

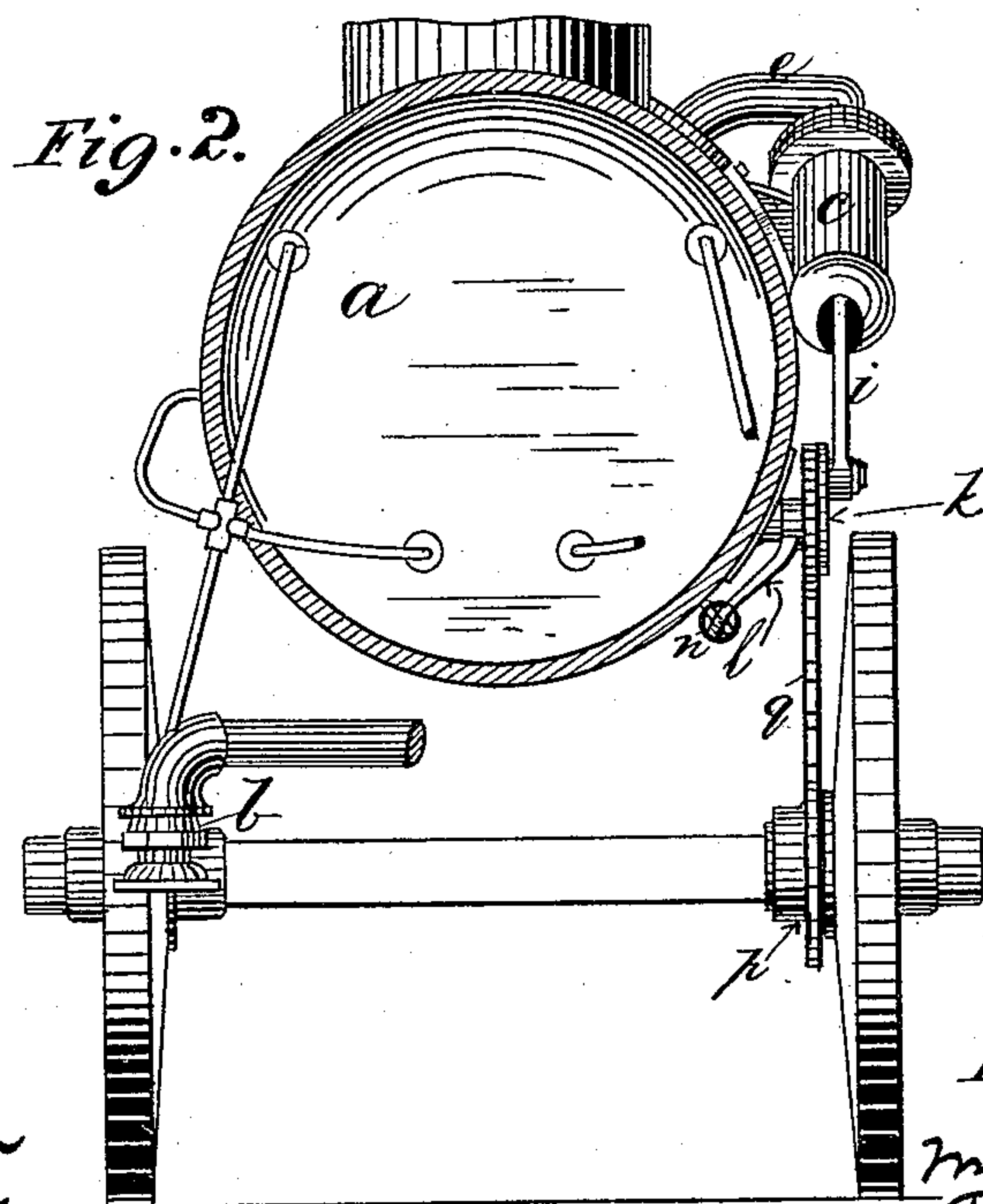
