

No. 745,674.

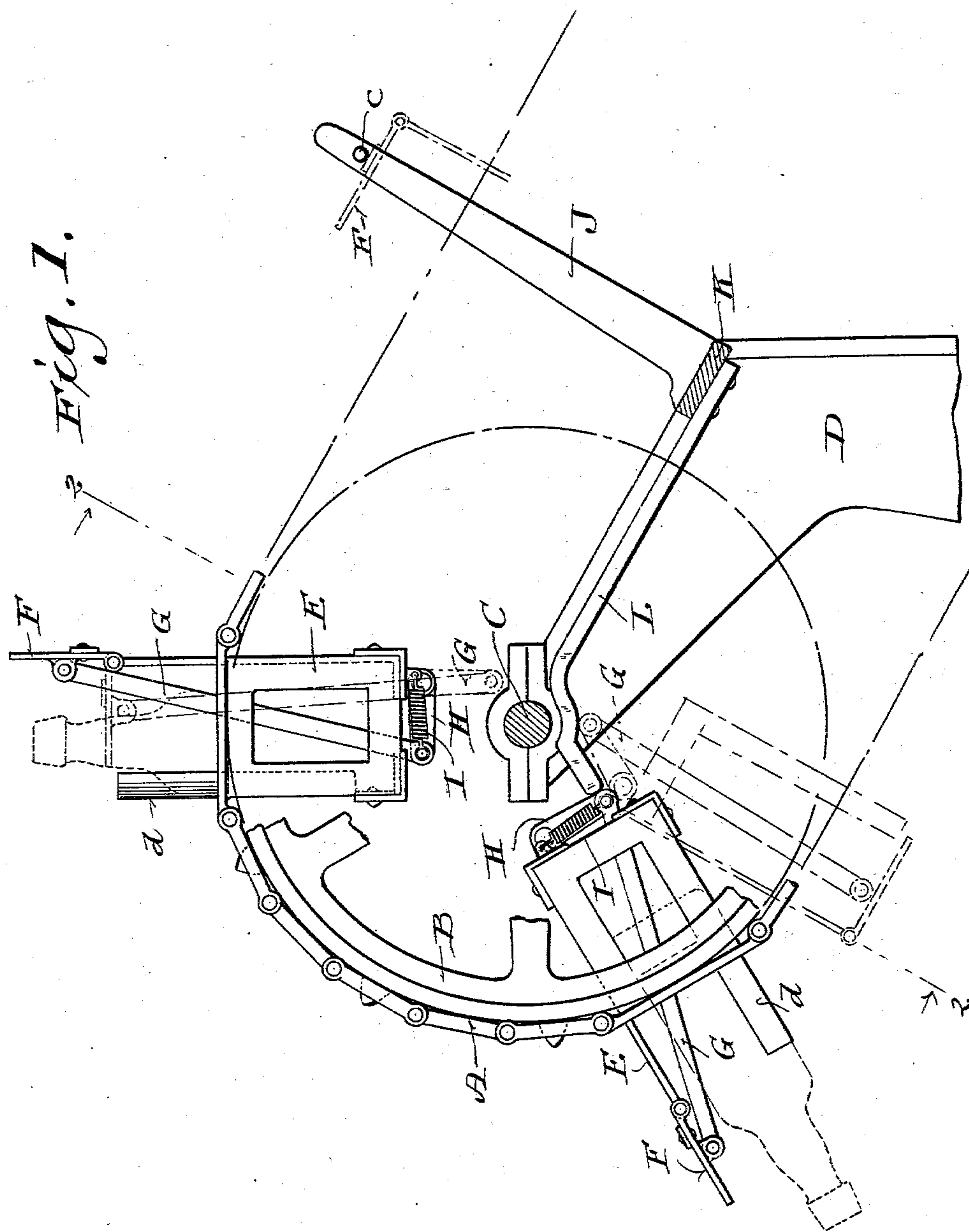
PATENTED DEC. 1, 1903.

