No. 735,410. PATENTED AUG. 4, 1903.

J. J. PLUCKER.

FIRE WAGON.

APPLICATION FILED FEB. 7, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 2.

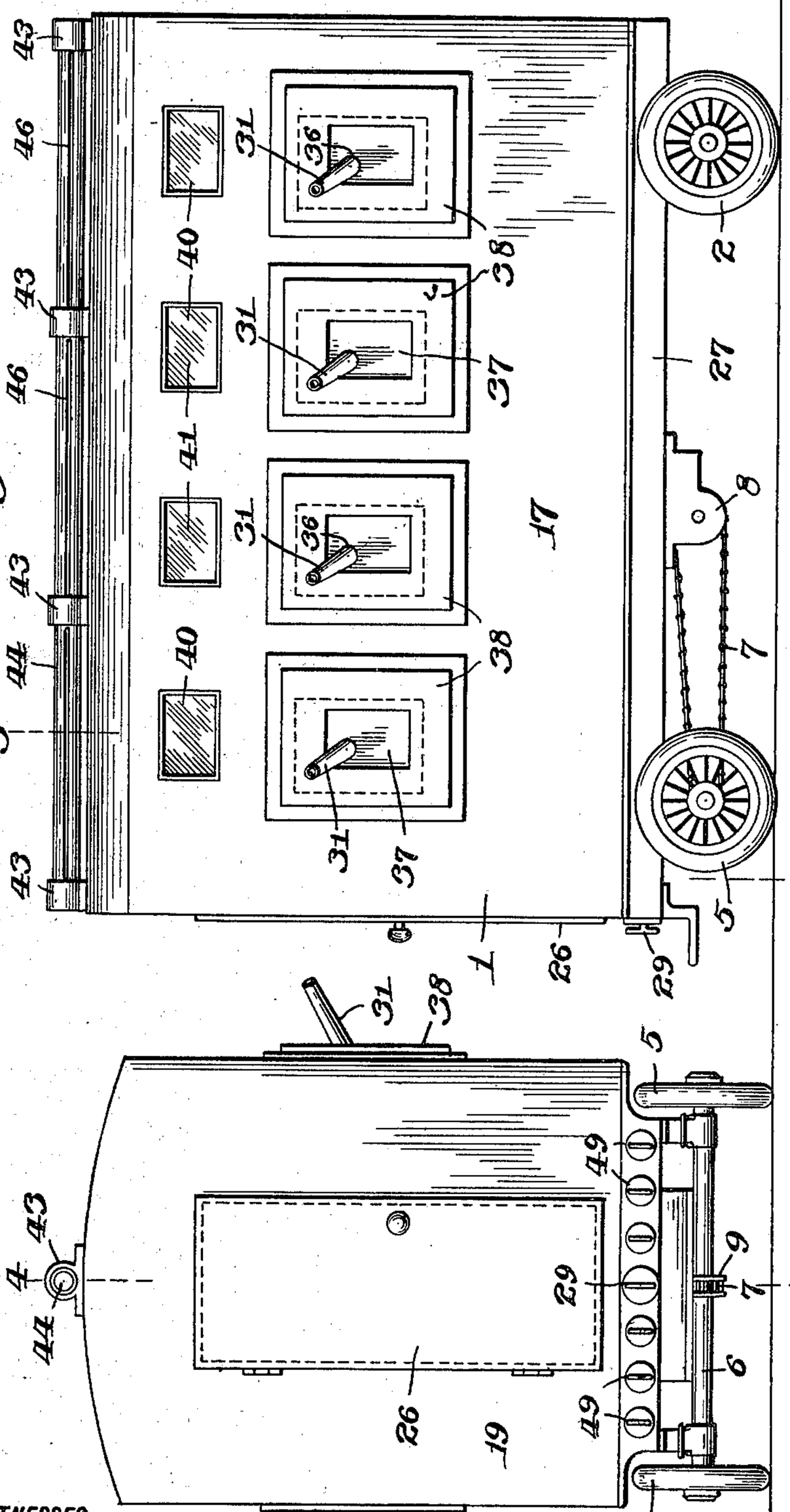

Fig. 1.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.

