(No Model.) 2 Sheets—Sheet 1.

J. B. LOGAN.

WATER TOWER.

No. 311,905. Patented Feb. 10, 1885.

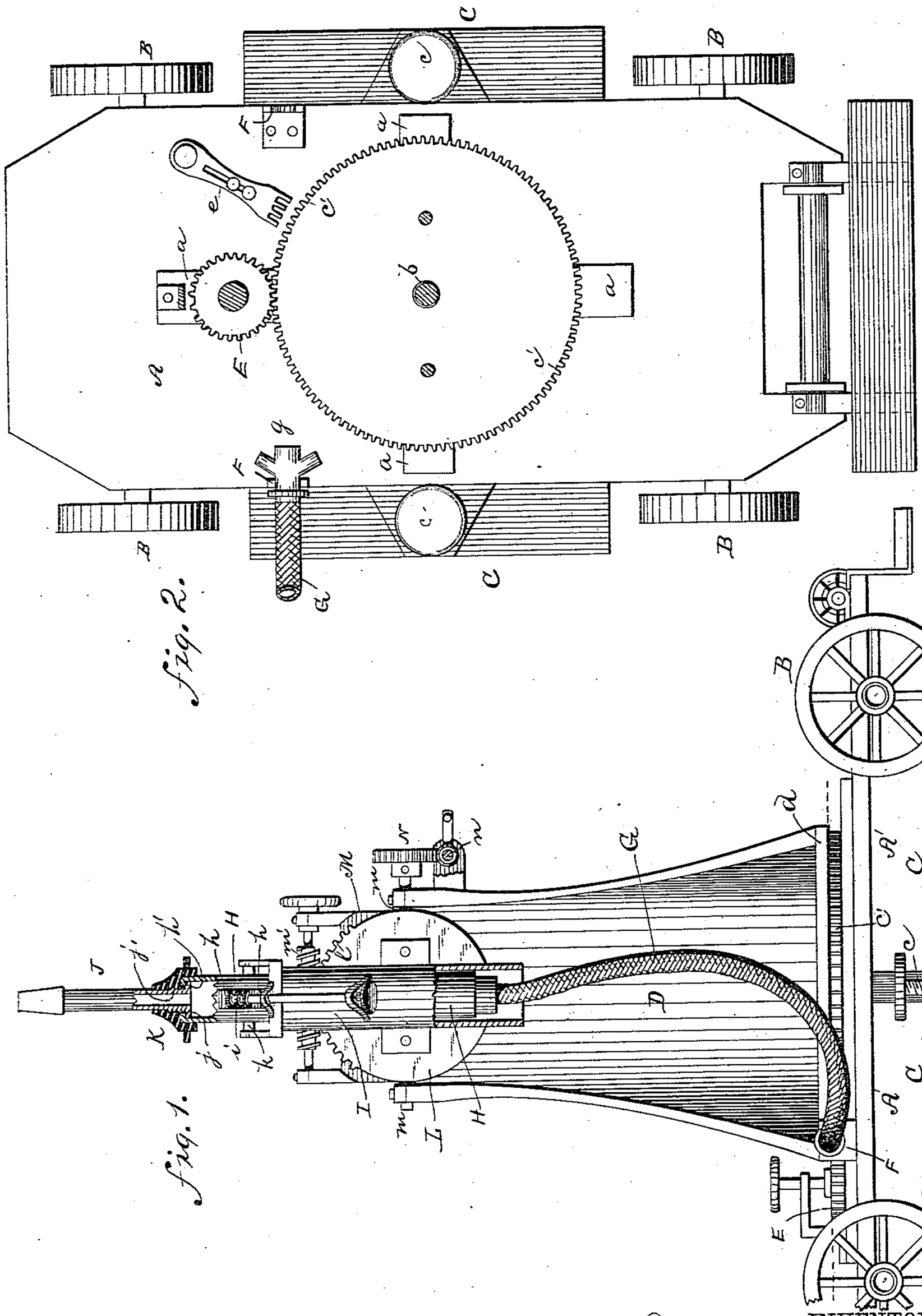


Fig. 2.

Fig. 1.

WITNESSES:

N. B. Brown

W. X. Stevens.

INVENTOR:

John B. Logan

BY Munn & Co

ATTORNEYS.