A. L. ROSMANN & F. BARTHOLD.
BOTTLE CARRIER.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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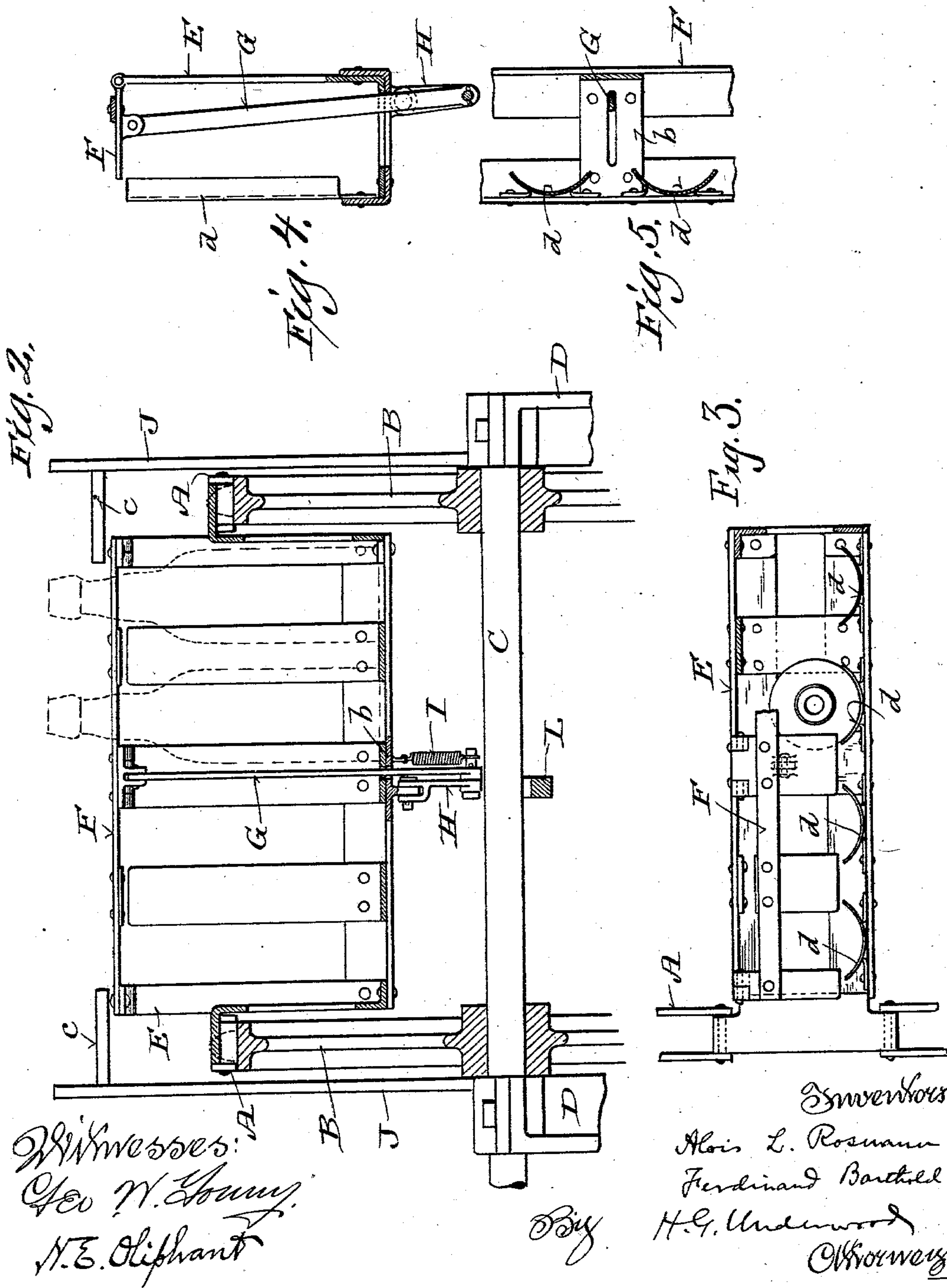
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UNITED STATES PATENT OFFICE.

ALOIS L. ROSMANN AND FERDINAND BARTHOLD, OF MILWAUKEE,
WISCONSIN.

