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M. W. HENNESSEY.

FIRE ESCAPE AND WATER TOWER.

No. 578,989. Patented Mar. 16, 1897.

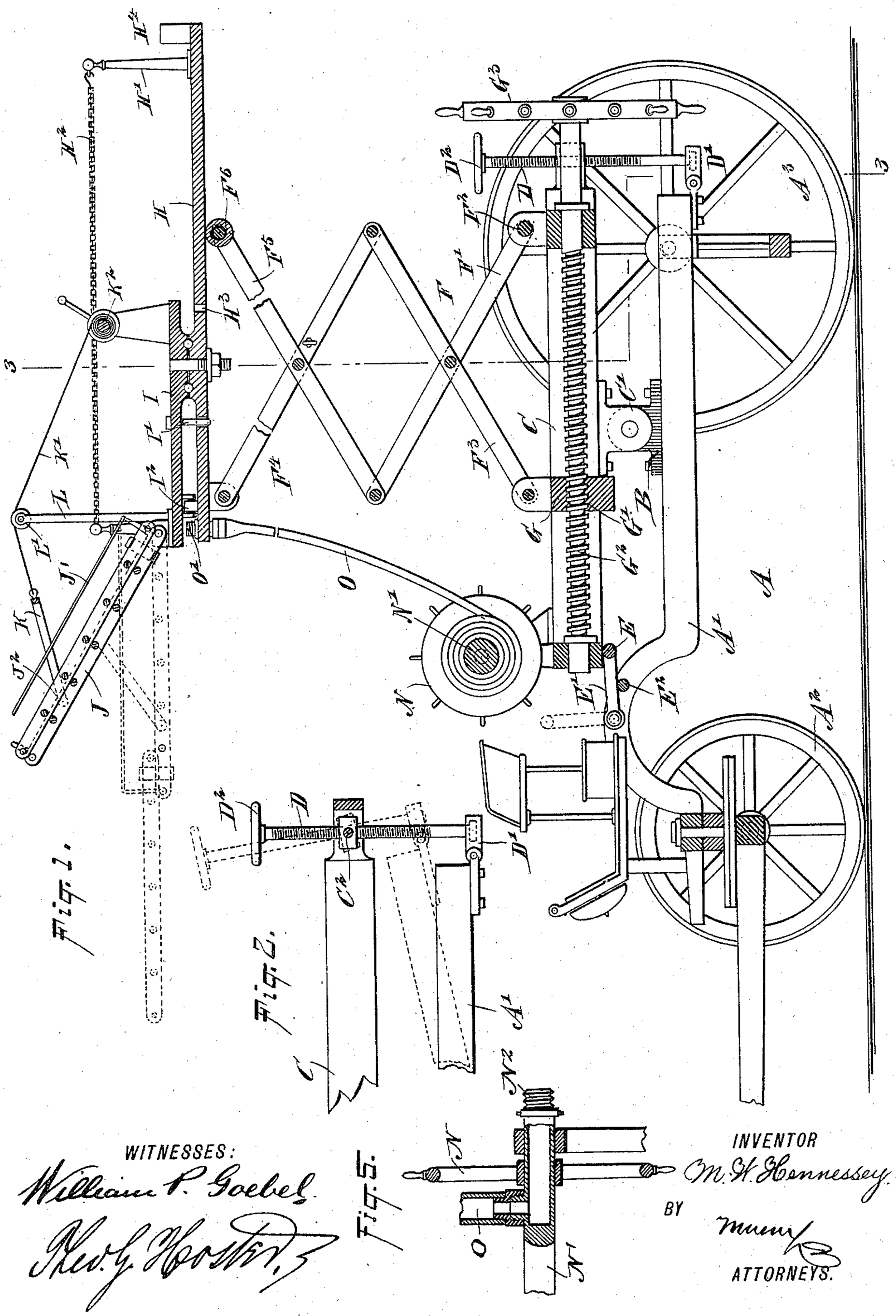

Fig. 1.

Fig. 2.

Fig. 5.

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Fig. 3.

