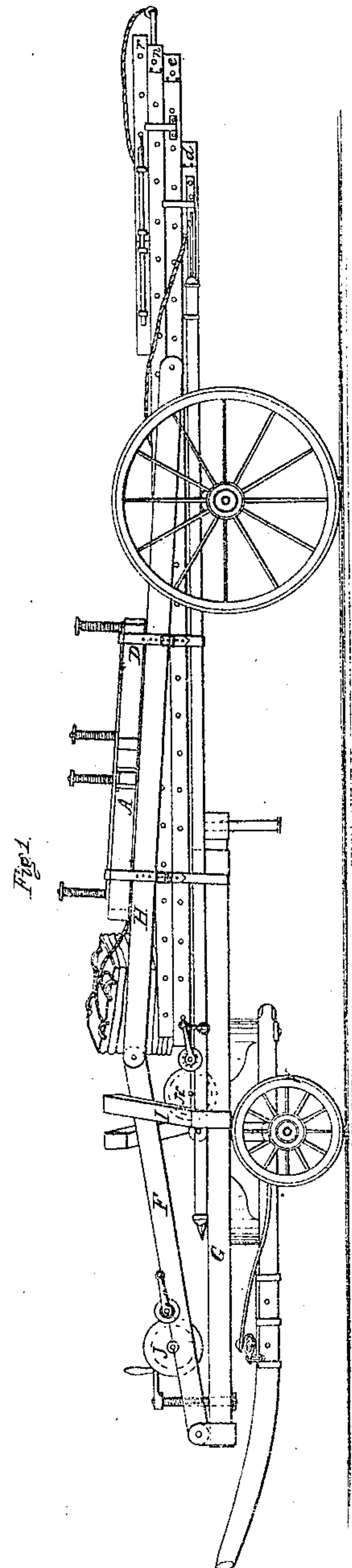
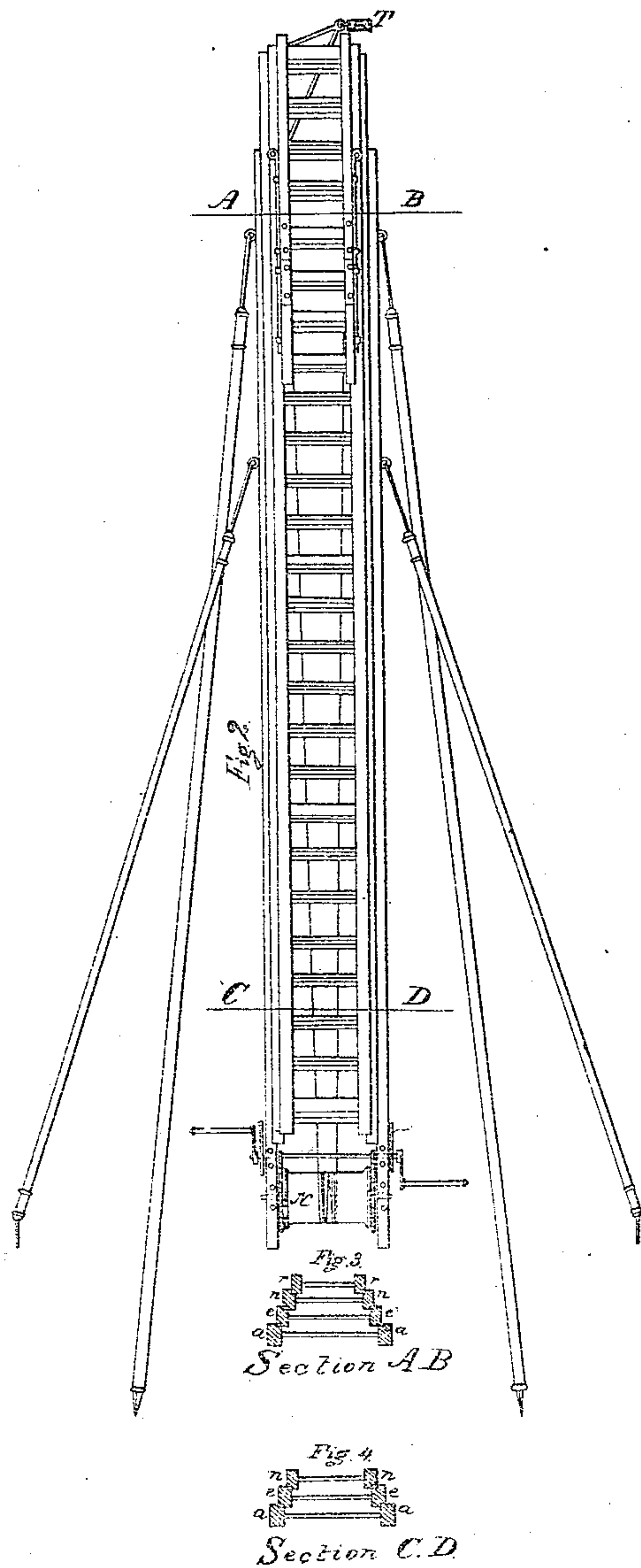


C. Weidling.

Fire Escape.

