No. 763,372. PATENTED JUNE 28, 1904.

J. CURRY.

WATER TOWER.

APPLICATION FILED DEC. 15, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

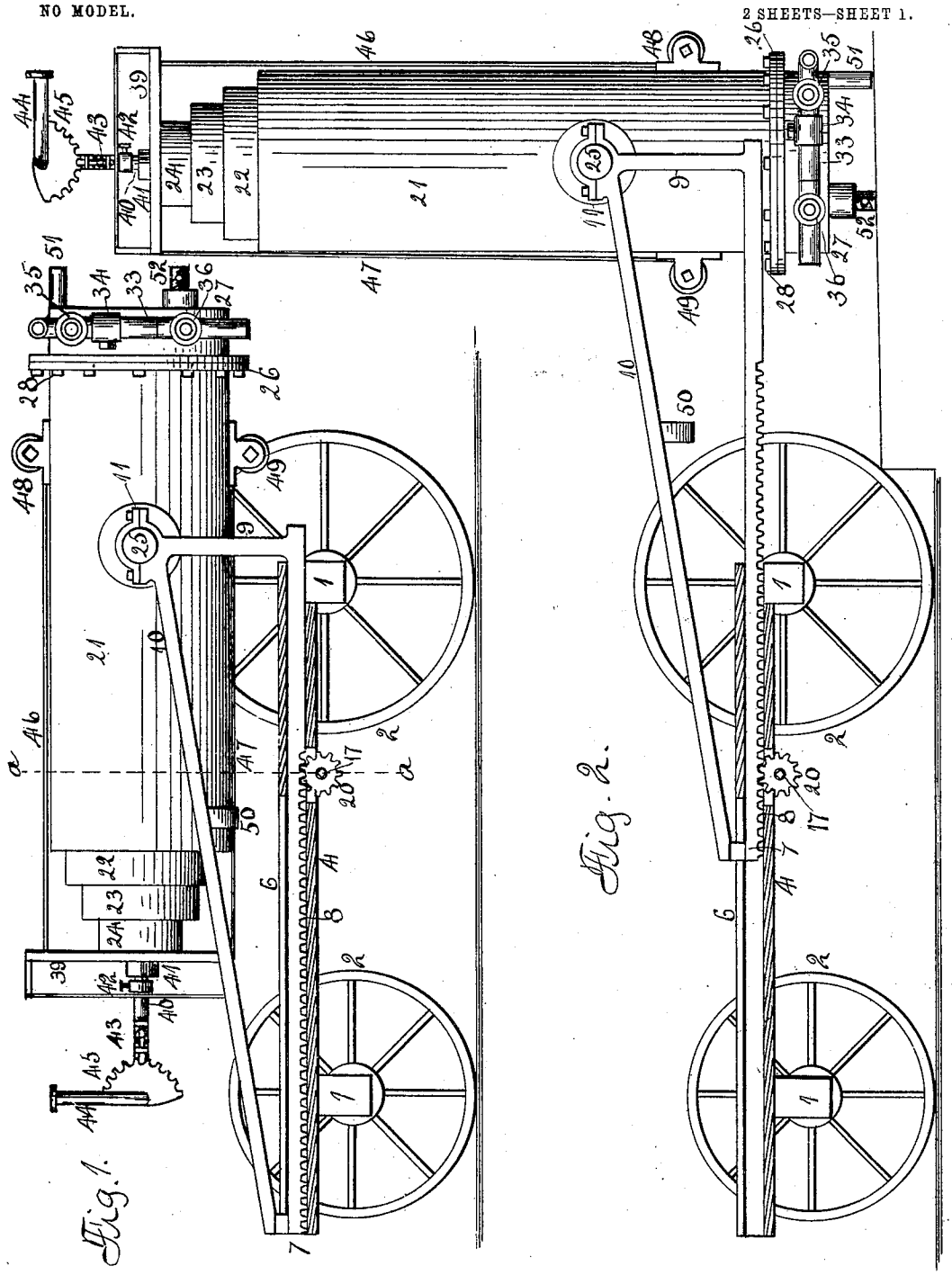


Fig. 1.

Fig. 2.

Witnesses:
H. J. Slagle
W. E. Bridgeford

Inventor:
James Curry
By Robert Strebel
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 5.

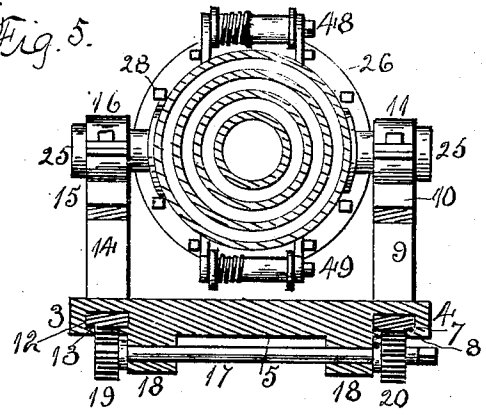


Fig. 3.