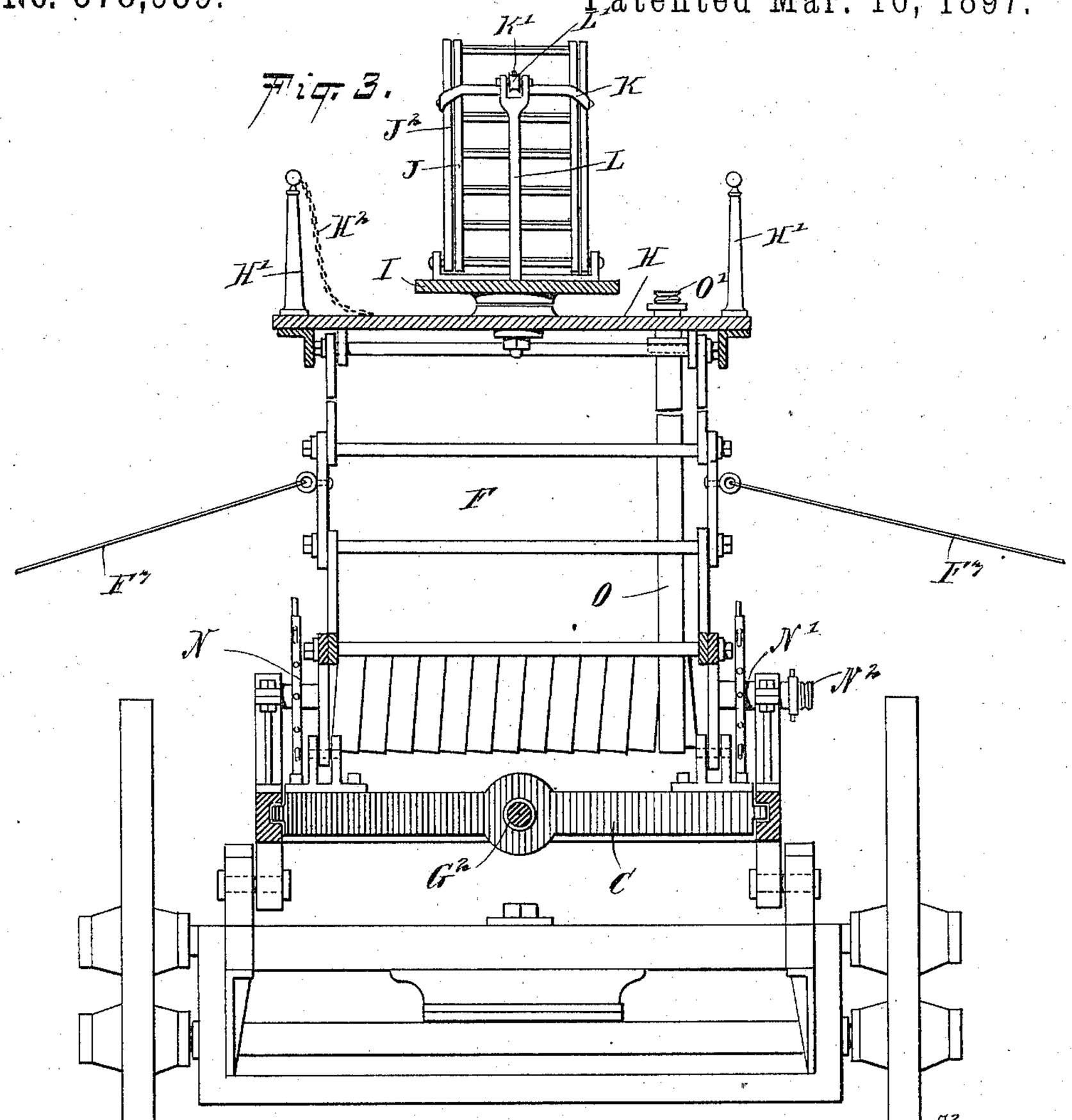
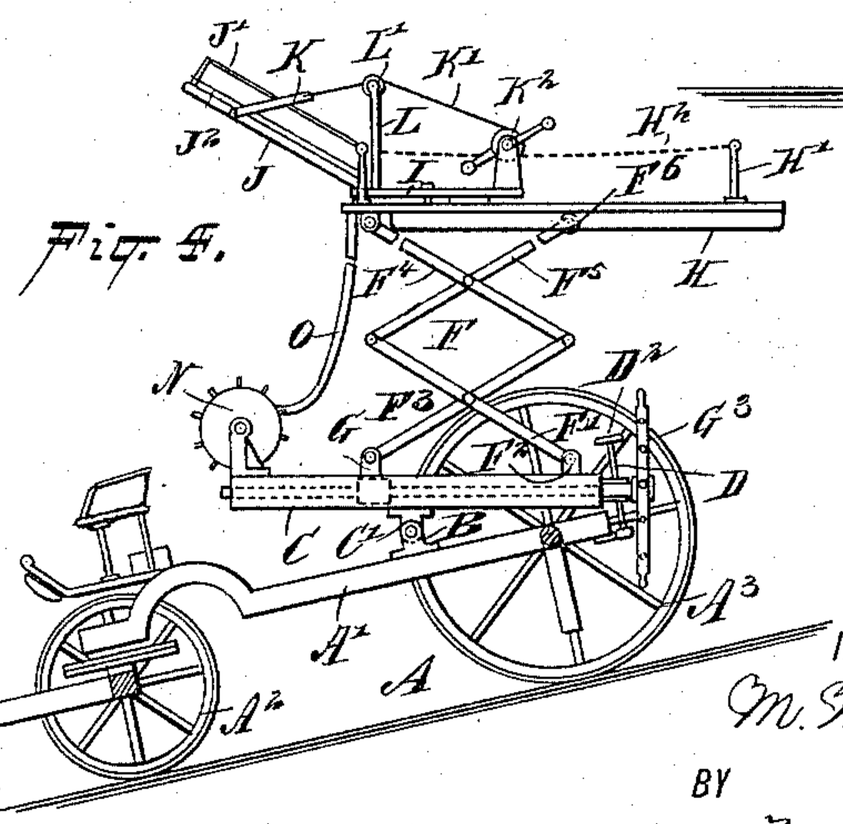


