

(No Model.)

H. R. WINKELMANN.

WATER SUPPLYING DEVICE FOR LOCOMOTIVE TENDERS.

No. 499,074.

Patented June 6, 1893.

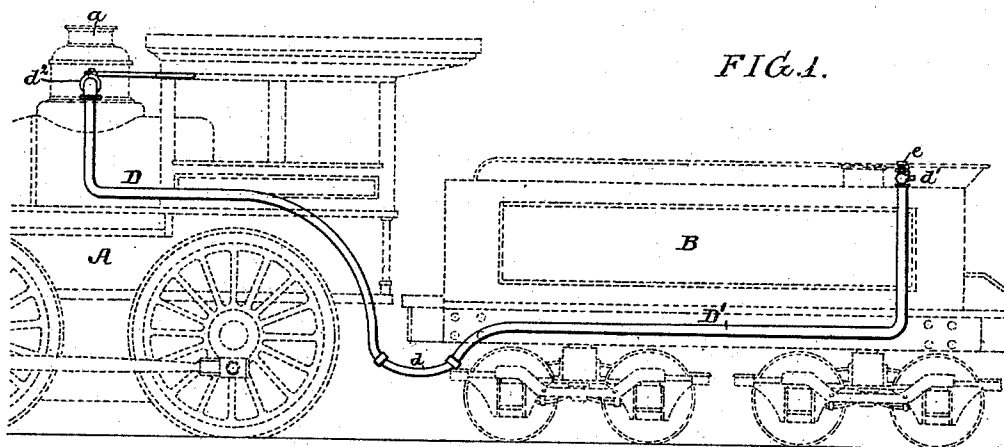


FIG. 1.

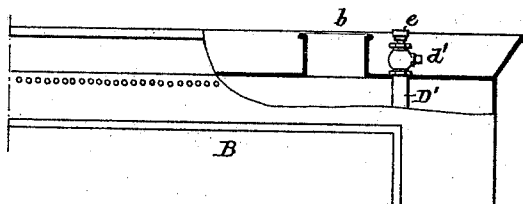


FIG. 2.

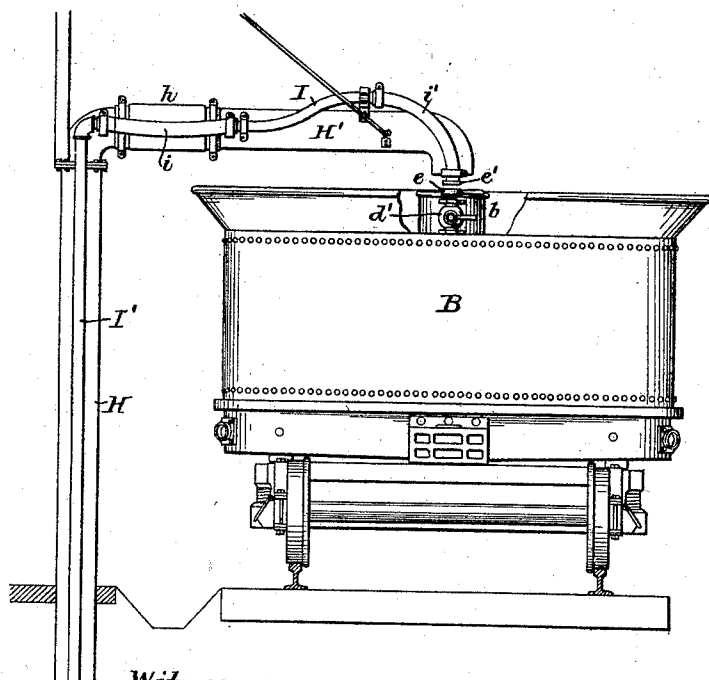


FIG. 3.

Witnesses:
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by his Attorneys
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UNITED STATES PATENT OFFICE.

HERMAN R. WINKELMANN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO THE AUTOMATIC WATER TANK COMPANY, OF CAMDEN, NEW JERSEY.

WATER-SUPPLYING DEVICE FOR LOCOMOTIVE-TENDERS.

SPECIFICATION forming part of Letters Patent No. 499,074, dated June 6, 1893.

Application filed January 6, 1893. Serial No. 457,476. (No model.)

