

(No Model.)

J. J. RAY.
RAILROAD WATER TANK.

No. 248,884.

Patented Nov. 1, 1881.

Fig. 1

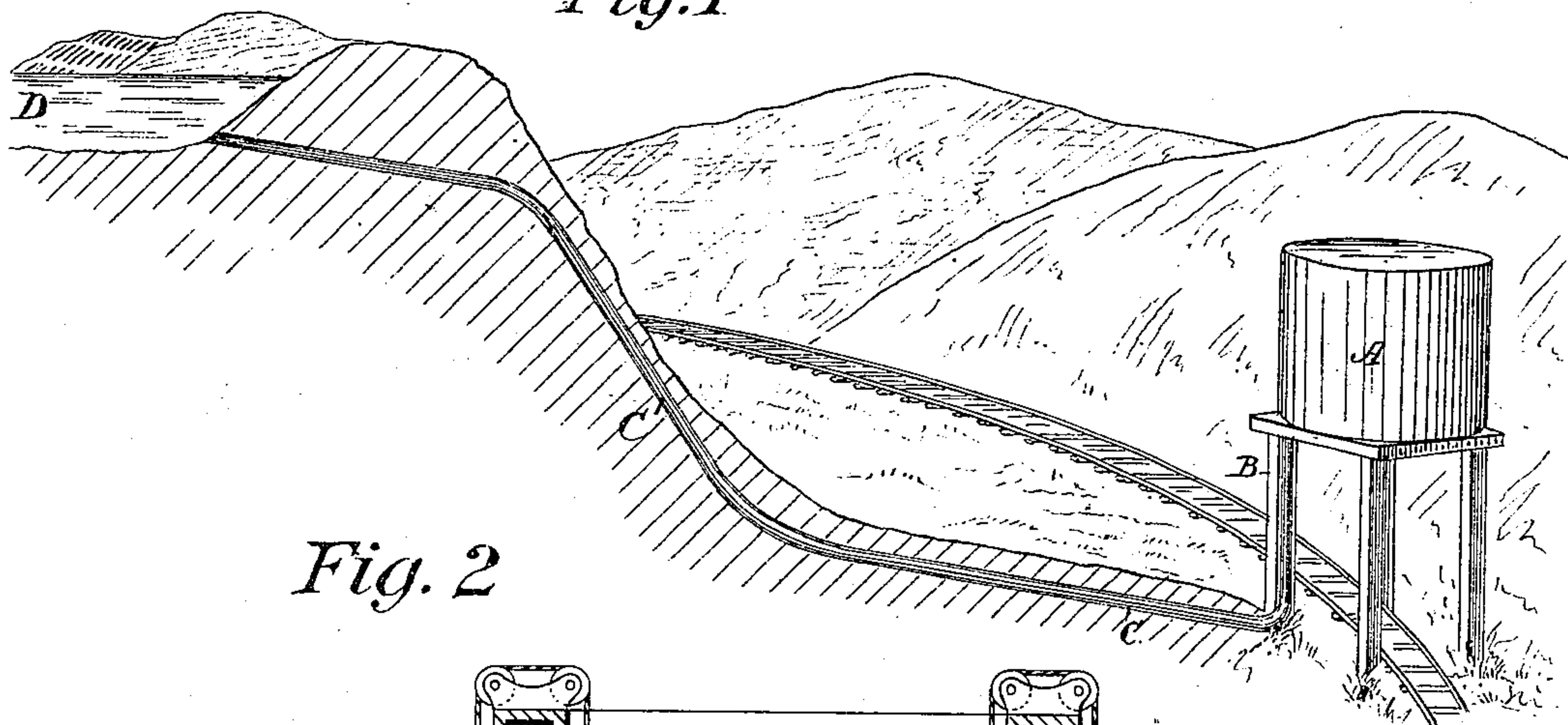
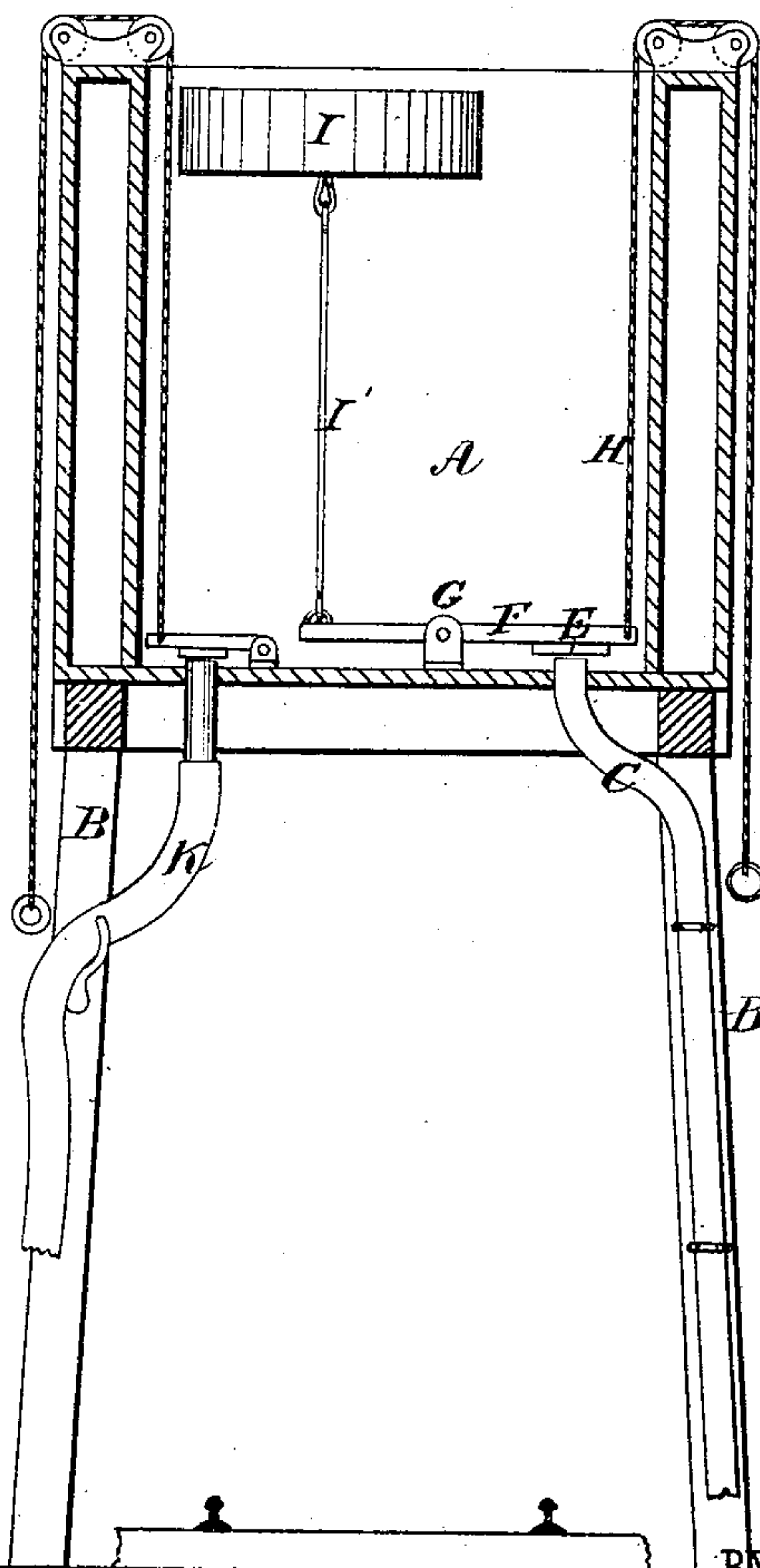