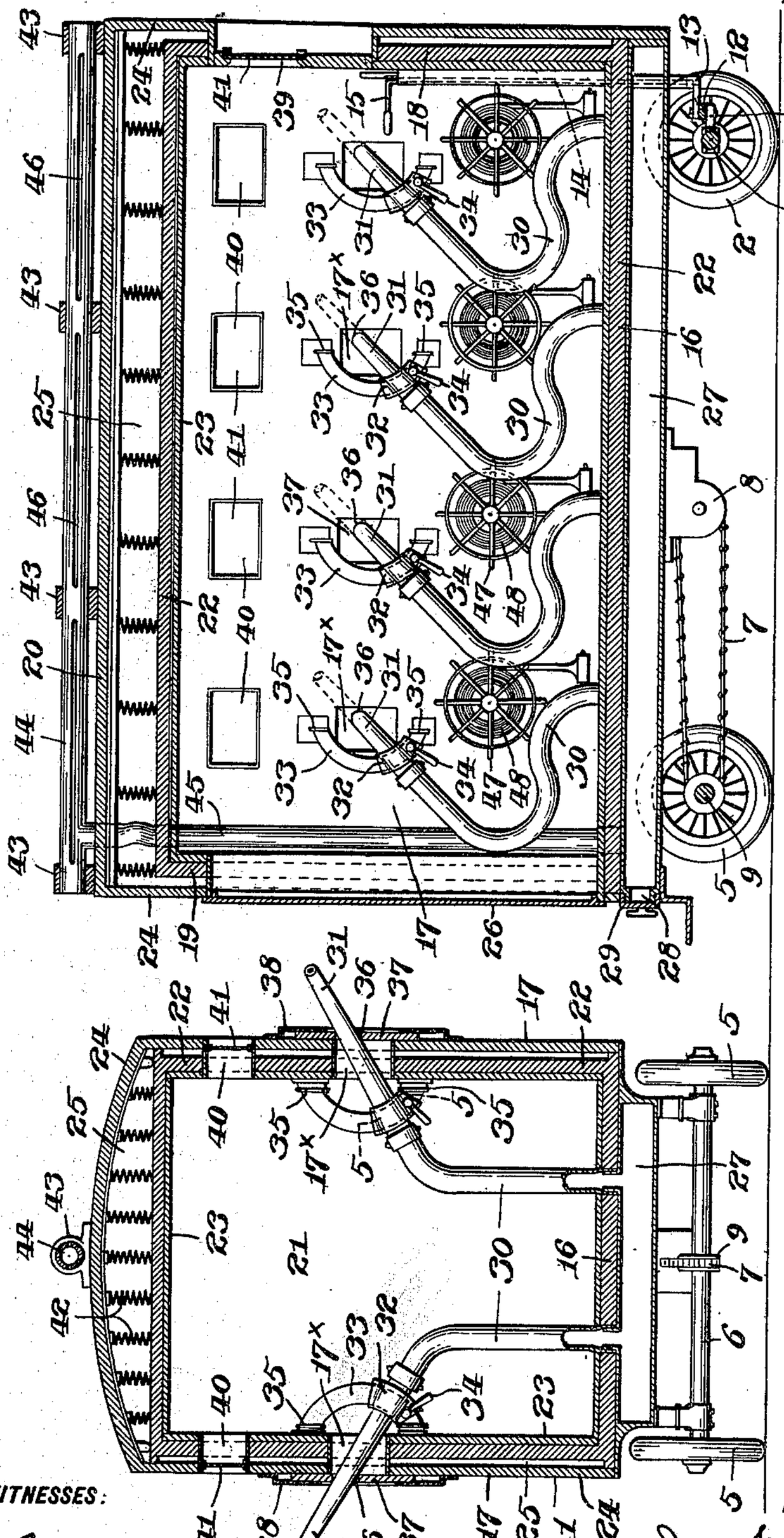

Fig. 3.

