(No Model.)

2 Sheets—Sheet 1.

E. F. STECK.

WATER TOWER.

No. 546,627. Patented Sept. 17, 1895.

Fig. 1.

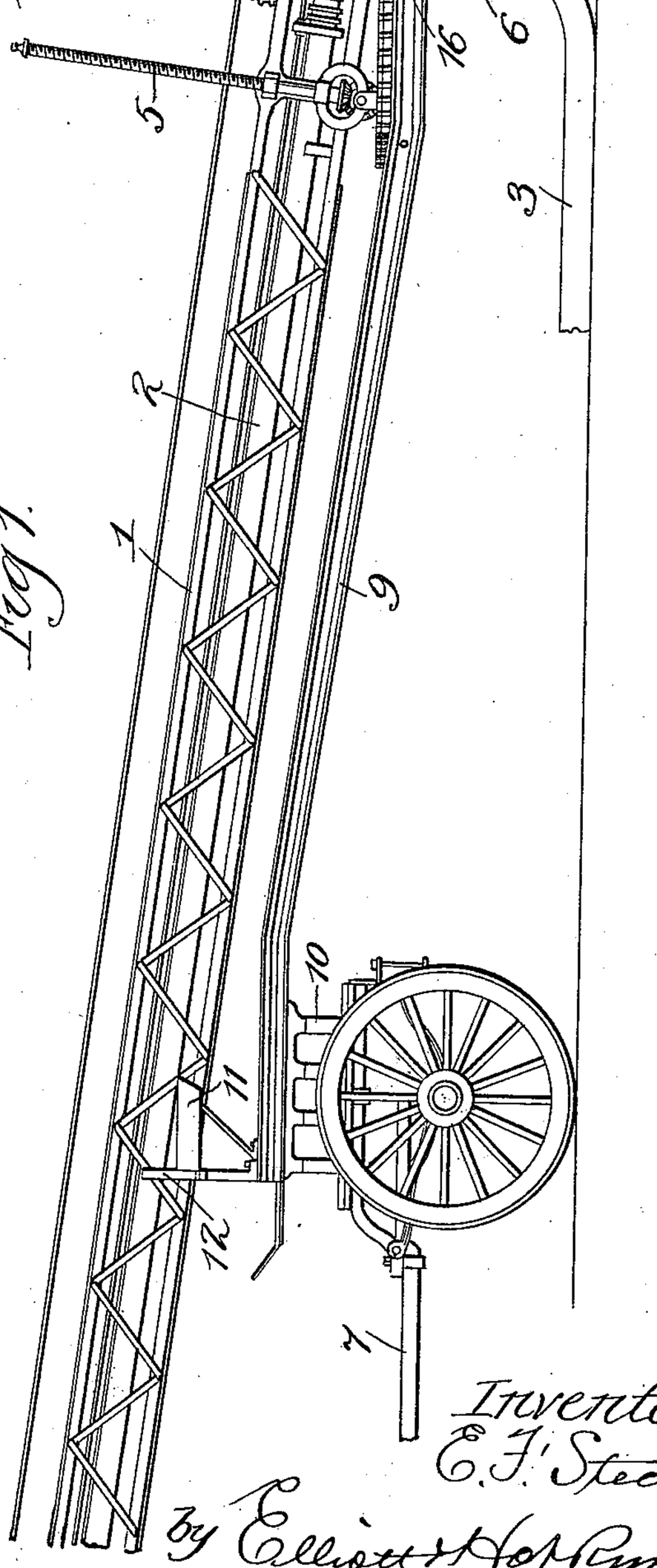

Fig. 1a

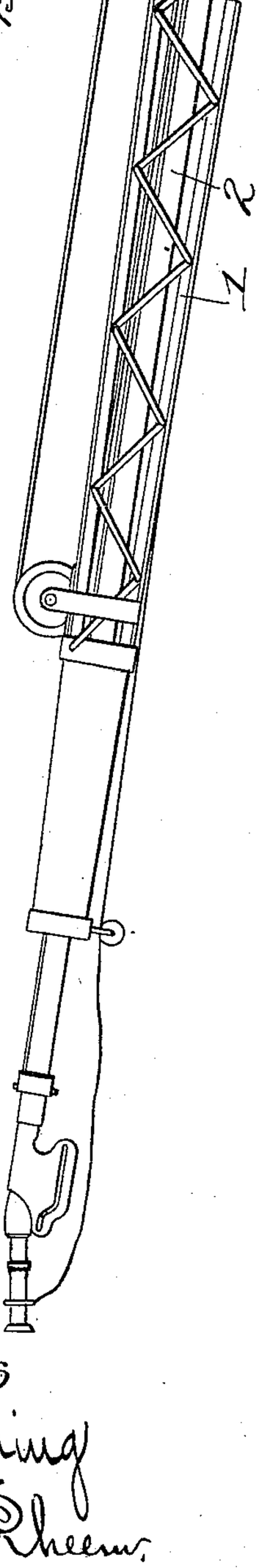

Fig. 2.

Fig. 3.