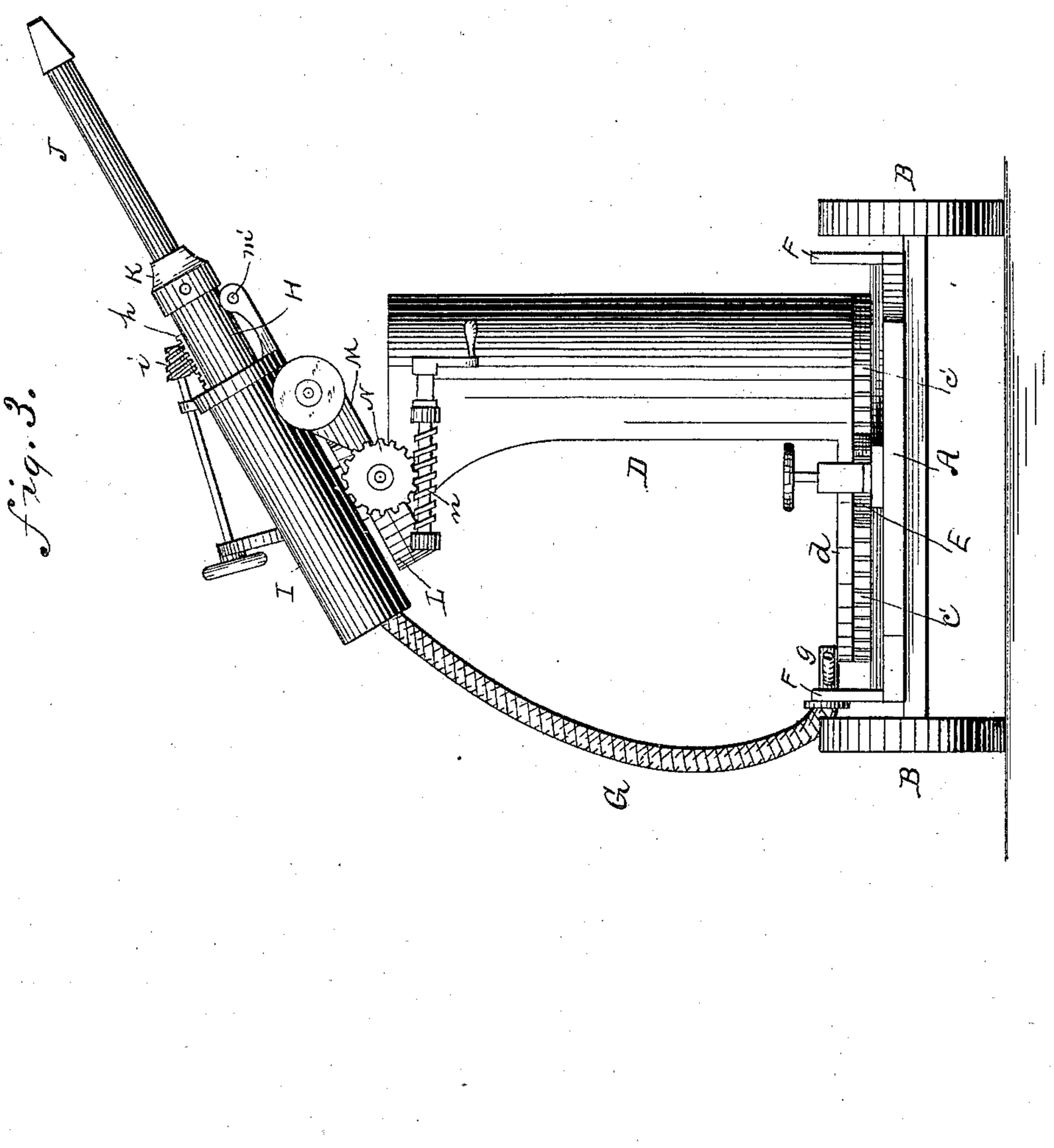
(No Model.) 2 Sheets—Sheet 2.

J. B. LOGAN.

WATER TOWER.

No. 311,905. Patented Feb. 10, 1885.

Fig. 3.



WITNESSES:

A. B. Brown

W. K. Stevens.

INVENTOR:

John B. Logan

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN BERNARD LOGAN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-THIRD TO JOSEPH P. POWER, OF SAME PLACE.

WATER-TOWER.

SPECIFICATION forming part of Letters Patent No. 311,905, dated February 10, 1885.

Application filed May 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN BERNARD LOGAN, a citizen of the United States, residing at Baltimore city and State of Maryland, have invented certain new and useful Improvements in Water-Towers, of which the following is a description.

This invention relates to that class of devices which are used to elevate a hose and pipe beside of burning buildings for the purpose of directing the stream of water therefrom into that story of the building in which the fire is; and the object of the invention is to carry on a truck a tower which shall support a pipe or nozzle at any angle of elevation and at any angle of horizontal rotation, to lengthen said pipe and secure it while under water-pressure, to fix the truck on the ground when in use, and to carry the end of the suspended hose while not in use.

