No. 846,864. PATENTED MAR. 12, 1907.

C. J. REMSBURG.

LIVE FISH HOLDER.

APPLICATION FILED JAN. 5, 1907.

Fig. 1.

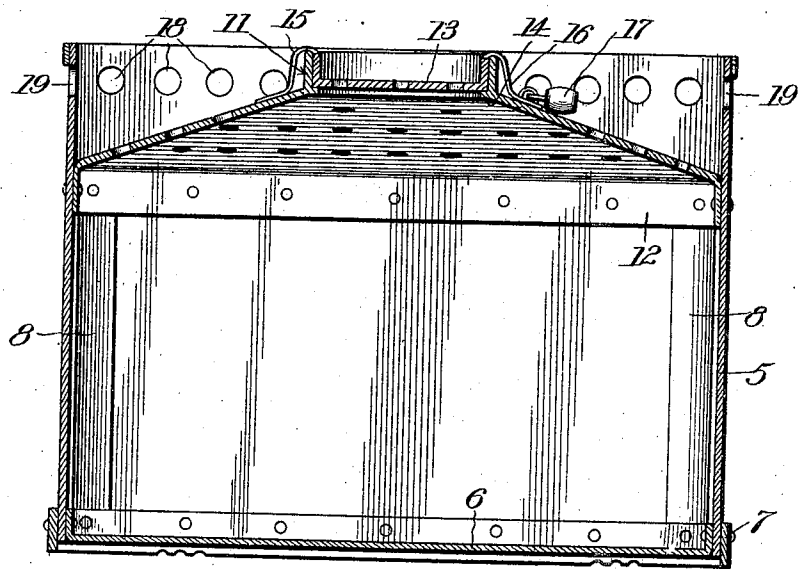
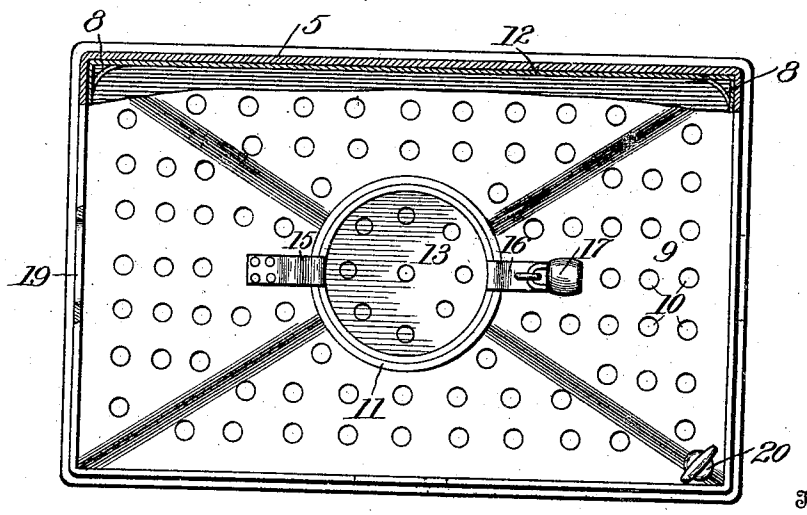


Fig. 2.



Inventor

C. J. Remsburg

Witnesses

C. W. Walker

H. Jones Dayle

By

W. W. Harrison

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES J. REMSBURG, OF LEWISTOWN, MARYLAND.

LIVE-FISH HOLDER.

No. 846,864. Specification of Letters Patent. Patented March 12, 1907.

Application filed January 5, 1907. Serial No. 351,024.

To all whom it may concern:

Be it known that I, CHARLES J. REMSBURG, a citizen of the United States, residing at Lewistown, in the county of Frederick and State of Maryland, have invented certain new and useful Improvements in Live-Fish Holders, of which the following is a specification.

This invention relates to holders for live fish, and refers particularly to structures in which small fish may be shipped on railway-cars or other vehicles and which must therefore contain a sufficient quantity of water and must also be provided with apertures for air to circulate over the surface of the water to insure delivery of the fish in good condition.

One of the difficulties or objections connected with holders of this character as heretofore constructed has been the splashing of the water outward through the apertures which are provided for the circulation of air. One of the objects of this invention is to provide the holders with means for preventing the water contained in them from being splashed entirely out of the vessel. Another objection to live-fish holders as heretofore usually constructed is that considerable space is wasted between the cans or holders when set side by side on a car-floor and that they have been liable to indent and injure each other during transportation and handling. To avoid these latter objections, I preferably construct my holder rectangular in cross-section, whereby a number of such holders can be placed with their flat sides in contact with each other, and so leave no space between them, and another series or layer placed on top of the first series or layer and still provide for ventilation of all of the cans.

Other objects are to provide improvements in the details of the structure with a view to providing a strong and durable holder which will enable live fish to be transported and delivered in excellent condition even when subjected to long journeys, all as will appear more fully hereinafter.

To these ends my invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

Of the accompanying drawings, Figure 1 represents a vertical section through a holder embodying my improved features of construction. Fig. 2 represents a plan view of the same, partly broken out to more clearly show some of the details.

Similar reference characters indicate the same or similar parts in both views.