Fig. 4.



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UNITED STATES PATENT OFFICE.

MICHAEL W. HENNESSEY, OF BROOKLYN, NEW YORK.

FIRE-ESCAPE AND WATER-TOWER.

SPECIFICATION forming part of Letters Patent No. 578,989, dated March 16, 1897.

Application filed June 13, 1896. Serial No. 595,392. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL W. HENNESSEY, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Fire-Escape and Water-Tower, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fire-escape and water-tower arranged to permit of conveniently raising and lowering a platform to make connection with windows, so as to enable firemen to enter the upper stories of a building for rescuing persons and to enable the firemen to throw streams of water from the raised platform into the burning building.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is a like view of the platform-frame-leveling device. Fig. 3 is a transverse section of the improvement on the line 3 3 of Fig. 1. Fig. 4 is a reduced side elevation of the improvement with the truck in an inclined position, and Fig. 5 is a detail section to be hereinafter described.

The combination fire-escape and water-tower is mounted on a truck A, having a suitable frame A′ and front wheels A^2 and rear wheels A^3.

On the sides of the frame A′ are secured brackets B, in which are fulcrumed lugs C′, secured to the sides of a platform-frame C, adapted to be swung into a level position whenever the truck A stands in an inclined position, as indicated in Fig. 4.

In order to move the platform-frame C into this position, I provide the rear end of the frame with a swiveled nut C^2, in which screws a screw-rod D, fulcrumed at its lower end at D′ to the rear end of the truck-frame A′, as plainly shown in Figs. 1 and 2, the upper end of the said screw-rod being provided with a suitable hand-wheel D^2 for conveniently turning the said rod to impart a swinging motion to the frame C until the latter is level.

The forward end of the frame C normally rests on a cross-bar E, held on two arms E′, pivoted to the sides of the frame A′, the said arms resting on a cross-bar E^2, connecting the sides of the frame A′ with each other. Now when the frame C is moved to a horizontal position at the time the truck A stands down an incline, as shown in Fig. 4, then the front end of the said frame C moves away from the cross-bar E. When, however, the truck A stands up an incline, then the arms E′, with the rod E, are first swung into a vertical position, as shown in dotted lines in Fig. 1, to permit the front end of the frame C to pass downward between the sides of the truck-frame A′.

