

APPLICATION FILED NOV. 20, 1911.

Patented Feb. 20, 1912.

2 SHEETS—SHEET 1.



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1,018,338.

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FIRE APPARATUS.
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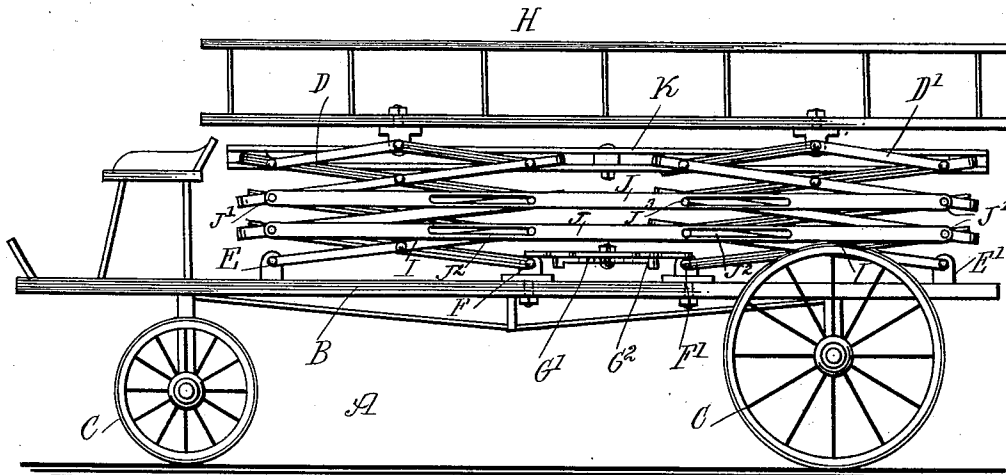


Fig. 2

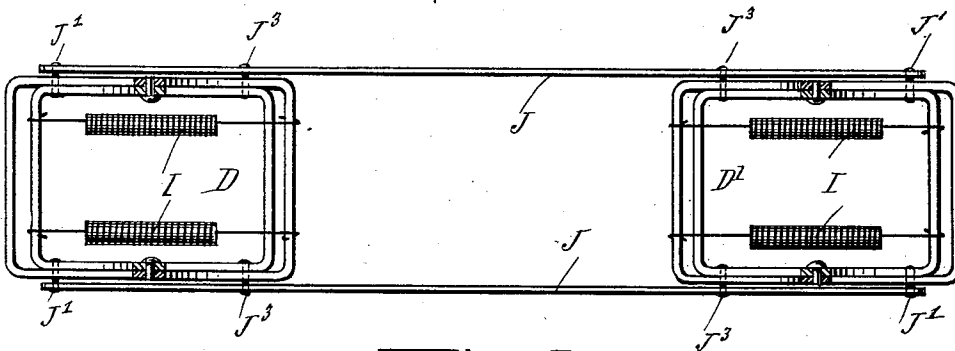


Fig. 4

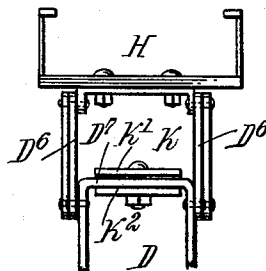


Fig. 6

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FIRE APPARATUS.

1,018,338.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed November 20, 1911. Serial No. 661,248.

To all whom it may concern:

Be it known that I, HARRY PINES, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Fire Apparatus, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fire apparatus for lowering persons from the upper floors of a building to the sidewalk and for lifting firemen, hose and other fire-fighting apparatus to upper floors of buildings with a view to permit of conveniently fighting a fire in a building. For the purpose mentioned, use is made of a truck on which are mounted two pairs of raising and lowering lazy tongs carrying at their upper ends a platform, the lower outer members of the lazy tongs being pivotally connected with the truck, and the lower inner members being connected with slides mounted on the truck, and an actuating or operating lazy tong pivotally connecting the said slides with each other and adapted to be opened and closed, to extend or fold the said raising and lowering lazy tongs to raise or lower the platform.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the fire apparatus with the parts in extended position; Fig. 2 is a sectional plan view of the same on the line 2—2 of Fig. 1; Fig. 3 is a side elevation of the fire apparatus with the parts in folded position; Fig. 4 is an enlarged sectional plan view of the pair of raising and lowering lazy tongs, the section being on the line 4—4 of Fig. 1; and Fig. 5 is an end elevation of the platform and the upper ends of the lazy tongs.