To all whom it may concern:

Be it known that I, HERMAN R. WINKELMANN, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have
5 invented certain Improvements in Water-Supplying Devices for Locomotive-Tenders, of which the following is a specification.

The object of my invention is to relieve the locomotive engineer of the duty of attending
10 to the steam supply pipe of a steam actuated water elevator which receives its steam from the locomotive.

Heretofore in this class of elevators, the engineer attended to the steam connection,
15 while the fireman moved the water pipe of the elevator in position over the tank opening on the tender, consequently very little time was left the engineer to oil up and to examine his engine. My invention overcomes
20 this difficulty, the engineer being relieved so that his entire time may be occupied in oiling up and examining the parts inaccessible while the locomotive is in motion.

My present invention relates particularly to
25 the tender and locomotive, the parts relating particularly to the water elevator, being described and claimed in a separate application filed of even date herewith.

In the accompanying drawings:—Figure 1,
30 is a side view of sufficient of a locomotive and tender to illustrate my invention. Fig. 2, is an enlarged side view of a portion of the tender at the tank inlet opening; and Fig. 3, is a view showing the goose-neck of the water
35 elevator in position, and the steam pipes in position to be coupled.

A is the locomotive of the ordinary type, B the tender having the usual water tank coupled to the boiler of the locomotive.

40 Extending from the steam dome *a* in the present instance, is a steam supply pipe D which is connected to a steam supply pipe D' on the tender by a flexible coupling *d*. The supply pipe D' extends to a point in close
45 proximity to the inlet opening *b* of the tank, as clearly shown in Fig. 2, and is provided with a suitable coupling *e*. A valve *d'* regulates the flow of steam through the pipes.

In the pipe D, adjacent to the steam dome
50 of the locomotive, is another valve *d''*, by which the steam supply may be cut off from the cab

of the engine, so that the long line of pipe to the tender will not contain steam which would otherwise condense and form a water block, which would have to be blown out before the
55 pipe could be coupled to the steam pipe of the water elevator, but by the arrangement of the two valves, the fireman can first turn on the valve in the cab, and then proceed to the tender, direct the goose-neck of the water
60 elevator in position over the inlet of the tank, make the coupling, and turn on the valve at the inlet so as to form steam communication between the locomotive boiler and the water
65 elevator. The water elevator in the present instance, is of the steam actuated type, and is placed either below the surface of the ground or upon the ground, and has a standing pipe
70 H connected by a flexible coupling *h* with the goose-neck H', the nozzle of which can be directed over the inlet opening of the tender tank as clearly shown in Fig. 3. Mounted on the goose-neck in the present instance is a
75 steam supply pipe I connected to an upright pipe I' by a flexible coupling *i*, so that it can be moved with the goose-neck. This pipe I' extends to the steam space of the water elevator.

On the end of the pipe I is a flexible section *i'* having the mate *e'* of the coupling *e*
80 carried by the pipe D' of the tender, so that when the tank opening and the goose-neck are brought in line, all that is necessary for the fireman to do, is to couple the pipe D with the flexible section *i'* and turn the steam
85 valve *d'* so as to allow steam to flow from the pipe D through the pipes I, I', to the steam space of the water elevator.

It will be understood that any of the ordinary forms of flexible tubing may be used,
90 either leather, rubber, or sectional metallic tubes.

By the arrangement above described the fireman has full control of the water supply, the same as in the case where a pumping
95 plant is used to pump the water to an elevated reservoir, and the engineer is relieved entirely so that his entire time may be given to the locomotive proper.

I claim as my invention—

1. The combination of the locomotive and
tender, water supply inlet for the tender tank,

with a steam pipe extending from the steam space of the boiler to a point adjacent to the water supply inlet of the tender tank, and a valve to regulate the flow of steam through
5 said pipe, substantially as described.

2. The combination of the locomotive and tender, a water inlet for the tender tank, a steam pipe on the locomotive extending from the steam space of the boiler, a valve in said
10 steam pipe near the steam space of the boiler, a steam pipe on the tender coupled to the steam pipe on the locomotive, said steam pipe

extending to a point adjacent to the water tank inlet, a valve at this point, and a coupling at the end of the pipe, substantially as
15 described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN R. WINKELMANN.

Witnesses:

JOSEPH H. KLEIN,
HENRY HOWSON.