N^o 67,239.

Patented Jul. 30, 1867.



Witnesses:
Chas. Webb
Chas. Kunkel

Inventor:
Carl Weidling

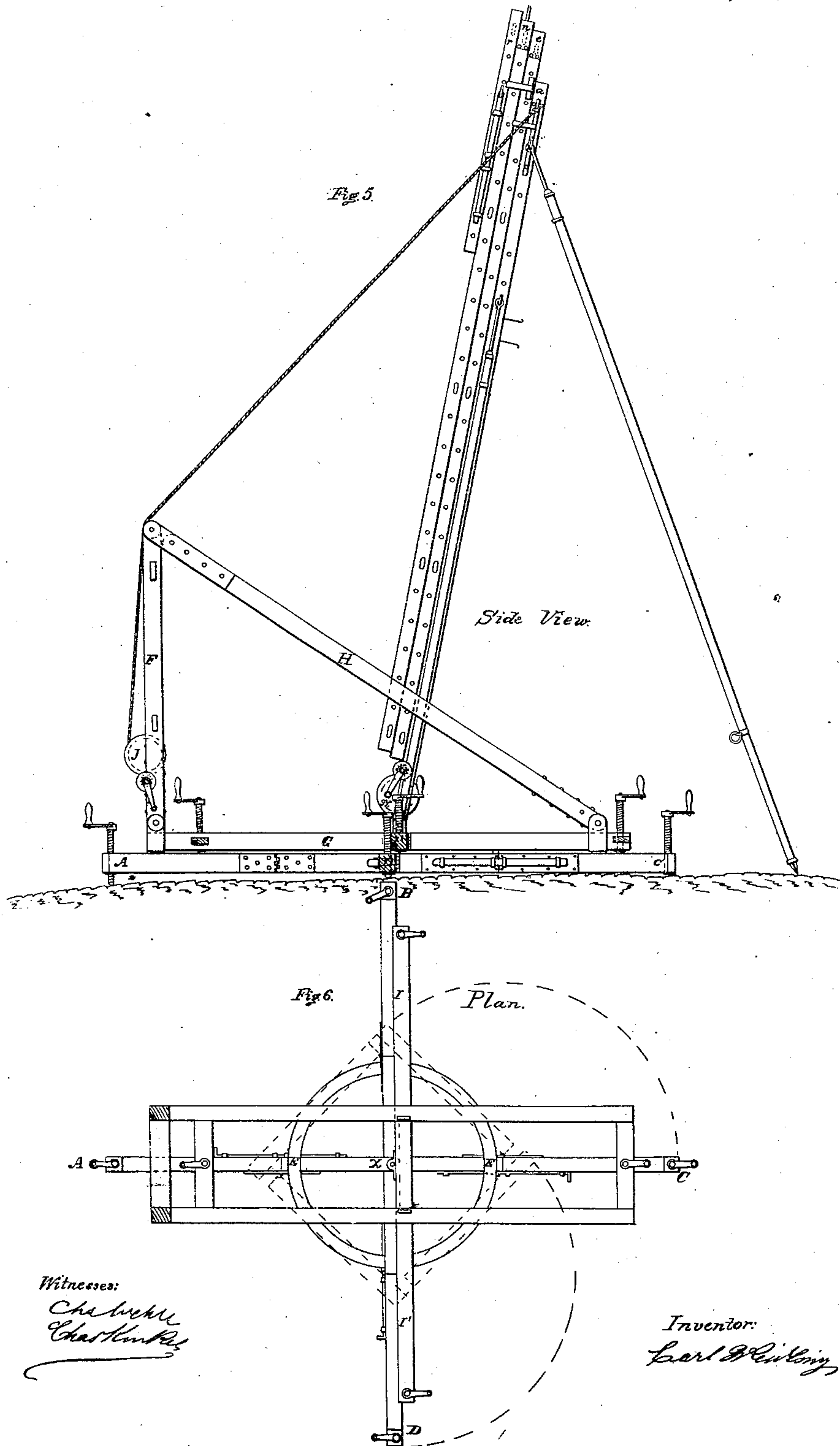
C. Weidling.