Fig. 2



WITNESSES:

Wm. H. Rowe,
W. M. Hollingsworth

INVENTOR:

Jas. J. Ray

BY *Wm. H. Rowe*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES J. RAY, OF HUNTSVILLE, MISSOURI.

RAILROAD WATER-TANK.

SPECIFICATION forming part of Letters Patent No. 248,884, dated November 1, 1881.

Application filed March 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES JASPER RAY, of Huntsville, in the county of Randolph and State of Missouri, have invented a new and Improved Apparatus for Supplying Railroad-Tenders with Water; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to a water-tank arranged at a suitable elevation above and over the track of a railroad, provided with a novel inlet-valve mechanism, and in connecting the said tank with a natural water-reservoir located at an elevation above the tank, so that the water therefrom will flow by gravitation into the tank until it is filled to the required height, when the valve will automatically close and prevent the water from flowing continuously from the reservoir, and thereby exhaust and waste the water that could otherwise be used.

In the accompanying drawings, Figure 1 is a view in elevation, showing the arrangement of the tank above the track and its connections with the spring; and Fig. 2, a sectional elevation of a water-tank provided with my improved valve mechanism.

The receiving water-tank, A, rests upon posts B, arranged upon opposite sides of the track, so that the said tank will be supported directly over it. A supply-pipe, C, passes through and extends above the bottom of the tank a short distance, and communicates with a spring, pond, or other natural water-reservoir, D, located at a sufficient elevation above or at any required distance from the water-tank, so that the water will flow into the tank by the force of gravitation.

In dry districts, where water is scarce and the springs have but a meagre flow, it is difficult to obtain sufficient water to supply the engines of a railroad, and it is important to prevent the wasteful flow of the water.

In order that the water-tank may be filled without overflowing, the upper end of pipe in

the tank is covered by a valve, E, secured to the end of a lever, F, that is hinged in its middle to standards G G, and is also hinged at its other end to an air-tight sheet-metal box, I, that serves as a float, and is arranged a suitable distance from the bottom of the tank to close the opening at the end of the pipe when the tank has become sufficiently full, the buoyancy of the float being sufficient to overcome the head or force of the inflowing water. A cord, H, is attached to the valve end of the lever F and passes over a pulley, I, and down to the side of the track within convenient reach of the engineer upon the train, by which means the inlet-valve F may be lifted if the valve should become inoperative because of the derangement of the float. An outlet-pipe, K, of leather or other flexible material, is attached to the bottom of the tank, and may be placed in connection with the water-tank of the tender to fill it in the usual manner.

Where water is only obtainable from wells located a considerable distance from the track it may be pumped up by windmills or other well-known means to a reservoir, L, arranged a suitable distance above the supply-tank A, above described, to allow the water to flow from the one to the other.

What I claim as new is—

In an apparatus for supplying locomotive-tenders with water, consisting of a reservoir connected by pipes with a supply-tank supported above and over the track, the combination, with the said tank, of the valve E, secured to one end of a lever, F, pivoted to the tank, a float, I, hinged to the other end of the lever, and a cord or other suitable means secured to the valve-lever for operating it, substantially as and for the purpose described.

J. J. RAY.

Witnesses:

SOLON C. KEMON,
CHAS. A. PETTIT.