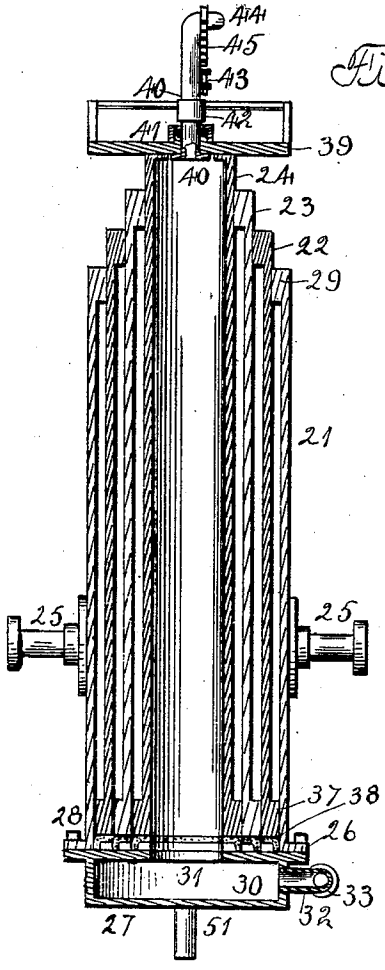
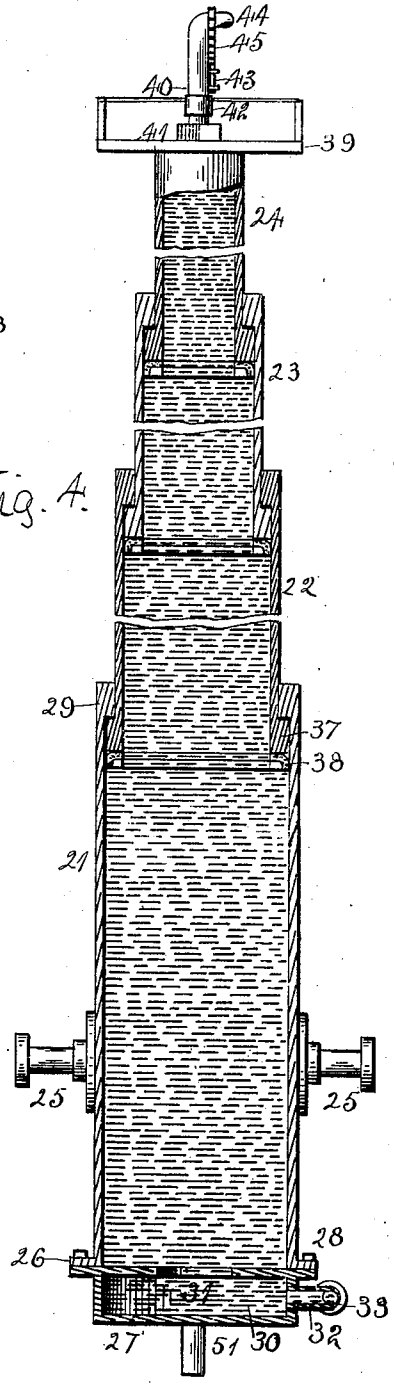


Fig. 4.



Witnesses
H. J. Slagle
W. E. Briggs

Inventor:
James Curry
By A. O. Behel.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 763,372. Patented June 28, 1904.

UNITED STATES PATENT OFFICE.

JAMES CURRY, OF ROCKFORD, ILLINOIS; ASSIGNOR OF ONE-HALF TO FRANK C. WHITE, OF ROCKFORD, ILLINOIS.

WATER-TOWER.

SPECIFICATION forming part of Letters Patent No. 763,372, dated June 28, 1904.

Application filed December 15, 1903. Serial No. 185,234. (No model.)

To all whom it may concern:

Be it known that I, JAMES CURRY, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Water-Towers, of which the following is a specification.

The object of this invention is to construct a water-tower in slidable sections which are extended by the pressure of water within them and a pipe having a connection with the center section to which a hose or nozzle may be connected, by which a stream of water may be thrown onto a burning building.

In the accompanying drawings, Figure 1 is a side elevation of a truck supporting the tower, the guideway of the truck being in section. Fig. 2 is a similar elevation in which the tower is supported upon the pavement. Fig. 3 is a vertical section of the tower in its normal condition. Fig. 4 is a vertical section of the tower in its extended condition. Fig. 5 is a transverse section on dotted line *a*, Fig. 1.