Witnesses
Wm. F. Fleming
Wm. N. Rheem.

Inventor
E. F. Steck
by Elliott & Hopkins
Attys

(No Model.)

2 Sheets—Sheet 2.

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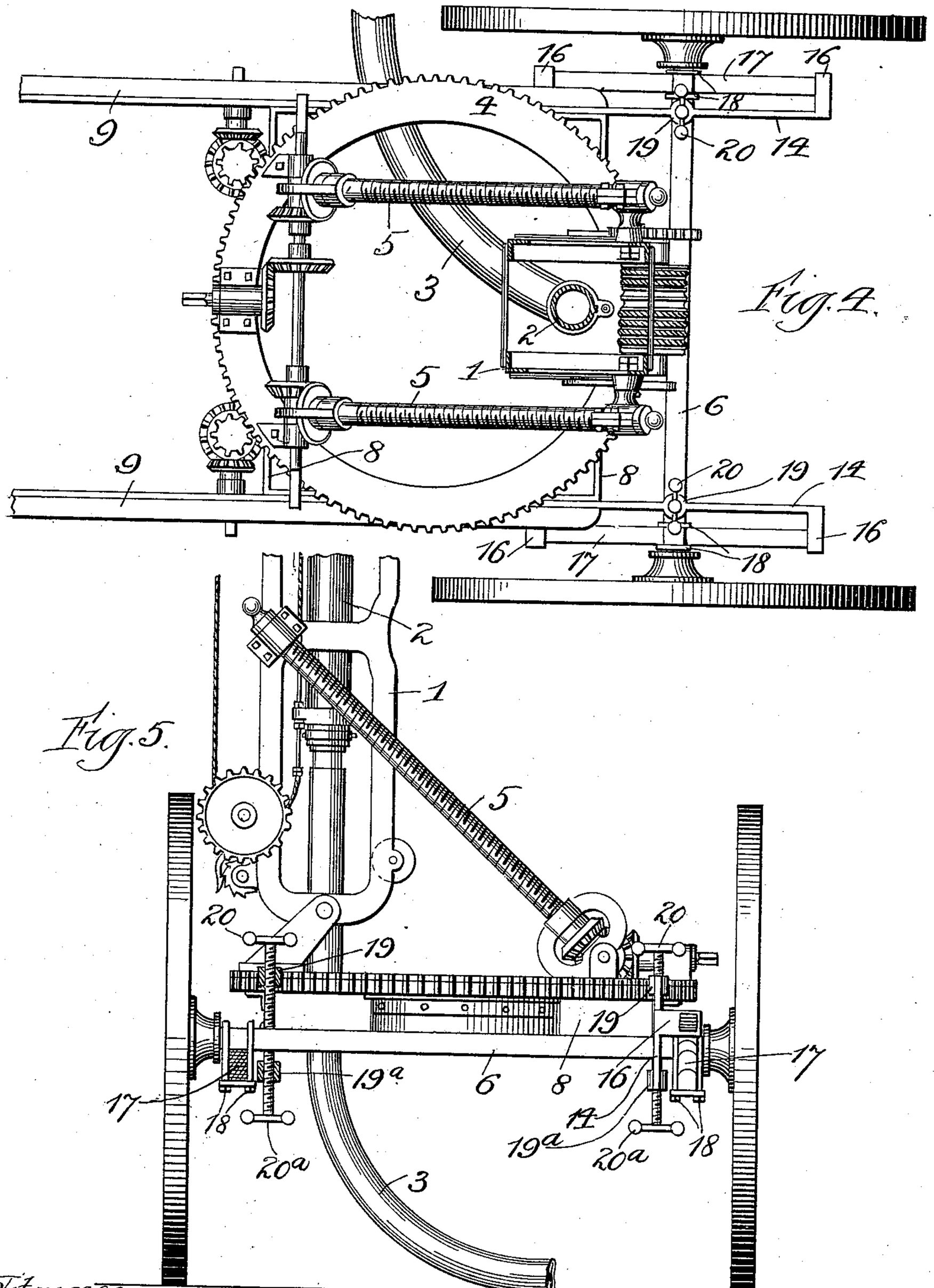