To this end my invention consists in the construction and combination of parts forming a water-tower, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, part in section, of my water-tower; and Fig. 2 is a fragmentary plan view at the base of the tower. Fig. 3 is an elevation of my water-tower standing across the truck.

A represents the truck, having wheels B, and provided with two drop-legs consisting of the brackets C, having each a vertical screw, *c*, adapted to be screwed down firmly onto the ground between the wheels at each side of the truck A to hold the truck still while the tower is in use.

D represents the tower, which has a broad circular base, *d*, provided circumferentially with gear-teeth *c'*, and firmly secured to a bed-plate, *a*, resting on the truck A, by a central pivot-bolt, *b*.

E is a pinion provided with a hand-wheel, by which the tower may be rotated on the bed-plate to face in any direction.

e is a latch adapted to engage the teeth *c'* to hold the tower fixed at any point desired by the latch being slid endwise into the teeth.

F F are forked brackets, either one adapted to support the free end of the hose G, the hose-coupling *g* being hung therein when not in use.

H is the water-pipe which it is the object of this invention to carry and guide. The hose G is attached to one end of pipe H, to form a flexible connection with a fire-engine or other water-supply.

I is a sleeve, in which the pipe H telescopes, operated by a worm, *i*, engaging a rack, *h*, on the pipe H. This telescoping device is for extending the pipe to the point desired.

J is the nozzle which telescopes in pipe H, and is provided with a flange, *j*, to engage a flange, *h'*, to prevent the nozzle being forced entirely out of pipe H.

j' represents screw-threads on the nozzle to be engaged by a union-coupling, K, when the nozzle is extended to hold it in that position. The nozzle, fitting neatly in the pipe H, may be drawn forward and secured, as described, while water is being thrown through it. There may be any required number of these telescoping pipes, one within the other, to rise to the height required, each in succession being secured by a union-coupling, K.

k is a roller mounted in a bracket extending forward from the sleeve I to support the extended pipes and nozzle. The sleeve I is mounted on the tower by means of a turn-table, L, pivoted to a rocking table, M, which is journaled on the tower by trunnions *m*. The table L is provided with an arc of teeth, *l*, which are engaged by a tangent screw, *m'*, mounted on the table M, whereby the nozzle may be guided to the right and left in an arc of about ninety degrees. One of the trunnions *m* is provided with a toothed wheel, N, to be engaged by a tangent screw, *n*, which is mounted on the tower D, whereby the tables L M and the pipes thereon may be elevated or depressed to any degree required. Thus the nozzle may by these appliances be extended or guided in any direction required from the stationarily-fixed truck supporting the tower. When not in use, the screws *c* will be screwed up free of the ground to be out of the way in transportation.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the tower-carrying truck A, of drop-legs consisting of the brackets C, secured at each side thereof, and the screws *c*, adapted to be screwed vertically through the said brackets onto the ground or away from the ground, as shown and described.

2. The combination, with the truck A, provided with the bed-plate *a*, of the tower D, having the circular base *d*, with teeth *c'* around its edge, the hand-wheel pinion E, mounted to engage the teeth *c'*, and the latch *e*, fixed to the truck to slide into engagement with the teeth *c*, as and for the purpose specified.

3. The combination, with the sleeve I, carrying water-pipes, as described, and provided with the table L, having an arc of teeth, *l*, of the table M, mounted on the tower D, and provided with the tangent screw *m'* to engage the teeth *l*, as and for the purpose specified.

4. The combination, with the sleeve I, carrying water-pipes, as described, and secured to the table L, of the table M, serving as a pivoted base to table L, and hung to the tower D by means of trunnions *m*, the toothed wheel N on one of said trunnions, and the tangent screw *n*, mounted on the tower to engage the wheel N, as shown and described.

5. The combination, with the sleeve I, adjustably mounted on a tower as described, of the pipe H, having a hose, G, attached at one end, and a nozzle connected with its other end, a toothed rack, *h*, secured longitudinally upon the pipe, and a worm, *i*, hung upon the sleeve to engage the toothed rack, as and for the purpose specified.

6. The combination, with the pipe H, having a flange, *h'*, and supported as described, of the nozzle J, having a flange, *j*, at its rear end, and screw-threads *j'* in front of the flange, and a union-coupling, K, adapted to engage the screw-threads, as shown and described.

JOHN BERNARD LOGAN.

Witnesses:
W. McCORMICK,
CHAS. LENTLENTON.