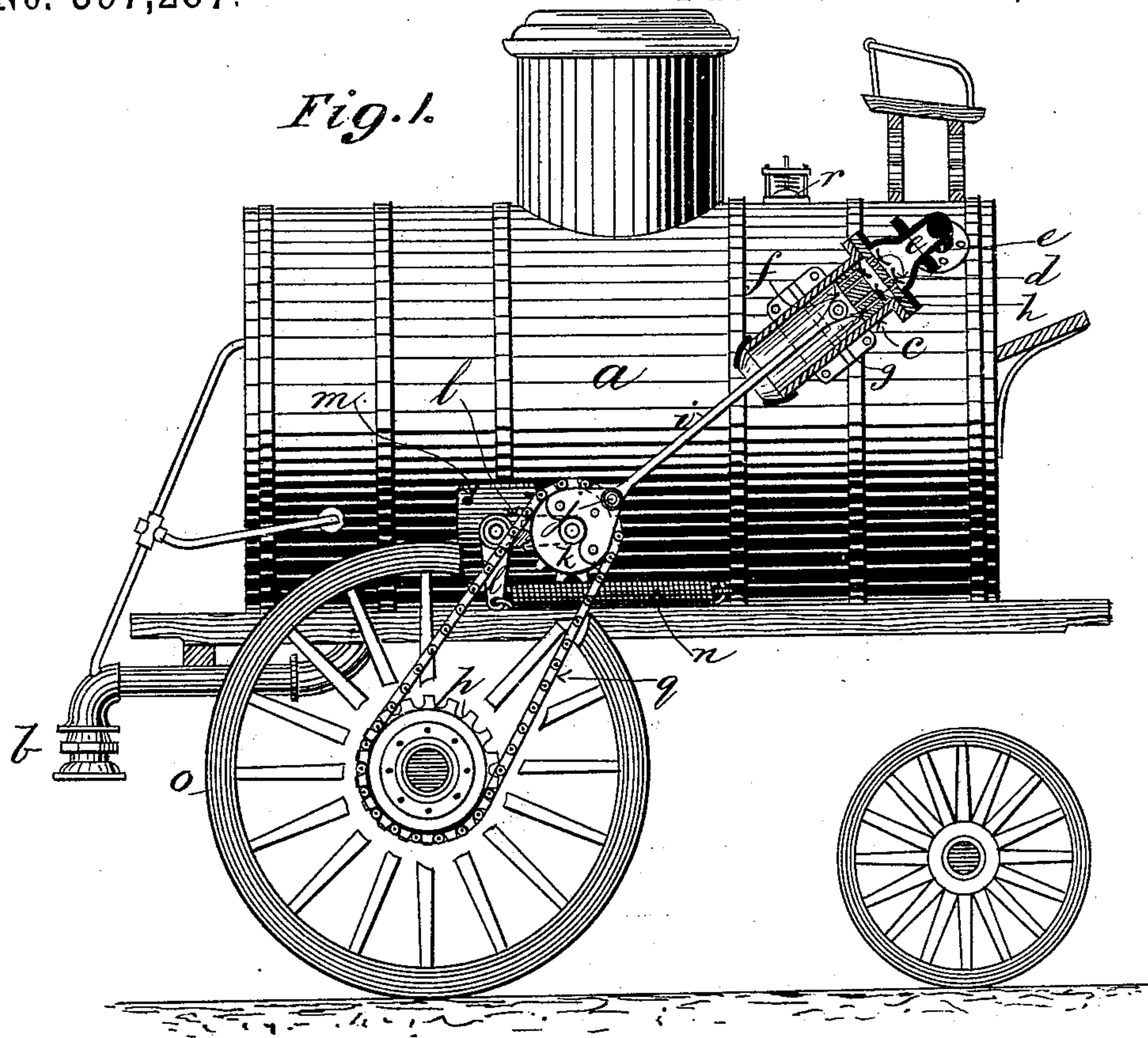
(No Model.)