Fig. 4.

Fig. 5.

Witnesses
Wm. F. Fleming
Wm. M. Rheem.

E. F. Steck Inventor
by Elliott & Hopkins Attys

UNITED STATES PATENT OFFICE.

ERNST F. STECK, OF CHICAGO, ILLINOIS.

WATER-TOWER.

SPECIFICATION forming part of Letters Patent No. 546,627, dated September 17, 1895.

Application filed December 26, 1894. Serial No. 532,930. (No model.)

To all whom it may concern:

Be it known that I, ERNST F. STECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Water-Towers, of which the following is a full, clear, and exact specification.

My invention relates to that class of portable water-towers more especially designed for extinguishing fires, such as shown and described in United States Letters Patent No. 527,460, issued to me October 16, 1894, and to which reference may be had for an understanding of any features common to both constructions and not fully described herein.

One of the objects of my invention is to provide improved means for relieving the truck or carriage springs of the weight of the tower proper when desired; and a further object is to provide improved means for resisting the recoil resulting from the discharging stream by giving the truck or carriage frame an unequal support upon the axle.

With these ends in view my invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which the said objects and certain other objects hereinafter appearing are attained, all as fully explained with reference to the accompanying drawings, and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a side elevation of my improved tower, the upper extremity of the tower proper and the stand-pipe being broken away, and Fig. 1ª is a side elevation of such portion. Fig. 2 is an enlarged detail sectional view of a part of the frame, taken transversely of the rear axle, showing the means of supporting the frame upon the axle. Fig. 3 is a transverse sectional view of the tower proper, showing the means for supporting its forward end on the truck or carriage. Fig. 4 is an enlarged detail plan view of the rear end of the apparatus, and Fig. 5 is an end elevation thereof.

Like signs of reference indicate like parts throughout the several views.

In carrying out my present invention I mount the tower proper at the rear instead of the forward end of the carriage or truck and recline it over the forward instead of the rear end of such truck so that that portion of the tower proper which projects beyond the truck will be over the draft-animals in front of the driver, and consequently always and conveniently under his notice and care, and the truck-frame adjacent to the base of the tower proper is provided with independent lifting devices on opposite sides, which take their support or bearing upon the adjacent axle, thus relieving the springs of the weight while the apparatus is in operation, and also providing means for raising one side of the truck-frame independently of the other to counteract the recoil resulting from the discharging stream.

1 is the tower proper, in which is arranged the stand-pipe 2, which is capable of being projected from the top of the tower, as heretofore, and to the lower end of which the hose 3 is connected.

