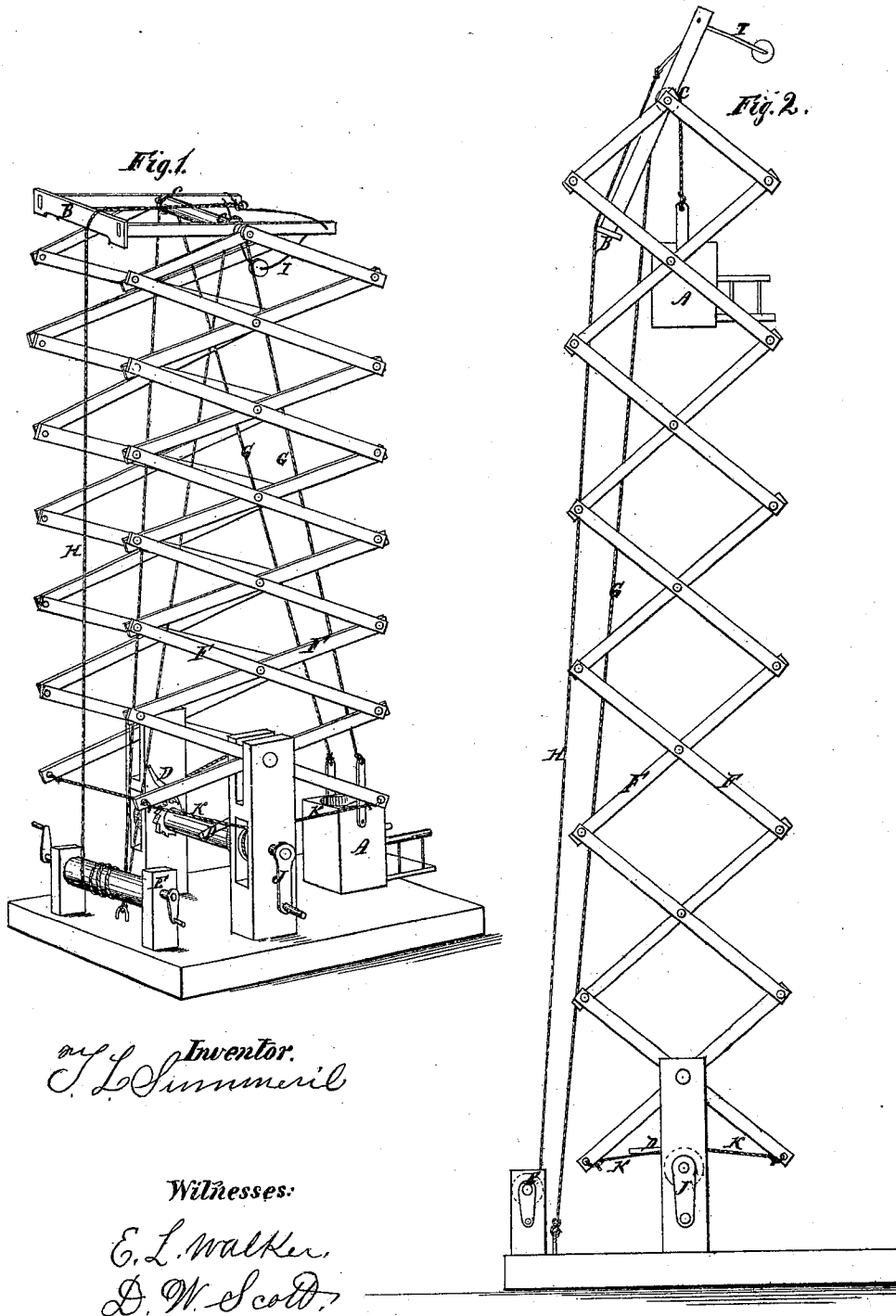


T. L. Summeril,

Fire Escape.

No. 112,982.

Patented Mar. 21. 1871.



United States Patent Office.

THOMAS L. SUMMERIL, OF JUDA, WISCONSIN.

Letters Patent No. 112,982, dated March 21, 1871.

IMPROVEMENT IN FIRE-ESCAPES.

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

To all whom it may concern:

Be it known that I, THOMAS L. SUMMERIL, of Juda Post Office, Green county, Wisconsin, have invented a new and useful Device for Elevating and Lowering different Materials, especially adapted to rescuing persons from buildings on fire; and I do hereby declare that the following is a full, clear, and exact description of the same, its construction and operation, reference being had to the annexed drawing making a part of this specification, in which—

Figure 1 is a perspective view, showing the car or box in a position ready to be elevated,

Figure 2 showing the same when elevated and ready to come down.

Similar letters of reference indicate like parts in the drawing.

My invention consists in the apparatus and means used to operate the arms or levers generally known as "lazy-tongs," and also the means used to press forward the box or car to receive its load, as, for instance, a person from a high window of a burning building.

To enable others to understand and use my invention, I will describe the same with reference to the drawing.

A represents the car or box used to elevate or lower the load;

B represents a frame, which is used to press the box forward;

C C are pulleys, over which the cords pass in elevating or lowering;

D is a ratchet and pawl, used to lock the load at any desired height;

E represents a windlass, by which the rope H is tightened to press the car forward;

F F are the arms or lazy-tongs;

G G are the cords used to elevate the car;

H is the cord used to press forward the car;

I is a bale and leaden ball used to balance the frame B;

J is a windlass; and

K K cords.

The operation is as follows:

The foundation having been first leveled up and the ropes G G and car A being placed as shown in fig. 1, the operators will turn the windlass J, which, by means of the cords K K, will draw the arms F F into the position shown by fig. 2, and the car will be elevated to the top of the apparatus, when, by turning the windlass E, the car can be pressed forward, so as to receive any thing to be lowered or to unload any thing which has been elevated.

It will be noticed that there are two sets of arms or lazy-tongs, rendering the machine firm and strong for elevating.

It will also be noticed that the car A travels the entire distance from the bottom to the top of the machine, while the top of the machine is elevated but half the distance, thus rendering it possible to elevate a load very quickly, and also to render speedy aid to sufferers in buildings on fire.

The machine can, however, be used for elevating brick, mortar, stone, &c., on the walls of buildings, and for various other purposes.

I do not claim the invention of the lazy-tongs; but what I do claim, and desire to secure by Letters Patent of the United States, is—

The combination and arrangement of the car A, frame B, pulleys C C, ratchets D D, windlass E, cords G, G, and H, bale I, windlass J, and cords K K, substantially as described.

In witness whereof I have subscribed my name this 18th day of October, 1870.

T. L. SUMMERIL.

Witnesses:

E. L. WALKER,
LEAH M. WALKER.