BOTTLE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 745,674, dated December 1, 1903.

Application filed March 23, 1903. Serial No. 149,059. (No model.)

To all whom it may concern:

Be it known that we, ALOIS L. ROSMANN and FERDINAND BARTHOLD, citizens of the United States, and residents of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Bottle-Carriers; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention has for its object to provide simple, economical, and automatic discharge bottle-carriers applicable in association with tanks, said invention consisting in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a partly-sectional side view of a fragment of a bottle-carrier in accordance with our invention; Fig. 2, a transverse sectional view of the same on the plane indicated by line 2 2 in the first figure; Fig. 3, a detail plan view that for the most part illustrates a crate portion of the carrier, partly broken and in horizontal section; Fig. 4, a vertical transverse section view of a bottle-crate, and Fig. 5 a horizontal section view of the same.

Referring by letter to the drawings, A indicates each of a pair of parallel link belts on suitably-arranged sprocket-wheels, the upper pair B of said wheels being herein shown fast on a horizontal drive-shaft C, for which the inclined upper ends of standards D are provided with bearings. Hung between the belts, in connection with links of same, at suitable intervals, are bottle-crates E, each provided with an outer gate F in hinge connection therewith.

In pivotal connection with the inner side of each gate F, central of the same, is a link bar G, that extends through a longitudinal slot in a transverse central bottom piece *b* of the corresponding crate, and a crank H, shackled to the crate, engages the inner end of the link bar. A spiral spring I is connected at its ends to each crank H and the adjacent crate and serves to hold the gate of said crate in either open or closed position.

Made fast on the inclined upper ends of the standards D is a yoke, the outwardly-extend-

ing branches J of which are provided with inner lateral pins *c*, arranged to be in the path of open gates of the bottle-crates, and made fast to the cross-piece K of the yoke is a tripper-arm L, arranged to have its free end in the path of the cranks H when these cranks are extended in a direction lengthwise of said crates. The gates are automatically closed as a result of their contact with the pins *c* of the yoke branches J, and likewise opened as a result of contact of the cranks H with the tripper-arm L, extending from the cross-piece K of the yoke.

In practice, bottles are placed in each crate when the same is uppermost and vertical, as shown in Fig. 1, the crate-gate being then open, said bottles being opposed by curved shield portions *d* of the crate. As the loaded crate descends with the upper inclined stretches of the link belts, to which it is connected, its gate is automatically closed. Hence the bottles are held for a predetermined time in said crate. The crate and bottles therewith having passed through a tank are carried upward by the lower inclined stretches of the link belts, and the crank H, that is linked to the gate of said crate, comes into contact with the tripper-arm L, whereby said gate is automatically opened, as shown in Fig. 1, to permit an automatic discharge of said bottles.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A bottle-carrier, comprising a pair of parallel link belts and means for driving same, crates hung at intervals between the belts in connection with links of the same, a gate in hinge connection with each crate, strikers in the part of open gates, and means whereby the gates are automatically opened at predetermined times in the travel of the crates to which they belong.

2. A bottle-carrier comprising a pair of parallel link belts and means for driving same, crates hung at intervals between the belts in connection with links of the same, a gate in hinge connection with each crate, a crank carried by each crate in link-bar connection with the gate of same, a spring arranged in connection with the crate and

crank to hold the gate in open or closed position, and means whereby the gate is automatically closed and opened at predetermined times in the travel of said crate.

- 5 3. A bottle-carrier comprising a pair of parallel link belts and means for driving same, crates hung at intervals between the belts in connection with links of the same, a gate in hinge connection with each crate, a
10 crank carried by each crate in link-bar connection with the gate of same, a spring arranged in connection with the crate and crank to hold the gate in open or closed position,

strikers arranged in the path of open gates, and a crank-tripper arranged to cause predetermined automatic opening of closed gates. 15

In testimony that we claim the foregoing we have hereunto set our hands, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses. 20

ALOIS L. ROSMANN.
FERDINAND BARTHOLD.

Witnesses:

N. E. OLIPHANT,
GEO. W. YOUNG.