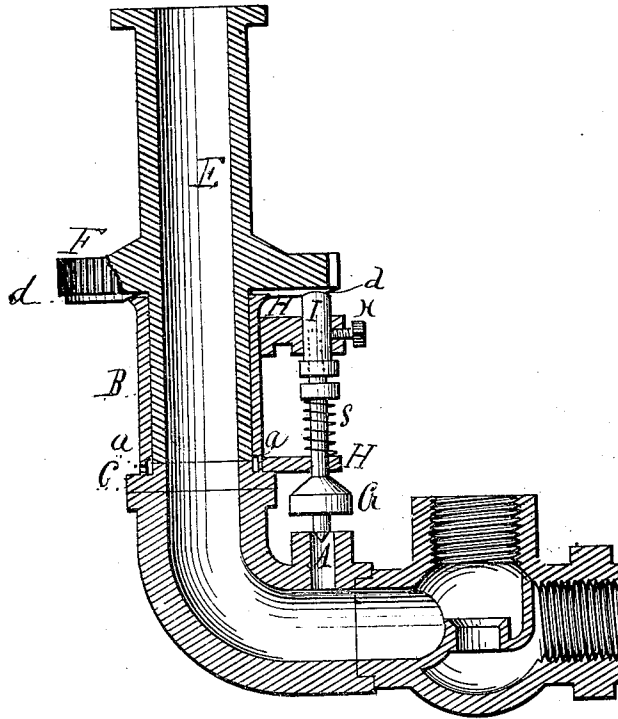


C. K. DODGE.

LOCOMOTIVE WATERING DEVICE.

No. 179,473.

Patented July 4, 1876.



WITNESSES:

Shepherd, H. Wheeler
Leonidas Holmes.

INVENTOR,

Caleb K. Dodge.

UNITED STATES PATENT OFFICE.

CALEB K. DODGE, OF NILES, MICHIGAN.

IMPROVEMENT IN LOCOMOTIVE WATERING DEVICES.

Specification forming part of Letters Patent No. **179,473**, dated July 4, 1876; application filed April 10, 1875.

To all whom it may concern:

Be it known that I, CALEB K. DODGE, of city of Niles, county of Berrien, and State of Michigan, have invented a new and useful Improvement in Locomotive Watering Devices, of which the following is a description:

The nature and object of this invention are to provide a suitable device for discharging waste-water from a locomotive watering-pipe, and to prevent the accumulation of ice in the joint of the rotating delivery-pipe.

To accomplish the above-named purposes I make a discharge-orifice, A, near the elbow in the supply-pipe, of sufficient size to admit of a rapid discharge of the water remaining in the pipes after the locomotive has been supplied, and thus prevent it from freezing in said pipes during the cold months of the year; but so large an opening as is required to draw off the water before it would have time to freeze would waste a large amount of water, unless it was closed while the water was passing to the locomotive, and should be so closed during the warm season of the year. As a means of preventing the accumulation of ice in the joint between the rotating pipe and its supporting-sleeve B, I provide a flange, C, in the joint between the elbow of the supply-pipe and said sleeve. This flange extends inward sufficiently to form a seat, upon which the rotating pipe rests and rotates. This seat is surrounded by a recess or chamber in the lower end of said sleeve, with openings *a a* leading from said recess through the sleeve, for the discharge of any water that may chance to work through between the lower end of the rotating pipe and its seat on the flange C. E

represents the rotating pipe. This pipe fits snugly within the sleeve B. In all other respects the rotating pipe does not differ from the one described in the schedule to Patent No. 158,049. *d d* represent cams attached to the under side of the spur-wheel F. These cams are so arranged as that when the wheel F and pipe E are turned so as to conduct water to the locomotive one of said cams will impinge on the stem I of the valve G, and thus close the discharge-opening A.

In order to take up lost motion caused by wear, and to prevent overstrain on the valve, I make the valve-stem I in two sections, like the joints of a telescope, with a rubber or other elastic substance between the joints or sections. This valve-stem is held in a vertical position by means of supports H H.

The valve G is opened by means of the spring S on the stem I; but during the warm months of the year the said valve may be held closed by means of the set-screw X near the upper end of the stem I.

What I claim is—

1. The combination of the seated flange C, with its surrounding recess or chamber, and discharge-openings *a a*, as and for the purposes set forth.
2. The combination of the rotating pipe E, cams *d d*, jointed elastic valve-stem I, spring S, valve G, and discharge-opening A, substantially as set forth.

CALEB K. DODGE.

Witnesses:

SHEPHERD H. WHEELER,
LEONIDAS HOLMES.