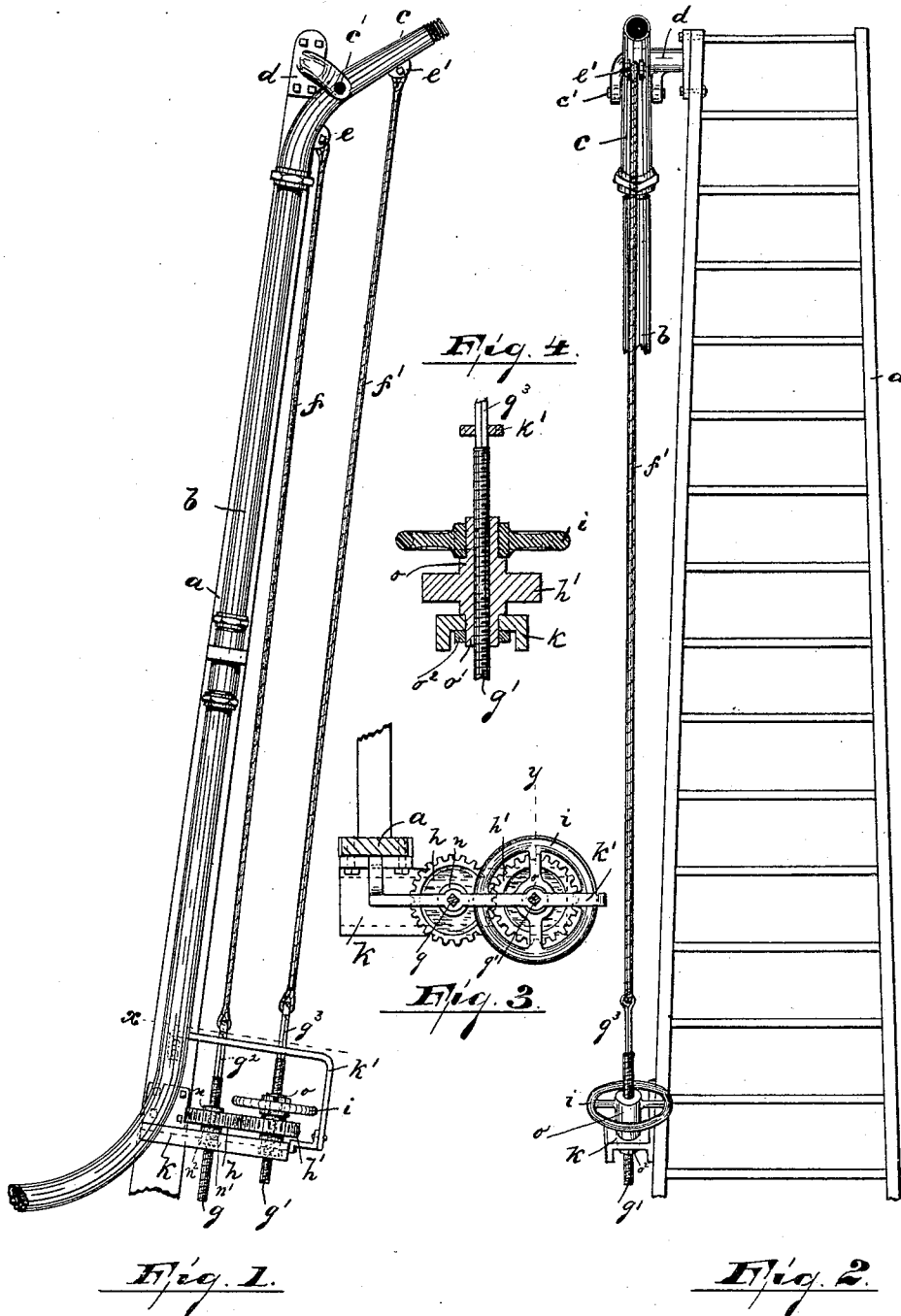


(No Model.)

T. RAWSON.
WATER TOWER ATTACHMENT.

No. 463,749.

Patented Nov. 24, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS RAWSON, OF PATERSON, NEW JERSEY.