A truck A of any approved construction is provided with a flat body B mounted on wheels C, and on the top of the said body B are mounted spaced raising and lowering lazy tongs D and D', having their lower outer members D², D³ pivotally connected with bearings E fixed on the truck body B. The inner lower members of the lazy tongs D and D' are pivotally connected with slides F, F' mounted to slide lengthwise toward and from each other in suitable guideways B' formed or arranged on the truck

body B. The inner members D⁴ and D⁵ are also connected at their lower ends with the ends of an actuating lazy tong G disposed horizontally immediately above the truck body B, and the middle members of this operating lazy tong G are provided with extensions to form handles G' and G² for opening and closing the lazy tong G either by hand or by power. It is understood that when the handles G' and G² are moved apart then the lazy tong G is opened to cause the raising and lowering lazy tongs D and D' to open in an upward direction, and when the handles G' and G² are swung toward each other then the lazy tong G is closed and with it the lazy tongs D and D', so that the latter move into the folded position shown in Fig. 3. The upper members D⁶ of the lazy tongs D and D' are pivotally connected at their fulcrums with the under side of a platform H adapted to move up or down on extending or folding the lazy tongs D and D' in the manner just described. The platform H is adapted to carry persons from an upper story of a building down to the sidewalk and to carry firemen, hose and other fire-fighting apparatus from the sidewalk up to an upper story of the building for effectively fighting a fire therein.

In order to render the opening and closing of the lazy tongs D and D' as easy as possible with a minimum amount of power expended for working the handles G' and G², use is made of counterbalancing springs I connecting corresponding members of the lazy tongs D and D' with each other, as will be readily understood by reference to Figs. 1, 3 and 4. When the lazy tongs D and D' move downward into folded position the springs I are placed under tension, and when the lazy tongs D and D' are extended then the springs I assist in the extension or opening of the lazy tongs and consequently comparatively little power is required at the handles G' and G² for extending the lazy tongs D and D' with a view to raise the platform H.

It is understood that when the persons step on the platform H and lower the same a descent is readily had in a safe manner as the springs I are placed under tension and consequently undue danger or shock is prevented on the lowering of the platform H and its load.

In order to steady the lazy tongs D and D' during their opening and closing move-

ment, use is made of links J pivotally connected at J' with the pivotal connections of outer pairs of members of the lazy tongs D and D', the links J being provided with elongated slots J² engaging the pivots J³ for a corresponding pair of members of the other lazy tong D'. A connecting link K is pivotally connected with extensions D⁷ of the outer members next below the uppermost members D⁶, and the inner members of the said second uppermost members of the lazy tongs D and D' are provided with extensions D⁸ slidably engaging the links K. Thus when the lazy tongs D and D' are opened and closed the links J and K tend to steady the said lazy tongs to prevent sidewise wobbling and also to cause uniform opening and closing of the lazy tongs D and D'.

The link K preferably consists of two parallel members K¹ and K² connected with each other at their middle by a block K³ and connected with each other at their ends by blocks K⁴ pivotally engaged by the extensions D⁷ previously referred to. Thus when the lazy tongs D and D' open and close the extensions D⁸ slide from and toward each other in the guideway formed by the members K¹ and K² of the link K.

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

1. A fire apparatus, comprising a truck, a pair of raising and lowering lazy tongs having the outer lower members pivoted on the said truck, a platform pivotally attached to the upper ends of the said pair of lazy tongs, slides mounted to slide toward and from each other on the said truck and connected with the inner lower members of the said pair of lazy tongs, and an actuating lazy tong disposed horizontally and connected with the lower inner members of the said pair of lazy tongs.

2. A fire apparatus, comprising a truck, a pair of raising and lowering lazy tongs having the outer lower members pivoted on the said truck, a platform pivotally attached to

the upper ends of the said pair of lazy tongs, slides mounted to slide toward and from each other on the said truck and connected with the inner lower members of the said pair of lazy tongs, and an actuating lazy tong disposed horizontally and connected with the lower inner members of the said pair of lazy tongs, the said actuating lazy tong having its middle members extended to form handles for opening or closing the said actuating lazy tong.

3. A fire apparatus, comprising a truck, a pair of raising and lowering lazy tongs having the outer lower members pivoted on the said truck, a platform pivotally attached to the upper ends of the said pair of lazy tongs, slides mounted to slide toward and from each other on the said truck and connected with the inner lower members of the said pair of lazy tongs, an actuating lazy tong disposed horizontally and connected with the lower inner members of the said pair of lazy tongs, and springs connected with corresponding members of each of the said pair of lazy tongs to counterbalance the same.

4. A fire apparatus, comprising a truck, a pair of raising and lowering lazy tongs having the outer lower members pivoted on the said truck, a platform pivotally attached to the upper ends of the said pair of lazy tongs, slides mounted to slide toward and from each other on the said truck and connected with the inner lower members of the said pair of lazy tongs, an actuating lazy tong disposed horizontally and connected with the lower inner members of the said pair of lazy tongs, and connecting and guiding links connecting the pair of lazy tongs with each other.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY PINES.

Witnesses:

THEO. G. HOSTER,
PHILIP D. ROLLHAUS.