Sheet 2-4, Sheet 5.

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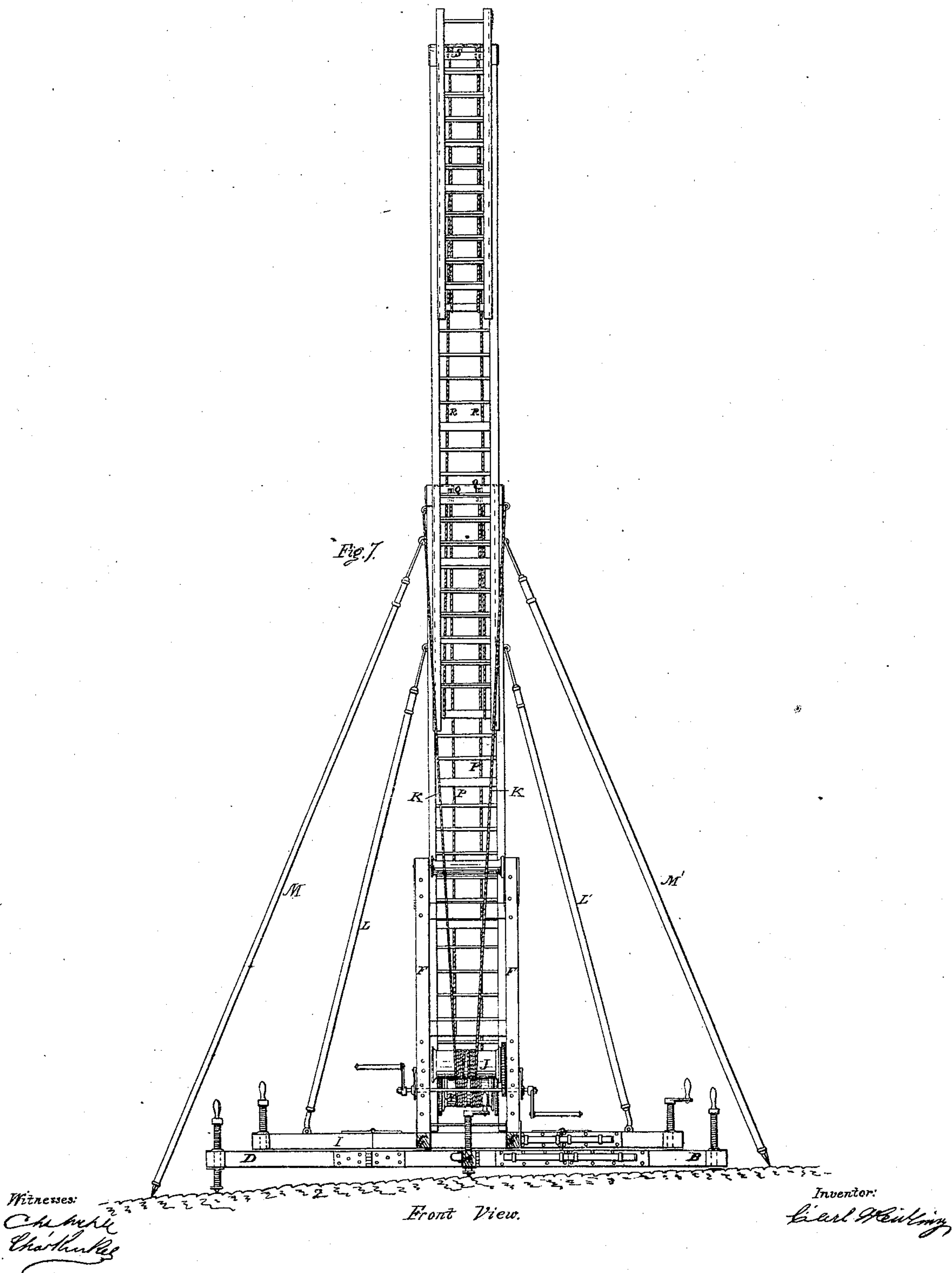
C. Weidling.

Sheet 3-4, Sheet 5.