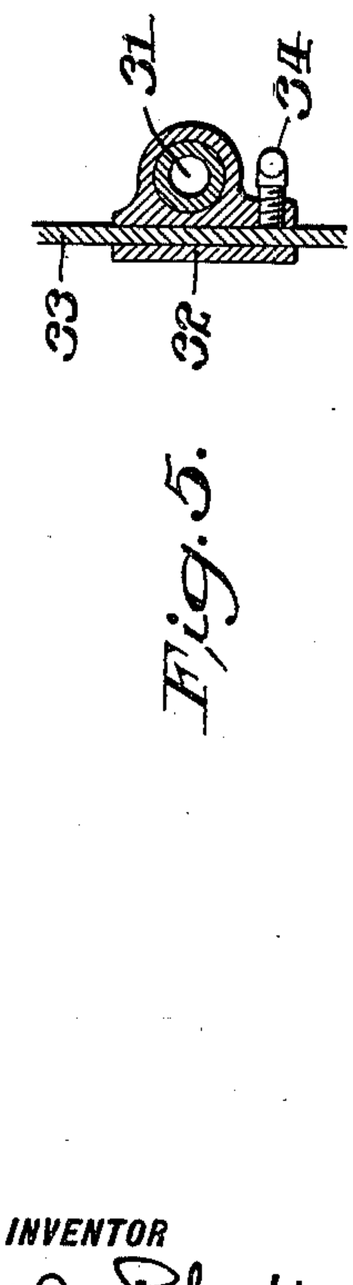

Fig. 5.

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UNITED STATES PATENT OFFICE.

JACOB J. PLUCKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CATHERINE A. PLUCKER, OF PHILADELPHIA, PENNSYLVANIA.

FIRE-WAGON.

SPECIFICATION forming part of Letters Patent No. 735,410, dated August 4, 1903.

Application filed February 7, 1903. Serial No. 142,263. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. PLUCKER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Wagons, of which the following is a specification.

The object of this invention is to provide a power-driven firemen's wagon which may be run very close to a burning building and at the same time afford protection to the occupants of the wagon while they are fighting the fire.

With this object in view the invention consists in the novel construction and combinations of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is an end elevation of the wagon. Fig. 2 is a side elevation thereof. Fig. 3 is a transverse section as on the line 3 3 of Fig. 2. Fig. 4 is a longitudinal section as on the line 4 4 of Fig. 1. Fig. 5 is a sectional detail as on the line 5 5 of Fig. 3.

1 designates the body of the wagon, and 2 5 the front and rear carrying-wheels, respectively. The rear wheels 5 are secured to the axle 6, which is driven by a chain 7, passing from a motor 8 to and around a sprocket-wheel 9, secured to said axle. The motor 8 is secured to the under side of the wagon and may be of any suitable well-known construction.

The front wheels 2 are mounted on brackets 10, which are pivoted to the respective ends of the front axle similar to the well-known automobile construction. The brackets 10 are provided with forwardly-extending arms 11, which are connected by a bar 12, the latter being connected to an arm 13 on the lower end of a vertical rod 14. The upper end of this rod 14 is provided with a conveniently-located handle 15, by means of which the rod 14 may be operated to shift the bar 12, and thereby adjust the wheels 2 to guide the wagon.

The body of the wagon comprises the bottom 16, the side walls 17 17, the end walls 18 19, and the top 20, which incloses a chamber 21 of any convenient size to accommodate a predetermined number of firemen.

I preferably construct the body of the wagon of steel 22, having an inner lining of wood 23 and an outer covering of asbestos 24, there being provided an air-space 25 between the steel 22 and asbestos 24.

The rear wall 19 is provided with a hinged door 26, by means of which access may be had to the chamber 21.

The bottom of the wagon is provided with a water-chamber 27, having an inlet 28, adapted to receive one end of a hose, whereby water may be supplied to said chamber. When the hose is disconnected from the inlet, the latter may be closed by a suitable screw-cap 29.

Arranged along each side of the interior of the chamber 21 are a series of flexible pipes 30, the lower ends of which are connected to the water-chamber 27. The upper end of each of these pipes is connected to the inner end of a nozzle 31, which projects outwardly through an opening $17^{\times}$ in the side wall. Each nozzle is secured to a block 32, which is slidingly fittted to a segmental bracket 33, the block 32 being provided with a suitable hand-screw 34, by means of which the block may be secured in its positions of adjustment.

