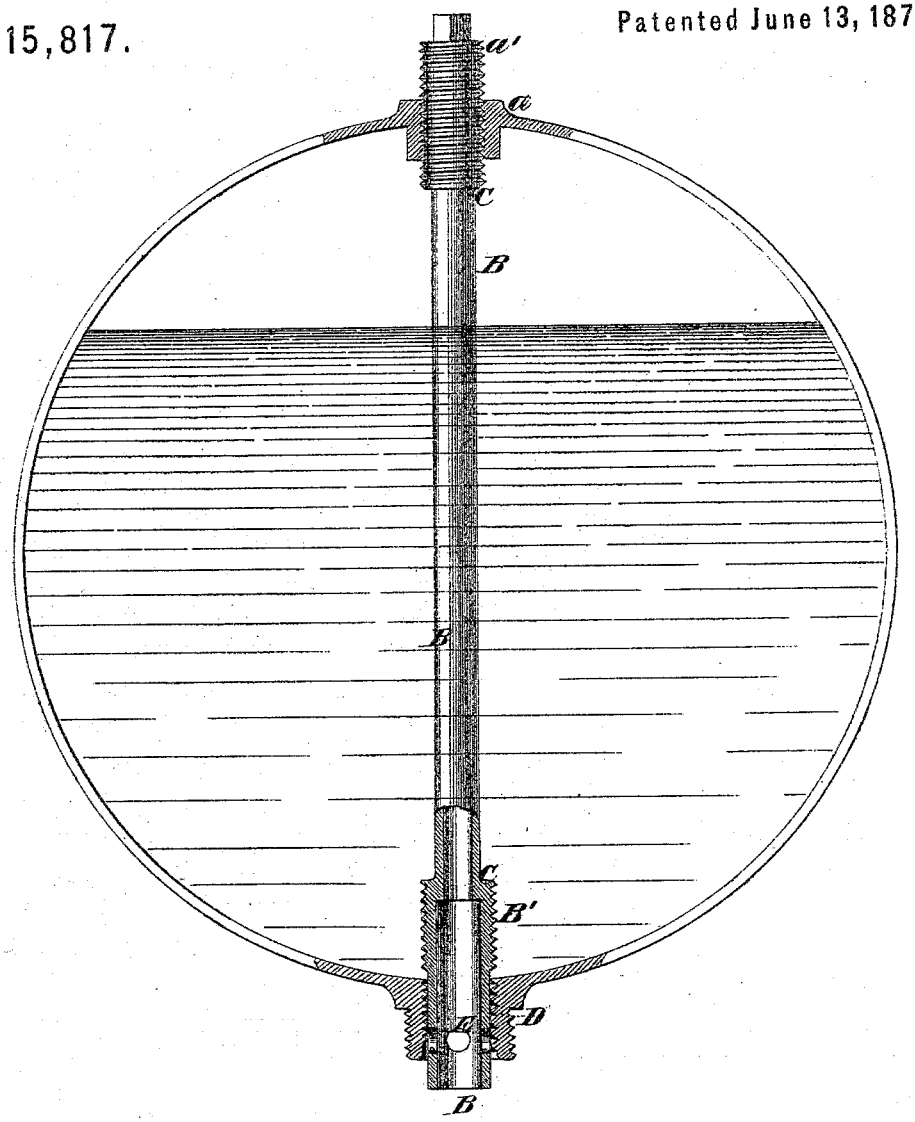
WILLIAM J. BRUNDRED.

Improvement in Discharge Apparatus for Oil Tanks, Grain Cars, &c.

No. 115,817. Patented June 13, 1871.



Witnesses:

Gustave Dieterich

Wm. H. C. Smith

Inventor:

W. J. Brundred

Per Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM J. BRUNDRED, OF OIL CITY, PENNSYLVANIA.

IMPROVEMENT IN DISCHARGE APPARATUS FOR OIL-TANKS, GRAIN-CARS, &c.

Specification forming part of Letters Patent No. 115,817, dated June 13, 1871.

To all whom it may concern:

Be it known that I, WILLIAM J. BRUNDRED, of Oil City, in the county of Venango and State of Pennsylvania, have invented a new and Improved Discharge Apparatus for Oil-Tanks, Grain-Cars, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention consists in an improvement upon the discharging-stems of oil-tanks, as hereinafter fully described and subsequently specified in the claim.

The accompanying drawing represents a sectional view of my discharge apparatus for oil-tank cars, grain-cars, &c.

Similar letters of reference indicate corresponding parts.

A A is a tubular casting secured to the upper shell of the tank or grain-car, with a screw or thread cut through a portion or the entire length of the hole, and through which the hollow stem B is designed to work.

B B B B is a hollow stem, made of steam or gas pipe, of one or more sizes or diameters, and with a screw cut on each end.

The screw or thread *a'* on the top end of the stem B, and which works in the casting A, is of greater length than the screw B′ on the bottom end of the stem, in order that the stem may continue to be raised after the thread or screw B′ on the bottom end of the stem has left the casting D at the bottom similar to A at the top, and until the holes E E E have been elevated to the height of the casting D or above. Reducers C C may be used to connect the different sizes of pipe used in making the stem B. E E E is a series of holes cut in the bottom or lower end of the hollow stem B for the purpose of allowing the liquid or grain to pass out through the hollow stem B and the discharge or hole in the casting D, when the hollow stem is raised sufficiently to bring the holes above the top of the discharge-casting D, the discharge or escape of the liquid or grain being cut off when the hollow stem B is secured down into the thread or screw in the discharge-casting D. This arrangement of the hollow perforated and screw-threaded lower end of the tube B with the casting D is employed in preference to the valves heretofore used, because it can be opened, although frozen up, by water lodging upon the inside of the tank when empty, which prevents the opening of the valves.

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

A stem, B, for oil-tanks, made hollow, and threaded at *a'* B′ to work in castings *a* D, when provided with a prolongation having the apertures E at the lower end, for the purpose of allowing the liquid to escape through the bottom of stem, but of retaining sticks and leaves.

W. J. BRUNDRED.

Witnesses:
J. R. CAMPBELL,
D. L. HATHAWAY.