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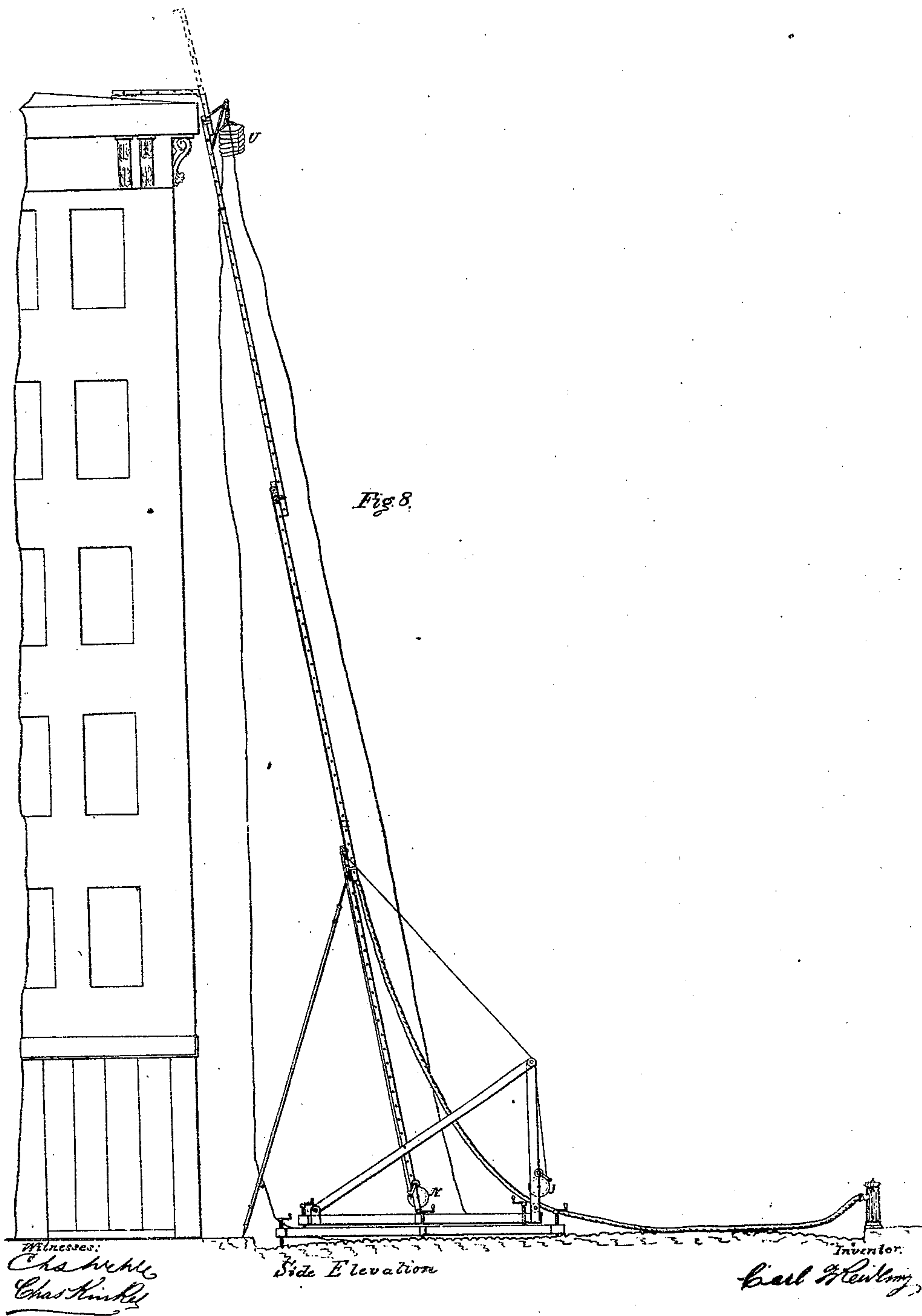
C. Weidling.

Sheet 4-4, Sheets.

Fire Escape.

No 67,239.

Patented Jul. 30, 1867.



United States Patent Office

CARL WEIDLING, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, ALEXANDER LIEDER, AND CHARLES KINKEL.

Letters Patent No. 67,239, dated July 30, 1867.

IMPROVED FIRE-ESCAPE.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, CARL WEIDLING, of the city of New York, have invented a new and improved Fire-Escape; and I do hereby declare the following to be a full and exact description thereof, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 represents a side view of the said fire-escape, placed on the wheels ready for transportation.

Figure 2 represents the ladders when detached from the wagon.

Figure 3 represents a cross-section of the ladder through line A B of fig. 2.

Figure 4, a cross-section thereof through line C D of fig. 2.

Figure 5 represents a side view of the frame and ladder.

Figure 6 is a horizontal view of the frame.