The truck comprises the axle 1, supported by the wheels 2. Extending in the lengthwise direction of the truck are located two guideways 3 and 4 and connected at suitable intervals by the cross-bars 5. A portion 6 of the upper face of each guideway is cut away, leaving a lengthwise opening. A guide 7 is located in the guideway, having a portion 8 of its under face in the form of a toothed rack. To the rear end of the guide is erected a vertical post 9, and a diagonal brace 10 connects the upper end of this post with the forward end of the guide. At the junction of the post 9 and brace 10 is formed a bearing 11. A guide 12 is located in the guideway 3, having a portion 13 of its under face in the form of a toothed rack. To the rear end of the guide is erected a vertical post 14, and a diagonal brace 15 connects the upper end of this post with the forward end of the guide. At the junction of the post 14 and brace 15 is formed a bearing 16.

A shaft 17 is supported in bearings 18 and supports two pinions 19 and 20, the former meshing with the toothed rack 13 and the latter meshing with the toothed rack 8. A crank can be placed on the end of the shaft 17 and the pinions rotated, which will move the toothed racks in their lengthwise direction.

The extensible sections of the water-tower are supported in bearings 11 and 16 and comprise the main outer tubular casing 21 and the inner casings 22, 23, and 24. The main outer casing 21 has two trunnions 25 secured to it, which are located in the bearings 11 and 16. A flange 26 extends from the lower end of the section 21, and an end 27 has a connection with the flange by the bolts 28. The upper end 29 of this section is contracted. The chamber 30, formed in the end 27, has an outlet 31 communicating with the interior of the section 21. A pipe 32 connects with the chamber 30, and a cross-pipe 33 connects with this pipe. Within the cross-pipe 33, at one side of the pipe 32, is located a check-valve 34 and a cut-off valve 35, and at the other side of the pipe 32 is located a cut-off valve 36. A connection with the water-supply is intended to be made with that end of the pipe supporting the check-valve. The section 22 is of a size to fit the contracted upper end of the section 21, and its lower end has an enlargement 37 equal to the internal diameter of the section 21. A cup-packing 38 is secured to the lower end of the section 22. The upper end of this section is contracted. The sections 23 and 24 are constructed substantially like the section 22, with the exception of the upper end of the section 24, which is contracted and to which is connected a platform 39, having a railing around its outer edge. A pipe 40 extends upward through the platform 39 and has an enlarged end which prevents it from becoming separated from the platform. A stuffing-box 40 surrounds the pipe outside of the platform, which forms a water-tight joint around the pipe. A cut-off valve 42 has a connection with the pipe 40. To the pipe 40 is secured a spring-actuated dog 43. A pipe extension 44 has a movable connection with the pipe 40, and a toothed segment 45 has a connection with the extension 44 and so located with reference to the spring-actuated dog that it may engage the teeth and hold the extension in its adjusted positions. Two ropes 46 and 47 have a con-

nection with the platform, also with the windlasses 48 and 49, secured to the outside section of the water-tower.

In transporting the water-tower the sections are folded onto the truck, as shown at Fig. 1, the upper end of the sections supported by the band 50, connecting the brace-bars 10 and 15. When it is desired to use the water-tower, the truck is backed up to the curbing and by means of a handle placed on the shaft 17 the shaft is rotated, which will extend the toothed racks supporting the water-tower until the water-tower is in proper position with respect to the burning building. The leg 51 rests upon the sidewalk, and by means of the legs 52 having a screw-thread connection with the end 27 of the outer section 21 of the water-tower the tower can be held in a plumb position. A man will stand upon the platform. Water is turned into the center section of the water-tower, which will exert its force against the platform, thereby raising it until the projection at the lower end of the section comes in contact with the inward projection at the top of the section 23, thereby raising both sections, and so on until all sections are extended, as shown at Fig. 4. The man on the platform connects a nozzle with the pipe extension 44, and upon opening the valve 42 water will be thrown from the nozzle, or a hose may be connected with the pipe extension and carried into the building. The pipe extension can be turned up and down and held by the dog 43 and can be turned around, the stuffing-box permitting such movement. When the water-tower is to be extended less than its full length, the ropes 46 and 47 will limit it in such movement.

By shutting off the valve 35 and opening the valve 36 the water in the tower may be allowed to waste, which will permit the sections to telescope and lower the platform.

By means of the check-valve 34 should the hose connection break between the water-supply and water-tower the platform will be held in its elevated position.

I claim as my invention—

1. The combination of a truck, a frame having a sliding connection with the truck, a water-tower having a pivotal connection with the frame some distance from its lower end, and the lower end of the tower provided with feet, some of which are adjustable in their lengthwise direction.

2. The combination of a truck, a frame having a sliding connection with the truck and comprising two side bars each formed with teeth, a cross-shaft supporting two pinions, one engaging the teeth of a side bar, and a water-tower located between the side bars and having a pivotal connection therewith.

JAMES CURRY.

Witnesses:
A. O. BEHEL,
E. BEHEL.