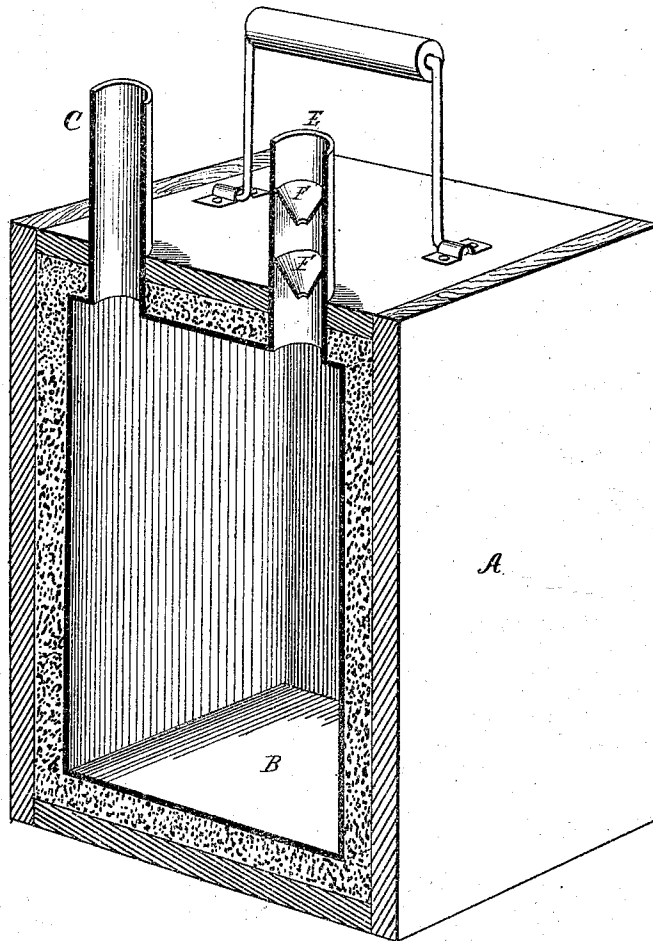


A. HAMAR.

Cans for Transporting Nitro-Glycerine, &c.

No. 137,439.

Patented April 1, 1873.



Witnesses.

H. L. Denard.

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UNITED STATES PATENT OFFICE.

ALEXANDER HAMAR, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CANS FOR TRANSPORTING NITRO-GLYCERINE, &c.

Specification forming part of Letters Patent No. **137,439**, dated April 1, 1873; application filed March 22, 1873.

To all whom it may concern:

Be it known that I, ALEXANDER HAMAR, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Safety-Cans for Transporting Explosive Materials, of which the following is a specification:

This invention has for its object to furnish a can for transporting and storing nitro-glycerine and similar explosive materials, which effectually prevents the accidental explosion of the contents. The invention consists in providing a can possessing the usual filling and discharge tube and other necessary appendages with a tube or vent for permitting the escape of the gases generated within the can, thus counteracting this chief cause of accidental explosion; said gas-tube being provided with one or more funnel-shaped diaphragms suitably perforated for the passage of the gases, but so arranged as to prevent the escape of the contents in the event of the can being capsized.

In the drawing, the figure represents a vertical section of my improved can for containing nitro-glycerine and other explosive fluids.

The outer or surrounding casing A, inclosing can B for the reception of nitro-glycerine or similar explosive materials, is so arranged in respect to the latter as to leave a space or chamber, which is filled with plaster of Paris or other suitable non-conducting material. The usual filling and discharge tube C or nozzle of the can projects through the top of the casing, and is provided with a tightly-fitting stopper or equivalent device for closing the same. In order to furnish means for permitting the escape of the gases generated or evolved by the decomposition of the nitro-glycerine in the

can B, I provide the same with a tube or duct, E, projecting through the casing A, and provided with one or more funnel-shaped diaphragms, F, which are perforated or open at their lower ends for the passage of the gases, and so arranged in relation to the inner diameter of the tube as to prevent the escape of the contents of the can in case the same is overturned, all the contents entering the tube being detained either by the lower or upper funnels, and conducted back again into the can when the same is in an upright position.

The provision of a vent for the escape of the gases effectually overcomes the chief cause of all accidental explosions which are superinduced when no such provision is made through the sudden relief of pressure, either by the forcible ejection of the stopper, due to the pressure of the gases, or when the stopper is removed for the purpose of discharging the contents of the can.

Having thus fully described my invention, what I claim is—

A can for the transportation of nitro-glycerine or similar explosive materials, provided with a discharge-nozzle, and with a vent-tube having one or more funnel-shaped diaphragms for the escape of gases created within the can, substantially as described, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of March, 1873.

A. HAMAR.

Witnesses:

JAMES L. NORRIS,
WM. J. PEYTON.