

(No Model.)

A. BERNEY.
Locomotive Tender.

No. 242,586.

Patented June 7, 1881.

FIG. 1

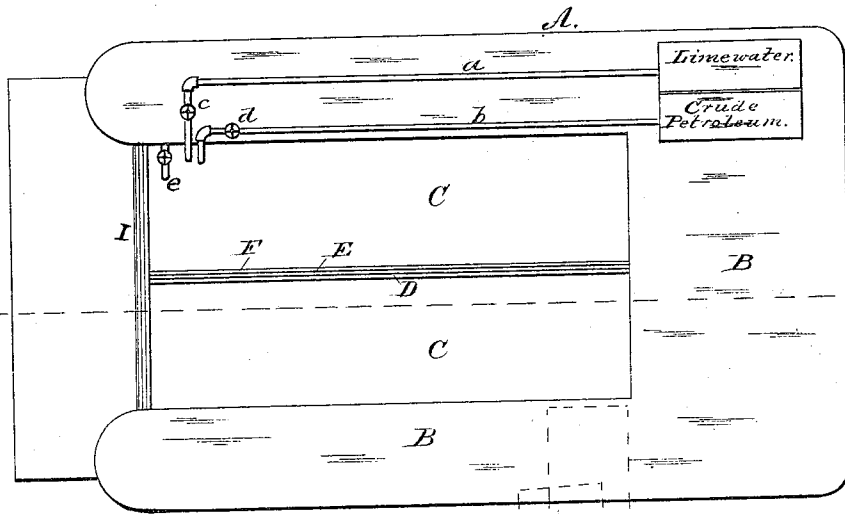
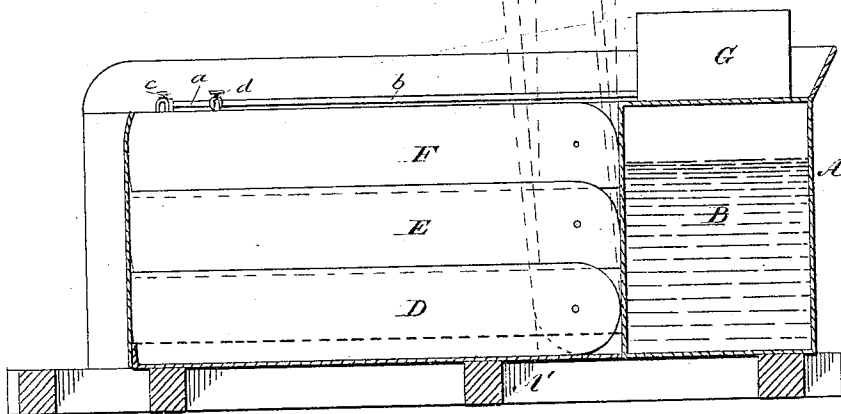


FIG. 2



WITNESSES:

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ALFRED BERNEY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE GLOBE COMPANY, OF HARTFORD, CONNECTICUT.

LOCOMOTIVE-TENDER.

SPECIFICATION forming part of Letters Patent No. 242,586, dated June 7, 1881.

Application filed March 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALFRED BERNEY, a citizen of the United States, residing at the city of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Locomotive-Tenders; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to tenders for locomotives, more especially those adapted for pulverized anthracite and other coal to be mixed with other ingredients; and the object is to utilize the pulverized fuel and small coal which is now wasted and cannot be utilized in locomotive and other engines.

The invention consists in the construction and arrangement of parts, as will be more fully described hereinafter, reference being had to the accompanying drawings, and the letters of reference marked thereon.

In the drawings, Figure 1 is a plan view of my improved tender. Fig. 2 is a longitudinal vertical section of the same.

In the drawings, A represents the body of the tender, supported on a suitable frame, A'. The tender is provided with the usual end and side water-tanks, B, for supplying the locomotive with feed-water. The central part, C, is closed at its front end, and it contains the pulverized fuel. It is divided longitudinally by two or more partitions, D E F, pivoted at their rear end, so that they can be raised successively, as shown by the broken lines in Fig. 2.

I shows the front partition.

On one or both sides (if desired) of the water-tank is arranged a tank, G, divided by a partition into two parts, the one for containing lime-water or its equivalent, and the other to contain crude petroleum or tar. From each compartment leads a pipe, a b, (each provided

with suitable valves or stop-cocks *c d*), toward the forward end of the tender, and they are there bent at right angles, so the materials in the compartments can be run into or over the pulverized fuel and be mixed with it. Another pipe, *e*, leads into the front end of the water-tank, and is also provided with a suitable valve, and this is to admit water to the fuel, so as to dampen or moisten the fuel and assist in mixing it. By mixing these ingredients with the pulverized coal it will form into a close mass, and can be then broken into lumps, while at the same time it will give a much greater heat and last a much longer time than when used in its natural state, tending to coke as soon as it comes in contact with the heat.

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

1. A tender for locomotives, having the pivoted partitions, and a tank for containing compositions for mixing with pulverized fuel, arranged substantially as shown, and for the purpose set forth.

2. A tender for locomotives, consisting of the body A, having water-tank B, and pivoted partitions D E F, and a tank, G, for containing ingredients for mixing with pulverized fuel to assist in its combustion, all arranged substantially as specified.

3. The tender for locomotives herein described, consisting of the body A, having water-tank B and pivoted partitions D E F, a tank, G, divided by a partition for containing lime-water and crude petroleum, and provided with pipes *a b e*, arranged substantially as shown, and for the purpose specified.

4. A tender for locomotives, having the cross-partition I and longitudinal partitions D E F, with or without being pivoted.

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

ALFRED BERNEY.

Witnesses:

S. N. BERNEY,
S. H. WALKER.