Figure 7 is a front view of the fire-escape partially drawn out.

Figure 8 is a side elevation of the fire-escape fully drawn out and ready for use.

The same letters of reference mark the same parts in all the figures.

The frame of this fire-escape consists of two strong beams, A C and B D, framed crossways together so as to form a right angle, on which is placed an iron ring, E E, which serves as a turn-table for the upper part of the frame, consisting of a horizontal beam, G, a vertical beam, F, and a slanting beam, H, connected with both of the other beams, F and G'', which, being hinged at their ends, permit the said upper part of the frame to be either in the position shown in figs. 8 and 5, or as shown in fig. 1. The beams A C and B D are also hinged each into two parts, so that they may be folded together when the escape is to be placed on the carriage. Screws with handles are attached to each end of the said lower beams, for the purpose of permitting the base or frame to be made level. J represents a windlass placed between the two vertical beams F F, with a crank on each side. This windlass is connected by means of two ropes or chains, K K, to the lower part of the ladder, and serves to bring the ladder into an upright position, and in order to sustain the ladder when in that position, the same is provided with four movable supports, L L' and M M', the two former of which may be fastened to a horizontal frame-beam, I, by bolts, and the two supports M M' serve to steady the ladder on the street or sidewalk. The ladder itself consists of several distinct parts, *a a*, *e e*, *n n*, and *r r*, the side pieces of which are grooved so that the part *e e* will slide in part *a a*, *n n* will slide in *e e*, *r r* in *n n*, as shown in figs. 2, 3, and 4. In order to effect a simultaneous sliding movement of all the parts of the ladder, a windlass, N, is placed between the two side pieces *a a*, on the lower end thereof, over which two ropes or chains, P P, are passing, first upwards over two rollers or pulleys, Q Q, and then downwards to the lower end of the second part *e e*, to which the said ropes or chains are fastened. Two other ropes or chains, R R, are fastened on the upper end of *a a*, pass over two pulleys, S S, which are fixed to the upper end *e e*, thence downwards to the lower end of *n n*, to which they are fastened. In a similar manner the upper part of the ladder *r r* is fastened to the part *n n*. T represents a pulley fixed to the part *n n* of the ladder, with which a bag, U, is connected, so that the same may be raised or lowered at pleasure, said bag being used for the purpose of saving persons or property, which may be placed therein and lowered to the street. Each of the said windlasses is connected with cranks, gearing-wheels, and ratchets, so that they may be turned and stopped at pleasure. The upper part of the ladder *r r* is partly hinged, whereby the same may be easily fastened horizontally to the roof or window, as shown in fig. 8. The whole apparatus may be turned on the turn-table E E, so that the ladder may be made to face in any desirable direction. When the ladder is in the position shown by fig. 2, and the windlass N is turned to the right, the three upper parts, *e e*, *n n*, and *r r*, will simultaneously slide upwards, until the whole ladder is elevated to its greatest height, as shown in fig. 8. When in that position it may be shoved down again by turning the windlass N N to the left, when all the parts will slide downwards.

A long car or carriage, shown in fig. 1, is used for the purpose of moving this fire-escape to the place where it may be required. During its transportation it is folded together as shown in fig. 1, and drawn by horses or other means to the place of destination. When there the lower frame A B C D is removed from the upper part of the ladder, (on which it is placed during its transportation,) then the fore wheels V are removed from under

the apparatus; the frame is placed under the apparatus, so that the bolt X of the said frame is fitted into a corresponding hole of the upper frame-beam I. The upper frame F G H is then brought in the position shown in fig. 5. The windlass J is then turned until the folded ladder is drawn up, in a nearly vertical position, as shown in fig. 5. Then the windlass N is turned until the ladder is unfolded, as shown in fig. 8, when the hinged part of the highest part of the ladder is fastened to the roof, window, or other part of the house, and is ready for use. Before being so fastened it is of course turned on the turn-table E E to the position best suited for that purpose. The supports L L' and M M' are used to steady the apparatus during its elevation, and also during the time that it is in actual use. If, after the extinguishment of the fire, the apparatus is to be removed again, the said apparatus is again folded by means of the windlasses, the supports are withdrawn; and after the ladders are lowered they and the frames are brought on the carriage and removed.

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

1. The upper frame F G H, with its windlass I and chains or ropes K K, all combined with the ladder as and for the purpose set forth.

2. In combination with the upper frame, constructed and arranged as described, I claim the lower frame A B C D with its turn-table, as and for the purpose set forth.

CARL WEIDLING.

Witnesses:

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HENRY WEHLE