

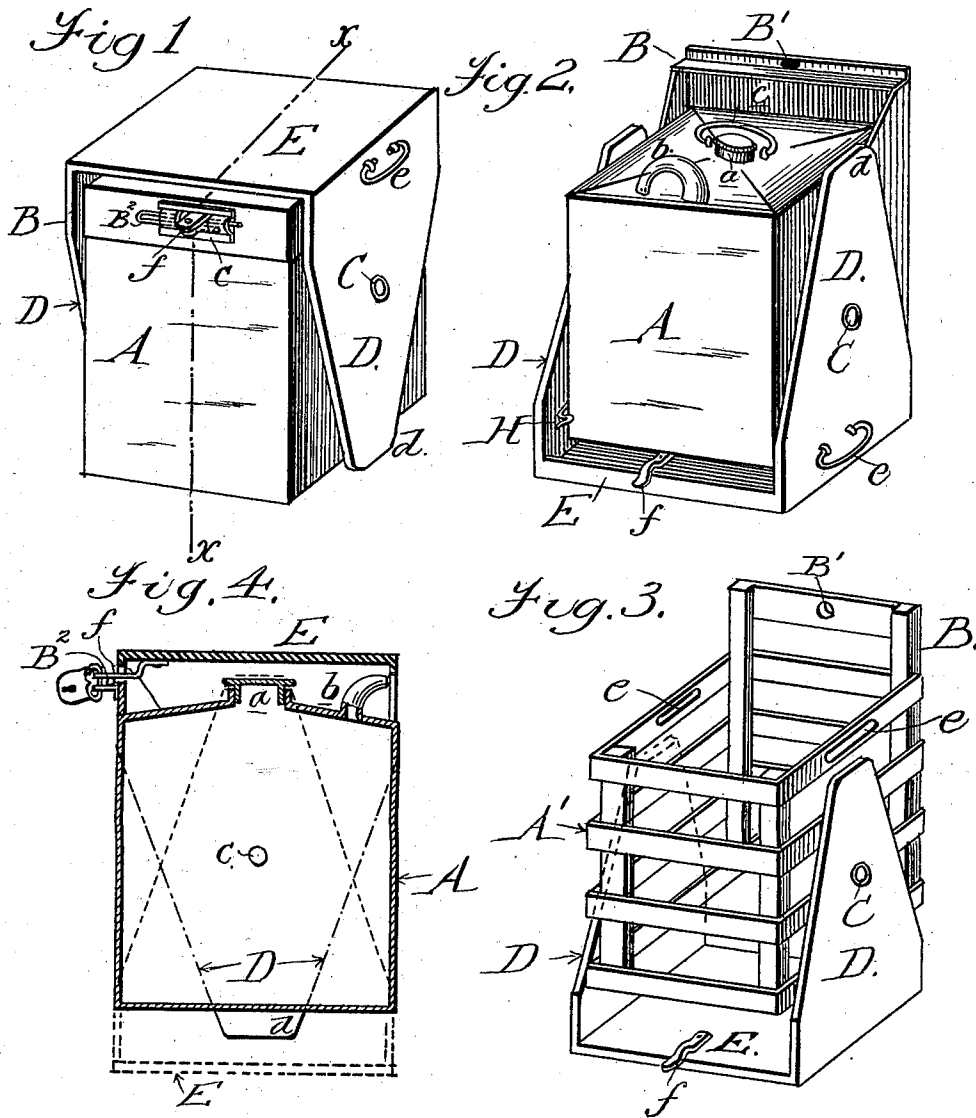
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E. M. KNIGHT.
SHIPPING CASE AND HOLDER.

(Application filed June 6, 1900.)

(No Model.)



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SHIPPING-CASE AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 668,376, dated February 19, 1901.

Application filed June 6, 1900. Serial No. 19,305. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. KNIGHT, a citizen of the United States, residing at New York, in the borough of Manhattan and State of New York, have invented new and useful Improvements in Shipping-Cases and Holders, of which the following is a specification.

Figure 1 is a perspective view of a holder and containing-case embodying my invention. Fig. 2 is a similar view showing the holder reversed. Fig. 3 is a modification to be hereinafter referred to. Fig. 4 is a vertical sectional view on the line xx of Fig. 1.