The body of the holder, preferably of sheet metal, comprises sides 5, a bottom 6, and a reinforcing base strip or band 7. To prevent water in the holder from being dashed up too violently at the corners, I preferably employ vertical curved strips 8, suitably secured in the angles when the holder is made rectangular in form. If the holder is made round or vertically cylindrical, the curved strips 8 will of course not be employed. In a rectangular holder, however, said strips serve not only to prevent the water and fish swimming there from being dashed up too violently during transportation, but said strips also strengthen the can. In practice said strips are so secured in the angles, as by being soldered at their edges, that if a portion of the corner outside of a strip were to be knocked off or broken there would be no leakage from the holder.

A somewhat dome-shaped top 9, having perforations 10 and a central opening 11, has its flanges 12 secured within the sides 5 at such a distance below the upper edges of the latter that no portion of the top or of the cover 13 projects above said upper edges of the sides 5, thereby enabling one holder to be set squarely on another. The top, having the sloping portions and the vertical flanges 12, may be secured within the body by any suitable means, as by rivets or otherwise. Preferably the said top is formed with an inwardly-projecting shoulder 14 to support the cover 13. Preferably the cover 13 is perforated or formed with small openings to increase the facility for access of air to the space between the top and the surface of the water contained in the body. The openings in said cover also serve to permit water poured onto the cover to gain access to the interior of the holder. After the live fish and a certain quantity of water are in the holder it is frequently desirable to add more water, either to supply the fish with a proper quantity or to occasionally replace the amount of water which may have evaporated. By pouring such water onto the cover 13 after the latter has been put in place it will percolate through the openings in the cover. By this means liability of supplying the water with a too violent dash among the fish is avoided. The cover may

be secured on its seat by any suitable means—as, for instance, by a flexible strap 15, secured at its outer end to the upper surface of the top 9 and at its other end to the upper edge of the flange of the cover 13. Another strap or hasp 16 may be connected to the opposite side of the cover 13, the outer end of such hasp fitting over a staple secured to the top 9 and locked in place, as by a padlock 17. Any other means, however, may be employed for securing the cover 13 in place.

The portions of the sides 5 which extend above the top 9 are provided with openings 18 of suitable size to permit the free access of air to the space within the sides of the body and above the top 9, so that when one holder is placed above another, so that the upper holder might be said to completely cover the lower holder, ventilation for the space immediately above the surface of the water in the holder may take place through the openings 18 in the sides of the body and through the perforations 10 of the top 9. The central openings in two or all four of the sides are preferably elongated and made of sufficient size to serve as handles to enable the holder to be grasped and lifted. Such elongated or enlarged opening is indicated at 19, the left end portion of Fig. 2 being broken out to indicate the length of such elongated opening. Practically the said elongated opening in either two or four of the sides forms a hand-hole. By this structure I avoid the necessity of using either a bail or projecting handles, thereby enabling a plurality of holders to be packed closely side by side without interference by any projecting handles or bails and without liability of breaking or injuring such bails or handles.

I do not limit myself to a rectangular form of holder, as the advantages of the dome-shaped perforated top located within the sides of the upper portion of the holder will apply to round or cylindrical holders, as well as rectangular holders. A particular advantage of the rectangular holder is that if a large number of them are placed in a car in several series or tiers and the holders of each series placed closely together side by side there will still be sufficient ventilation, provided the car of course be not absolutely shut in at the sides or if a little space is left between the sides of the car and the outer sides of the outer holders of each series. This sufficient ventilation is due to the fact that air can pass or circulate through the openings 18 and 19 from one holder to another and the perforations 10 in the top permit sufficient fresh air to gain access to the space below the perforated top.

When during transportation of a holder any lateral shaking or agitation occurs, so as to throw water up against the perforated top 9, only a small quantity of water can find its way through the perforations 10, because said perforations are so small as to break up the force of water dashing against the under side of the top. Such water as may be thrown through the perforations 10 will readily find its way back through said perforations as soon as the water below the top 9 returns to a lower level. A suitable pump for forcing air into the water contained in the holder may be employed, such as indicated at 20 in Fig. 2.

In Fig. 1 I have indicated the lower edge of the strip or band 7 as provided with indentations or notches. These are to prevent an upper holder from slipping laterally relatively to another holder on which it has been placed crosswise, the metal at the sides of said notches or recesses of the upper holder engaging the upper edges of the lower holder on which it rests.

Having now described my invention, what I claim is—

1. A holder for live fish having a perforated top permanently secured below the upper edge of the holder, the sides above said top having openings, the said top having an opening to afford access to the interior of the holder.

2. A holder for live fish, having openings near the upper edge thereof, and having a dome-shaped perforated top secured within the sides of the holder, the upper portion of said top being substantially in the plane of the upper edge of the sides of the holder.

3. A holder for live fish having a perforated top supported entirely within the area bounded by the upper edge of the holder and having a flanged central opening, and a cover having perforations fitting within the flanged opening, the sides of the holder above the top having openings for access of air.

4. A rectangular holder for live fish having vertical curved pieces in its corners, and a perforated top having its upper portions substantially in the plane of the upper edges of the sides of the holder, openings being formed in the sides of the holder above the perforated top.

5. A holder for live fish having a perforated top below the upper edge of the holder, the sides above said top having openings, and means for preventing relative lateral movements of two of such holders when one is superimposed upon the other.

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

CHARLES J. REMSBURG.

Witnesses:
J. MARSHALL MILLER,
THOMAS A. CHAPLINE.