4 is the turn-table upon which the tower 1 and its lifting-screws 5 are mounted, as heretofore, the tower being hinged to the turn-table in any suitable way. The turn-table, instead of being mounted adjacent to the forward axle of the truck or at or adjacent to the mid-length of the apparatus, as in my former patent, is mounted on the extreme rear end of the carriage or truck frame in close proximity to the rear axle 6. This enables me to recline the tower 1 over the forward end of the carriage or truck so that its projecting end will be over the draft tongue or pole 7, and hence occupy the same space or room which is necessary for the said tongue or pole, and this arrangement also enables me to shorten the length of the apparatus still further by reducing the length of the truck or carriage frame, for it is obvious that to get the requisite support for the tower when reclined the truck-frame from the base of the tower to the point at which the tower rests upon the frame must bear a certain proportion to the length of the tower. When the tower is reclined over the rear end of the frame, as heretofore, this essential extent of the frame must be reckoned from a point several feet in the rear of the forward axle, because it is impossible to place the base of the tower directly over such axle, owing to the great altitude of the truck or carriage frame at that point; but when the tower is reclined over the forward end of the truck its base

may be located directly over the rear axle as the frame at that point need not necessarily be arranged at a great elevation. Hence it will be seen that according to my invention I am enabled to reduce the length of the truck or carriage frame an amount equal to the distance between the forward end of the frame as heretofore constructed and the point in the rear of the forward axle at which the base of the tower was heretofore located.

The turn-table 4 may be supported, as in my prior invention, by cross members 8, whose ends are suitably secured to the side members 9, which constitute the carriage or truck frame.

The forward ends of the side members 9 are supported as usual upon the platform 10 and carry a pair of seats 11, one on either side of the tower 1, which latter, when being lowered, descends between two stays 12 and rests upon a suitable cross-bar or support 13. The side members 9 preferably incline from the platform 10 downwardly to the turn-table 4 and then extend substantially horizontal, so as to carry the turn-table at a low elevation. Their extreme rear ends are each provided with an enlargement or plate 14, having a vertical slot 15, through which the rear axle 6 passes, as more clearly shown in Fig. 2, and on either side of this slot is a lug 16, in which the ends of the carriage or truck springs 17 are secured, the springs being also secured by clips 18 to the axle, as heretofore. At the upper end of each of the slots 15 is a lug 19, provided with a screw-threaded perforation in which works a lifting-screw 20, whose lower end is or may be supported upon the axle 6, so that, when desired, the spring 17 may be entirely relieved of the weight of the frame and tower by projecting the screws 20 downward until they impinge the axle and raise the frame 9 9 until its weight is no longer borne by the springs. It will also be seen that by this construction I provide the opposite sides of the frame 9 9 with means for effecting an unequal support upon the axle, so that when in operation, should the stream be playing toward the right, for instance, the recoil of the discharge may be counteracted by screwing the screw 20 on the left downward and raising that side of the frame until such recoil is overcome. If desired, the screws 20 and lugs 19 may be duplicated at the under side of the axle, as shown at 20^a 19^a, respectively, whereby the axle may be rigidly pinched between the two screws and thus securely bound against relative movement in either direction.

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

1. In a water tower, the combination of a tower proper, a truck or carriage having a frame provided with slotted portions an axle passing through said slotted portions, and lifting screws secured to said frame and bearing upon said axle, substantially as set forth.

2. In a water tower, the combination of a truck or carriage having a frame provided with slotted portions at the sides thereof, the rear axle arranged in said slotted portions, a tower proper supported upon the rear end of said frame and adjacent to said axle, and opposing screws arranged at the upper and lower ends of said slots respectively on each side of the frame and impinging the upper and lower sides of the carriage axle, substantially as set forth.

ERNST F. STECK.

Witnesses.
F. A. HOPKINS,
EDNA B. JOHNSON.