It is understood that when the device is to be used the platform-frame C must stand in a level position irrespective of the position of the truck A.

The platform-frame C carries two pairs of connected lazy-tongs F, of which the lower members F′ are pivotally connected with a stationary part or bracket F^2 on the said frame C, and the other lowermost members F^3 are pivotally connected with a cross-piece G, fitted to slide longitudinally in suitable bearings in the frame C, the said cross-piece being formed with screw threads or nuts G′, in which screws the longitudinally-extending screw-rod G^2, mounted to turn in suitable bearings in the ends of the frame C. The outer rear end of the said screw-rod G^2 carries a hand-wheel G^3, under the control of the operator, so as to turn the said screw-rod G^2 to cause the cross-piece G to move forward or backward in the frame C to insure a closing or opening of the lazy-tongs F.

The uppermost member F^4 of each lazy-tong is pivoted to the side of the platform H near its forward edge, while the remaining uppermost members F^5 of the lazy-tongs are each provided at their free ends with a friction-roller F^6, loosely engaging the under surface of the main platform H. The platform H is provided on its sides and ends with posts H′, adapted to carry removable chains H^2, forming a railing for the said platform.

On the platform H is mounted to turn a turn-table I, adapted to be secured to the said platform by a pin I′, held on the turn-table and engaging one of a series of openings H^3,

formed in the platform H. Thus on withdrawing the pin I′ the turn-table may be swung to any position and then locked in place by again inserting the said pin I′.

One end of the turn-table I is extended a suitable distance from the center of the turn-table, and on the under side of this extended portion is arranged a roller I^2, traveling on the top surface of the platform H. On the free end of the extended portion of the turn-table is pivoted one end of a ladder J, engaged near its free end by a yoke K, connected with a rope K′, passing over a pulley L′, journaled in the upper end of a post L, attached to the turn-table I. The rear end of the rope K′ winds on a windlass K^2 of any approved construction and held on the said turn-table I. Thus by the operator manipulating the windlass K^2 the ladder J may be swung into any desired angular position so as to connect the turn-table I and platform H with the window of the building to permit the firemen to pass from the said platform and turn-table to the building for rescuing persons. The ladder J may be of the extension kind by having additional sections J^2, and a suitable railing J′ may also be provided for the said ladder.

On the front end of the frame C is journaled a reel N, one end of the shaft N′ of which is hollow to permit of connecting the outer end of the hollow shaft by a coupling N^2 with a water-pipe connected with a suitable source of water-supply, the inner end of the said hollow shaft being connected with one end of a hose O, normally wound on the said shaft. This construction is shown in Fig. 5. The other end of this hose O extends upwardly and connects with a threaded pipe O′, secured in the platform H and adapted to receive a hose-nozzle to permit the fireman to throw a stream of water directly from the platform H into the burning building.

In order to steady the lazy-tongs of the platform and parts supported thereby at the time the lazy-tongs are extended, I preferably connect the sides of the said lazy-tongs to guy-rods F^7, (see Fig. 3,) which guy-rods may be secured to the ground.

It is understood that when the device is used the turn-table I can be swung into the desired direction to face the building, and the corresponding chain H^2 on this side of the platform is then unhooked and removed to permit of manipulating the ladder J, as above described.

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

1. A fire-escape, provided with a platform adapted to be raised and lowered, a turn-table mounted on the said platform, a ladder pivoted on the said turn-table, a yoke connected with the said ladder, a rope connected with the said yoke, and a windlass held on the said turn-table and on which winds the said rope, substantially as shown and described.

2. A fire-escape, provided with a platform adapted to be raised and lowered, a turn-table mounted on the said platform, a ladder pivoted on the said turn-table, a yoke connected with the said ladder, a rope connected with the said yoke, a windlass held on the said turn-table and on which winds the said rope, and a post carrying a pulley over which passes the said rope, the said post being held on the said turn-table, substantially as shown and described.

3. A fire-escape, provided with a truck, a platform-frame pivoted on the said truck, and a cross-bar adapted to support the free end of the said platform-frame, the said cross-bar being held on arms pivoted to the truck-frame, substantially as shown and described.

MICHAEL W. HENNESSEY.

Witnesses:
GEORGE FILES,
GEORGE A. CALDWELL.