This invention relates to a device adapted primarily to provide a simple, convenient, and effective method for the transportation of liquids contained in vessels, either of a fragile nature or otherwise, and, further, to provide means for the easy withdrawal of the liquid contents of said vessels.

The invention consists, essentially, of a holder for the containing-case, which holder when the vessel is not in use or when the device is in transportation forms a protecting-guard for the vessel, said holder being so constructed that when it is wished to withdraw the contents of the case it (the holder) forms an axis about which the containing-case swings to enable the contents to be withdrawn with great facility.

The invention also consists of the combination of a containing-case and a holder in which it is pivotally mounted, said holder being adapted to swing in an arc of about one hundred and eighty degrees, so that in its normal closed condition it incloses and guards the sides and top of the containing-case and forms a stable support for said case, and when inverted or turned from its closed position to a position substantially the reverse thereof the top of the holder becomes a broad and secure supporting-base for the entire structure.

The invention also consists of the parts and the constructions, arrangements, and combinations of parts which I shall hereinafter fully describe and claim.

In the drawings I have shown two forms of devices, one of which is a slight modification of the other; but both include the same relative arrangements and combinations, and therefore to all practical intents and purposes

the two devices are alike and perform like results.

In Fig. 2 the containing-case A is shown in the form of a closed vessel—say an oil-can—having an inlet a , pouring spout or nozzle b , and a handle c , while in Fig. 3 the corresponding containing-case A' is in the form of open lattice-work or slatted structure and is adapted to receive a demijohn or like vessel, and in both instances the rear of the case is extended vertically at the rear side, as shown at B, and provided with an opening B', leading to a member B² of a locking device of some appropriate character and which is here shown as consisting of a piece of wire located within a keeper C on the back extension B, said wire being bent at substantially its middle portion, and having the members arranged substantially parallel with each other, with one member fixed in position and the other or free member lying in the plane of the opening b , so as to be automatically engaged by a companion member of the locking devices, as I will presently indicate.

Secured to or formed with the sides of the case and substantially in the plane of the vertical center thereof are trunnions C, which form the axis about which the case swings in discharging the contents thereof and about which the exterior holder swings from its closed to its open position, and vice versa. This holder is herein shown as consisting of two parallel sides D and a transverse end E, which forms the upper end or top of the holder when the parts are in the position shown in Figs. 1 and 4 and also forms the lower end or broad supporting-base when the holder is turned from the position shown in Fig. 1 to the reverse position shown in Fig. 2.

The holder is mounted and swings about the aforesaid trunnions or pivotal connection, and preferably the side members of the holder are tapered downwardly, so that in the closing movement of the holder from the open position in Fig. 2 to the closed position in Fig. 1 the front lower angles d of the sides engage the ground, floor, or other surface and act as fulcrums for elevating the interior case, so that its bottom is normally held out of contact with said surface, the weight of the structure being supported upon said sides, which

sides practically become the legs of the supporting structure.

The holder may have appropriate handles or grips *e*, by which it can be conveniently operated, and on the inner side of the top is secured a lug *f* or other well-known feature, forming the remaining member of the fastening device and which is adapted to pass through the opening *B'*, so as to be engaged by the other member of the fastening.

In the device shown in Fig. 3, which is designed to hold a demijohn or a glass jar, the crate may freely rock. When the demijohn is full, the bottle and crate hang plumb; but as the contents of the demijohn are withdrawn the center of gravity is lowered and the crate may hang somewhat out of plumb. This does not matter in the case of the demijohn, because the exit for the liquid is at the top of the bottle and the contents will not spill even if the crate did not hang perfectly plumb. Now in contradistinction to this take the case of the oil-can shown in Figs. 1 and 2, where the nozzle is to one side of the can. If the can were allowed to rock freely, it will at once be apparent that it might have a tendency to spill the contents. Therefore to provide against this objection in the case of the can I have provided a stop *H*, secured on the inner walls of one of the sides of the holder, so that when the can is rocked forward to withdraw the contents and pushed back to check the flow the stop acts to hold the can up into a perpendicular position, bringing the contents of it into such position that the center of gravity is perpendicular to the sides of the holder, and thus the can remains perpendicular.

