel

with the bottom, end and side sections, all
formed of sheet metal in one piece, the end
sections extending above said shelf or rack
and being reinforced and connected at their
5 upper edges by a rod or wire spanning the
sides of the case, and lids or covers hinged
on said rod or wire so as to close the top
of the case when swung inwardly, and to
hang out of the way at the sides of the case
10 when swung outwardly.

8. A packing case for bottled goods and
the like, comprising a bottom, a perforated
shelf or spacing rack above and parallel
with the bottom, and connecting side sec-
15 tions, all formed in one piece of sheet
metal, end pieces extending above the shelf

or rack, a strip or bar extending across the
upper part of the case from end to end and
provided with a latch, and lids or covers
hinged to the upper part of the case at the
sides thereof and adapted to close against
said strip or bar and to be fastened thereto
by said latch.

In testimony whereof, I have signed my
name to this specification, in the presence 25
of two subscribing witnesses, this 16th day
of October 1907.

FRANK RUHNAU.

Witnesses:

PETER PFISTER,
MAX ROTHER.