M. HAUGHEY.

STREET SPRINKLING APPARATUS.

No. 397,287.

Patented Feb. 5, 1889.



WITNESSES.  
S. L. Schwader.  
J. L. Kornsby.

INVENTOR

Michael Haughey,  
Rue, Bakerwell,  
his attorney.



# UNITED STATES PATENT OFFICE.

MICHEAL HAUGHEY, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO  
JAMES GRIFFIN, OF SAME PLACE.

## STREET-SPRINKLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 397,287, dated February 5, 1889:

Application filed July 3, 1888. Serial No. 278,935. (No model.)

*To all whom it may concern:*

Be it known that I, MICHEAL HAUGHEY, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Street-Sprinkling Apparatus, of which the following is a full, clear, and exact description.

My invention relates to improved means of discharging the water used for street-sprinkling from the tank in which it is contained, and has for its object to maintain a constant pressure and spread of water at the outlets or nozzles of discharge under a varying head of water in the tank.

It consists in the application to the water-tank of an air pump or compressor, which is driven from the hub or axle of the wheel during its revolution along the roadway, so as to compress the air in the tank as the water issues therefrom, and thereby compensate for the decreasing head of water and maintain its initial pressure and volume.

On the accompanying drawings, Figure 1 represents a side elevation of so much of a street-sprinkler as is necessary for the illustration of my invention applied thereto; and Fig. 2 a rear end view thereof, like letters of reference denoting like parts in both figures.

*a* represents the tank, which contains the water to be discharged through the ordinary rear nozzles, *b*. To the tank *a* is attached an air-pump cylinder, *c*, having one end open for the free admission of air and the other end provided with delivery-valves *d*, from which the delivery-pipe *e* communicates with the space between the top of the inside of the tank *a* and the surface of the water therein.

In the pump-cylinder *c* is fitted a piston, *f*, through which are formed passages *g*, having valves *h*, which open into the cylinder *c* between its piston *e* and delivery-valves *d*. The piston *f* is coupled by a rod, *i*, to a crank-pin, *j*, projecting from the face of a chain wheel or disk, *k*, having its axis at one end of a bell-crank, *l*, which is fulcrumed to a bracket, *m*, fixed to the side of the tank *a*,

the other arm of the bell-crank *l* being held by a spring, *n*, to the tank *a*, so as to normally tend to raise the chain wheel or disk *k*. On the hub of one of the wheels *o* of the carriage supporting the tank *a* and its appendages is fixed a chain-wheel, *p*, the two chain-wheels *k* and *p* being connected by an endless chain, *q*.

As the carriage-wheels *o* revolve along the roadway, rotation is imparted by the chain-wheel *p* and endless chain *q* to the chain-wheel *k*, which causes the piston *f* to reciprocate in the cylinder *c*, so that during the outward stroke of the piston *f* air is drawn through the passages *g* and valves *h* into the space behind the piston *f*, and during the inward stroke of the latter air is forced from the said space through the delivery-valves *d* into the tank *a* and presses upon the water therein with a force corresponding to the loss of head due to the discharge of water through the nozzles *b*.

By the action of the spring *n*, attached to the bell-crank *l*, the latter, with the chain-wheel *k*, is constrained, so as to maintain the endless driving-chain *q* in a taut condition as the level of the tank *a* relatively with its carriage-wheels *o* is continually varying on the bearing-springs.

On the top or other convenient part of the tank *a*, which is air-tight, is fitted a safety-valve, *r*, for relieving any undue pressure of air within the tank *a*.

By this invention, no matter how low the water may fall in the tank, the same volume and spread of water will be maintained through the discharge-nozzles *b* as when the tank is full, and the normal pressure and discharge may be increased, if desired.

I claim as my invention—

In a street-sprinkling apparatus, the combination, with a carriage, of a water-tank mounted thereon, an air-pump mounted on the tank and delivering therein, a floating sprocket-wheel journaled on one arm of a counterbalanced bell-crank lever fulcrumed on the tank, a crank on said sprocket-wheel

for operating a piston-rod which is pivot-  
ally connected to the piston of the pump, a  
sprocket-wheel on the hub of the carriage-  
wheel, and a chain belt for communicating  
5 motion from said sprocket-wheel to the floating  
sprocket-wheel, substantially as and for the  
purposes described.

In testimony whereof I affix my signature, in  
presence of two witnesses, this 28th day of  
June, 1888.

MICHEAL HAUGHEY.

Witnesses:

S. L. SCHRADER,  
W. M. BYRNE.