I will now point out some of the advantages of my invention. Up to the present time it has been customary to simply crate glass vessels containing liquids, leaving the glass exposed in places, so as to insure their being handled with care. They could not be packed one on top of the other without risk of breaking while in transportation and, moreover, it was a difficult matter to withdraw the contents without having recourse to special mechanical appliances. My invention overcomes these evils by providing simultaneously a rocking frame and also a protecting-guard when in transit. Again, it is customary to ship oil in metal cans, and the same difficulties will occur here as I before mentioned. The difficulty is in packing the cans one on top of the other without damage to them and also the difficulty of withdrawing the contents. Take, for instance, a five-gallon vessel of paraffin-oil, as used in a household. To enable the housewife to fill the ordinary lamp or reservoir it is necessary to lift the five-gallon can onto a table and to withdraw from it into a smaller vessel or oil-can a portion of the oil to enable her to fill the lamp or reservoir, it not being possible to fill the lamp from the five-gallon can with-

out risk of spilling the oil, thereby incurring waste and risk of fire. This is more particularly the case in explosive oils, such as gasoline-oil. By means of my invention this trouble of transferring the contents from the larger can to a smaller vessel to enable the lamp to be filled is obviated, as one drop can be withdrawn from the larger can direct as easily as the entire contents. The housewife has nothing to do but to take the lamp direct to the can and with the greatest facility refill the lamp.

In transit the can is thoroughly protected, all risks of damage to it or its contents being guarded against. It is also apparent that the contents of the vessel can be locked up so that they cannot be tampered with during transit. Moreover, the locking device can be so constructed that when it is in use in a household a padlock can be inserted and the housewife can lock up the contents. When this apparatus is used for liquors, wines, &c., it will at once be seen that this locking of the device is an important matter.

The operation of my invention is substantially as follows: The device being in the open position shown in Fig. 2, the can is lifted by the handle until the device clears the floor sufficiently to enable the holder to be drawn forward, swinging about its pivotal center, when the can may be lowered again to the floor, as the holder may now be brought over the top of the can and the fastening devices made to engage. In this closing action the front lower angles of the side fulcrum on the ground or floor, and this elevates the bottom of the can out of contact with the floor, as before described, thereby protecting the containing-case from injury in transit, while the top of the holder inclosing the top of the case protects the latter and enables any number of these devices, or any other articles, to be packed one on top of the other, thereby economizing in the space required for shipment.

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

1. The combination with a shipping-case, of a holder therefor and means pivotally uniting the two, whereby the holder may swing from a full-open to a full-closed position and the case may swing to discharge its contents when the holder is open, said holder supporting the case out of contact with the floor in both its open and closed positions.

2. The combination with a shipping-case, of a holder and means pivotally uniting the two, at points between opposite ends, said holder having its opposite sides serving as supports and adapted to fulcrum against the floor to elevate the case during the act of closing the holder.

3. In combination with a shipping-case, a holder therefor and including supporting sides with downwardly-diverging edges, said sides extending below the bottom of the case, and

a connecting top piece said holder pivotally secured to the case at points near the middle of the length of said sides whereby the holder is capable of reversal to bring the top thereof under the case to form a supporting-base which is out of contact with the can to enable the latter to swing to discharge its contents.

4. The combination of a containing-case and a holder therefor, means centrally pivoting the case to the holder to enable the latter to be moved from a closed position above the case to an open position below the same, said holder having a transverse member serving as a guard for the top of the case when the holder is closed, and also serving as a supporting-base when the holder is open, and means carried by the holder and adapted to fulcrum against the floor or ground to elevate the structure so that the bottom of the case

is out of contact with the floor or ground when the parts are closed.

5. The combination with a case and a holder therefor, one pivotally united to the other and the holder capable of swinging from a position above the case to a position below the same, said case having its rear side extended above the top, and means for uniting the case to the holder and including coacting fastening members one carried by the rear top extension of the case and the other carried by the holder.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EDWARD M. KNIGHT.

Witnesses:

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