If the block be adjusted upwardly, the angle of the nozzle will be changed to direct the stream of water downwardly, and if the block be adjusted downwardly the angle of the nozzle will be changed to direct the stream of water upwardly.

The brackets 33 are pivoted, as at 35, to the side walls 17, above and below the openings $17^{\times}$, so that if the bracket be moved to the right the angle of the nozzle will be changed to direct the stream of water to the left, and if the bracket be moved to the left the angle of the nozzle will be changed to direct the stream of water to the right. Thus it will be seen that the nozzles 31 have a compound vertical and lateral adjustment and that when the wagon is located adjacent to a burning building the nozzles may be adjusted to direct the water from the water-chamber 27 to all parts of the building.

The nozzles 31 project through openings 36 in plates 37 of fireproof material, which close the openings $17^{\times}$. These plates are adjustably held against the exterior of the side

walls by suitable frames 38, within which the plates 37 are adapted to move when the nozzles 31 are being adjusted.

The front wall 18 is provided with a window 39 above the handle 15, and the side walls 17 17 are provided with windows 40 above the nozzles 31, through which the firemen can see when guiding the wagon or manipulating the nozzles. These windows are closed by any suitable material 41, which will not be readily effected by the heat—such, for example, as mica.

The outer covering for the top of the wagon is made flexible and is supported by a series of springs 42, contained in the air-space 25, so that should any falling bodies strike the top of the wagon a cushioning action will be effected and the otherwise liability of injuring the wagon greatly decreased.

Mounted on suitable brackets 43 on the top of the wagon is a longitudinally-disposed pipe 44, which is connected to the water-chamber 27 by a pipe 45, the upper end of the latter being flexible to permit the cushioning action above described. The sides of the pipe 44 are provided with elongated openings 46, which discharge water from the said pipe. The water thus discharged flows over the top and down the sides of the wagon, and thereby assists in keeping the temperature of the chamber 21 down and also in protecting the wagon from the fire.

I preferably provide the wagon with reels 47, on which are wound flexible pipes 48, the ends of which are adapted to be attached to outlets 49 in the rear of the water-chamber 27. These outlets are closed by screw-caps 50, similar to the inlet 28. This enables the firemen to attach the pipes 48 to the water-supply and carry said pipes into the burning building when the fire is not great.

I claim—

1. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, means for connecting a source of water-supply to the wagon, and means for discharging the water from the wagon.

2. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a flexible top on said chamber, and springs supporting said flexible top.

3. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a water-chamber, means for connecting a source of water-supply to said chamber, and a series of discharge-nozzles connected to said water-chamber.

4. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a nozzle projecting through an opening in said casing, means for supporting and adjusting said nozzle, and means for connecting a source of water-supply to said nozzle.

5. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a nozzle projecting through an opening in said casing, an adjustable plate surrounding said nozzle and closing said opening, means for adjusting said nozzle, and means for connecting a source of water-supply to said nozzle.

6. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a pivoted bracket mounted on the inner side of said casing, a nozzle adjustably mounted on said bracket and projecting through an opening in said casing, and means for connecting a source of water-supply to said nozzle.

7. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a segmental bracket pivoted to the inner side of said casing, a block adjustably mounted on said bracket, a nozzle mounted on said block and projecting through an opening in said casing, and means for connecting a source of water-supply to said nozzle.

8. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, means for connecting a source of water-supply to the wagon, means for discharging the water from the wagon, a pipe provided with discharge-openings and extending along the top of the wagon, and means for connecting said pipe with the source of water-supply.

9. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a water-chamber, means for connecting a source of water-supply to said water-chamber, a flexible discharge-pipe, and means for detachably connecting said pipe to said water-supply.

10. In a fire-wagon, a fireproof casing inclosing a chamber, supporting-wheels therefor, a motor for driving said wheels, a water-chamber, means for connecting a source of water-supply to said water-chamber, a reel carried by said wagon, a flexible pipe carried by said reel, and means for detachably connecting said pipe to said water-chamber.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB J. PLUCKER.

Witnesses:
HARRY PARKIN,
RALPH H. GAMBLE.