(No Model.)

J. F. SMITH.

FEEDING TANK FOR LOCOMOTIVES.

No. 420,973. Patented Feb. 11, 1890.

Fig. 2

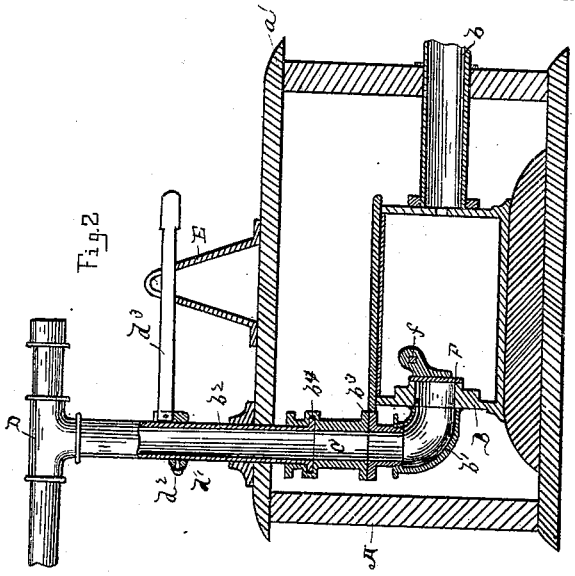


Fig. 3

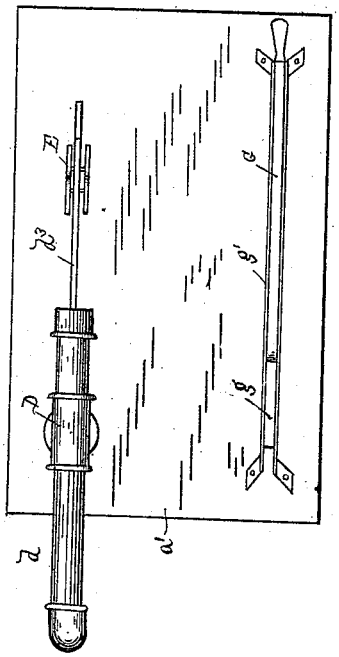
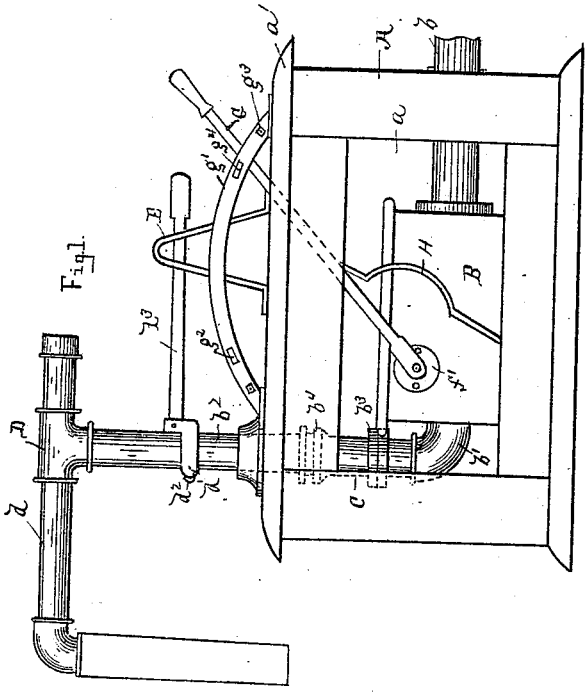


Fig. 1



Witnesses
Wm. S. Hodges.
Geo. R. King.

Inventor
John F. Smith.
By his Attorney
A. S. Fantis.

UNITED STATES PATENT OFFICE.

JOHN F. SMITH, OF WASHINGTON COUNTY, MARYLAND.

FEEDING-TANK FOR LOCOMOTIVES.

SPECIFICATION forming part of Letters Patent No. 420,973, dated February 11, 1890.

Application filed April 6, 1889. Serial No. 306,280. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. SMITH, of Washington county, in the State of Maryland, have invented certain new and useful Improvements in Feeding-Tanks for Locomotives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to certain new and useful improvements in feeding-tanks for locomotives, having for its object the provision of simple and highly efficient means whereby the supply of water is readily affected, and by which the same can be readily cut off without injury to the valve.

The invention comprises the details of construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of my improved feeding-tank. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a top plan view.

Referring to the drawings, A designates the box or casing, having glass windows or sides *a* and a cover *a'* firmly secured in place.

B is the water-supply box or receptacle, into one end of which opens one end of the supply-pipe *b*, leading from the reservoir or source of supply of water. From the opposite end of this box or receptacle B opens the outlet-pipe C, which comprises a lower elbow *b'* and an upper vertical pipe b^2; which at its lower end is secured to said elbow by a counterbored joint b^8 and stuffing-box b^4, said pipe b^2 being thus free to turn. To the upper end of this pipe b^2 is connected, by means of a T-joint D, a horizontal pipe *d*, closed at one end, and to its other end a piece of hose is generally connected thereto and to the boiler of a locomotive. A collar *d'* is held fast by a set-screw d^2 on pipe b^2, and to said collar an arm d^3 is pivotally connected. By means of this arm d^3 the pipe b^2 can be readily turned so as to bring its discharge end over the opening of the boiler. The arm d^3 is supported by a bracket E, secured to cover *a'*, when the water is not being supplied to a boiler, said arm resting in a slot in the upper end of said bracket.

F is a valve held fast upon a cross-rod *f*, and is located over and is disposed to fit flush against the inner opening of the outlet-pipe C. The inner end of rod *f* is held in a recess of one side of box B, and after being passed through a stuffing-box *f''* has connected to its outer end a lever or arm G, which is extended through a slot *g* in cover *a'*, and is guided by parallel strips *g' g'*, wherein are formed opposite openings g^2 g^2, adjoining screws g^3 g^3, which serve as stops for the lever or arm G. A pin g^4, inserted through the openings g^2, will hold the lever or arm at either end of its movement, according as the valve is opened or closed, the side edge of said pin being beveled, so as to fit flush against the lever or arm.

H is a spring of suitable tension rigidly secured at its lower end to the bottom of casing A, and with it the lever or arm G is designed to come in contact in closing the valve, said spring serving to prevent a too sudden closing thereof, and it also gives to the lever or arm an initial movement in opening the valve, causing the sudden displacement and escape of sufficient water to permit the valve to be then readily opened to its full extent. The valve is held open by securing the lever or arm by the pin g^4.

By means of my invention a better and more uniform supply of water is had, and pipes of smaller size feed as much water as larger ones in devices of this class as heretofore constructed, and by securing the valve directly over the mouth of the outlet-pipe the supply of water is the more readily cut off or effected.

I claim as my invention—

1. As an improvement in feeding-tanks for locomotives, the water box or receptacle having inlet and outlet pipes, the latter comprising a vertical pipe having a counterbored joint and stuffing-box and an upper horizontal pipe, the collar and arm for turning said vertical pipe, and the valve located over the mouth of said outlet-pipe, substantially as set forth.

2. As an improvement in feeding-tanks for locomotives, the combination of the water

box or receptacle having inlet and outlet pipes, the latter comprising a vertical pipe free to turn at its lower end, and an upper horizontal pipe, the collar and arm for turning said vertical pipe, the valve located over the mouth of said outlet-pipe, its pivoted rod extending through one side of said box or receptacle, and the spring-pressed lever or arm secured thereto, substantially as set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JOHN F. SMITH.

Witnesses:
H. V. DANIELS,
J. HARRY PARR.