

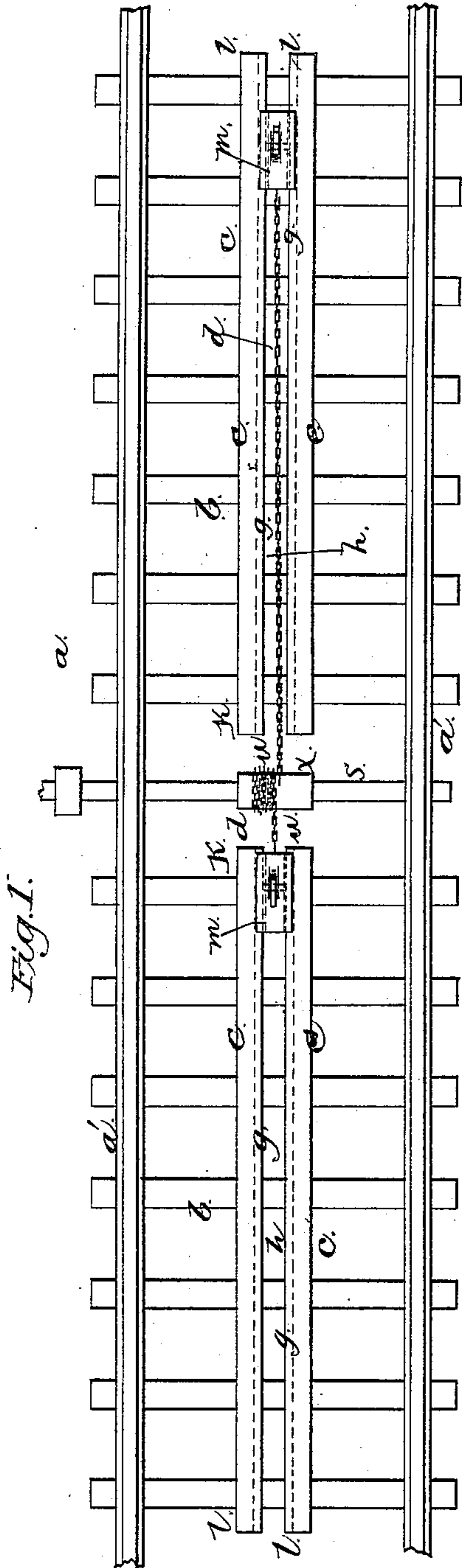
(No Model.)

J. L. O. KING.

TANK FEEDER.

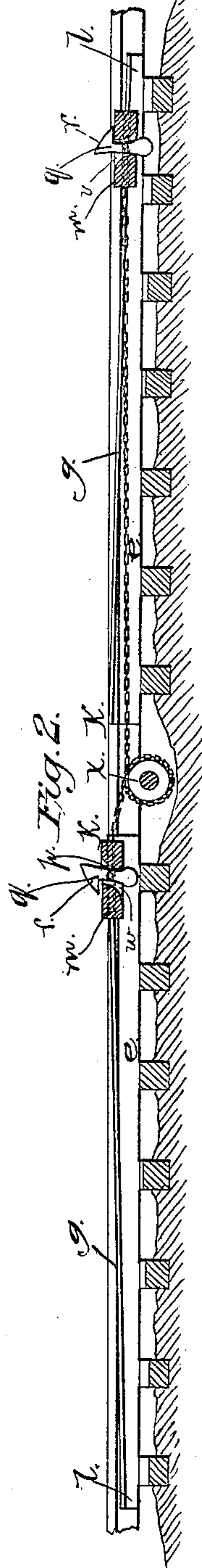
No. 246,150.

Patented Aug. 23, 1881.



WITNESSES

John A. Ellis  
James J. Sheehy.



INVENTOR.

James L. O. King.  
by Audensmith & Smith  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JAMES L. O. KING, OF HARTWELL, GEORGIA.

## TANK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 246,150, dated August 23, 1881.

Application filed June 4, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES L. O. KING, of Hartwell, in the State of Georgia, have invented a new and valuable Improvement in Tank-Feeders; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to improvements in devices for pumping water to supply station-tanks by the action of the locomotive while it is moving in or from the station; and it consists in the construction and novel arrangement of parts, as hereinafter set forth.

In the annexed drawings, Figure 1 is a plan view, and Fig. 2 is a longitudinal central section, of a portion of track provided with my improvement.

The letter *a* represents a section of a railroad-track, *a' a'* being the rails, and *b* the ties. Secured to these ties, midway between the rails, are the guide-tracks *c c*, spaced apart, as shown at *d*. These guide-tracks are made of rails *e*, which project inwardly at the top, forming flanges *g*. Between these flanges *g* is the path *h*. The sides *e* of these guide-tracks are higher at their ends *k* by the space *d* than at their other ends, *l*, which gives them a slope or incline in opposite directions.

Seated in the path *h*, between the sides *e* of each track *c*, is a slider-carriage, *m*, having side grooves, into which the flanges *g* fit, the flanges of the carriage bearing above and below those of the sides. Through these carriages are cut the perforations *p*, in which are journaled the weighted gravity-catches *q*, having the beveled heads *r*, the bevels being toward the lower ends of the guide-tracks.

Journaled below the railroad-tracks *a*, across the space *d*, is a shaft, *s*, to which is affixed a drum, *t*. This drum is between and in line with the guide-tracks *c c*, and from it run two chains, *n*, one being fastened to each carriage *m*. The position of this shaft and its chains is such that when one chain is wound the other is unwound, and hence one carriage is up near the shaft when the other is away from it. This shaft is connected to the pump by suitable mechanism, not necessary to be shown.

To the under side of the locomotive, at some

convenient point, is located a finger rod or catch, having a similar position with relation to the railroad-track as the catches *q*. As the locomotive passes over the guide-tracks *c c* this finger-rod, bearing against the straight edge of the catch *q*, drives the carriage down the incline, drawing on its chain *n*, and turning the shaft and operating the pump. At the same time the chain *n* is wound up, and the other carriage is drawn up its incline into position for a locomotive coming the other way. As the first carriage reaches the bottom of its incline the difference in level allows the finger-rod to pass over the catch.

When the rod of a locomotive strikes a catch at the bottom of an incline said rod, pushing on the lever, swings the catch and passes on. This difference in the action of the catch is permitted by the shape of the perforations. These having their upper ends, *v*, curved from the bottom upward to the front and their lower ends, *w*, curved from the top downward to the rear, furnish abatements to the catches in one direction and allow free play in the other.

When a locomotive comes in a direction opposite to that in which the device is set it can pass the first carriage and then back until supplied with water, and in going forward again it would operate the other carriage and obtain more water, the loss of time in backing being trivial, as the device works very rapidly.

I am aware that it is not new to have a tank-feeder in which there are an operating central sheave, guides arranged on each side thereof, and carriages upon such guides adapted to be operated by the moving trains, and I lay no claim to such a device.

Having described my device, what I claim is—

Two guide-tracks inclined in opposite directions, in combination with a transverse shaft between the two, a carriage on each track, and means for connecting the shaft and carriage.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES L. O. KING.

Witnesses:

THEO. MUNGEN,  
JAMES J. SHEEHY.