WATER-TOWER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 463,749, dated November 24, 1891.

Application filed August 6, 1891. Serial No. 401,870. (No model.)

To all whom it may concern:

Be it known that I, THOMAS RAWSON, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Water-Tower Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a water-tower on an aerial truck with a hose and nozzle which can be directed and operated from the foot of the tower, simple and cheap in construction, easily adjusted, and not liable to get out of order.

The invention consists in the improved water-tower attachment combining therein a nozzle attached to the upper end of a hose secured to the side of the ladder of an aerial truck, means for adjusting said nozzle, and the arrangement and combination of the various parts, as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a side elevation of a portion of a water-tower with my improvement attached thereto. Fig. 2 is a front elevation of Fig. 1, looking from right to left, only a part of the hose and part of the adjusting mechanism being shown. Fig. 3 is a sectional view on line *x*, Fig. 1; and Fig. 4 is a sectional view through line *y*, Fig. 3.

In said drawings, *a* represents a ladder of an aerial truck, secured thereto in the usual manner, the connection and the truck not being shown in the drawings. To the side of the ladder is adjustably secured a hose *b*, and to the upper end of said hose a nozzle *c*, pivoted at *c'* to bracket *d*, the latter extending from and being secured to ladder *a*. The outer end of said nozzle is threaded and adapted to connect with another line of hose or an extension-nozzle. The nozzle *c* is also provided on its underside with lugs *ee'*, to which

are secured the wire ropes *ff'*. The lower ends of said ropes are attached to rods *g g'*, having their lower portions threaded (both in the same direction) and adapted to engage internally-threaded hubs *no*, carrying gear-wheels *h h'*. The hubs *no* have on their lower ends a reduced extension *n'o'*, adapted to revolve in frame *k*, which latter is secured by bolts or in any desired manner to ladder *a*. The hubs, with their extensions, are kept in place by collars *n²o²*, as shown in Fig. 4. The upper portion of rods *g g'* are squared, as at *g²g²*, to prevent their turning when the gear-wheels are operated, and are guided by passing through corresponding openings in bracket *k'*, the latter being secured to frame *k* and ladder *a*, as shown in Figs. 1 and 3. To hub *o* is also secured a hand-wheel *i* for operating the adjusting mechanism.

The operation of my device is as follows: By rotating the hand-wheel *i* the gear-wheels *h h'* are caused to revolve in opposite directions and by their internally-threaded hubs *no* produce an opposite vertical motion to each of the rods *g g'*. This motion is transmitted to the nozzle *c* by means of the wire ropes *ff'*, thus allowing the said nozzle to be raised or lowered and to be held in any desired position.

I do not intend to limit myself to the construction shown and described, as various changes can be made without changing the scope of my invention.

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

1. In a water-tower, the combination, with a ladder, of a hose adjustably secured to the side of said ladder, a nozzle connected to said hose and pivotally secured to said ladder, threaded rods arranged at the foot of the ladder and parallel therewith, wire ropes connecting said rods with the said nozzle, and gear-wheels controlling the motion of said rods, all said parts being arranged and adapted to operate substantially as described and set forth.

2. In a water-tower, the combination, with a ladder, of a hose adjustably secured to the side of the ladder, a nozzle connected to said hose and pivotally secured to a bracket on said ladder, gear-wheels adapted to mesh into

each other, threaded rods adapted to be operated by said gear-wheels, and wire ropes connecting said rods with the nozzle, all said parts being adapted to operate substantially as described, and for the purposes set forth.

5 3. In a water-tower, the combination, with a ladder, of a hose adjustably secured to said ladder, a nozzle connected to said hose and pivoted to said ladder, gear-wheels meshing
10 into each other, a frame secured to the foot of the ladder and serving as a support for said gear-wheels, rods provided on their lower portions with threads and adapted to be op-

erated by gear-wheels, guides for said rods, a hand-wheel operating said gear-wheels, and 15 wire ropes to connect said rods with the nozzle, substantially as described, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of August, 1891. 20

THOMAS RAWSON.

Witnesses:

ALFRED GARTNER,

ALFRED A. VAN HOVENBERG.