(No Model.)

2 Sheets—Sheet 1.

T. P. LETTON.

FIRE ESCAPE.

No. 294,887.

Patented Mar. 11, 1884.

Fig. 2.

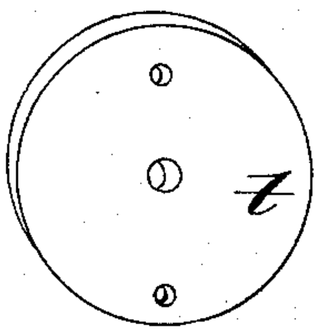


Fig. 3

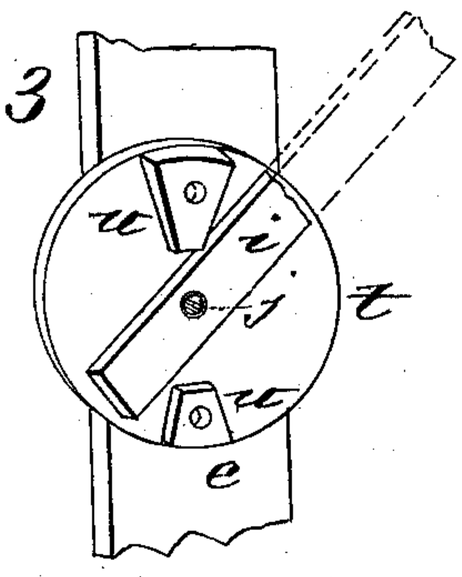
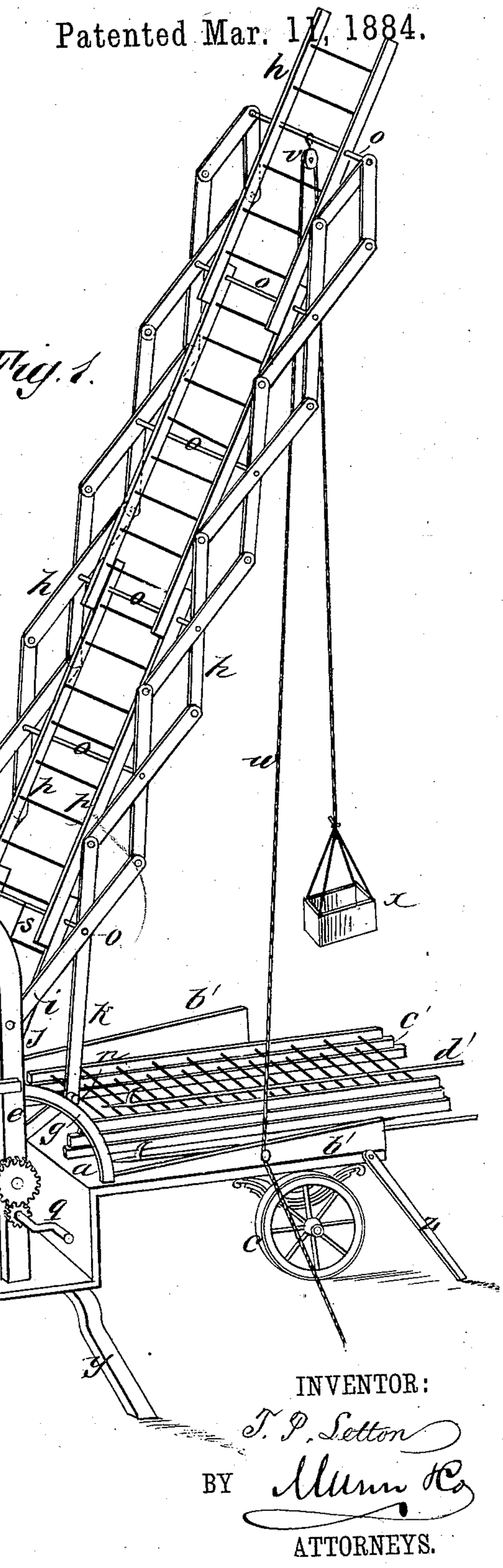


Fig. 1.



WITNESSES:

Francis McArdle.

A. Sedgwick

INVENTOR:

T. P. Letton

BY Munn & Co

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2

T. P. LETTON.

FIRE ESCAPE.

No. 294,887. Patented Mar. 11, 1884.

Fig. 4

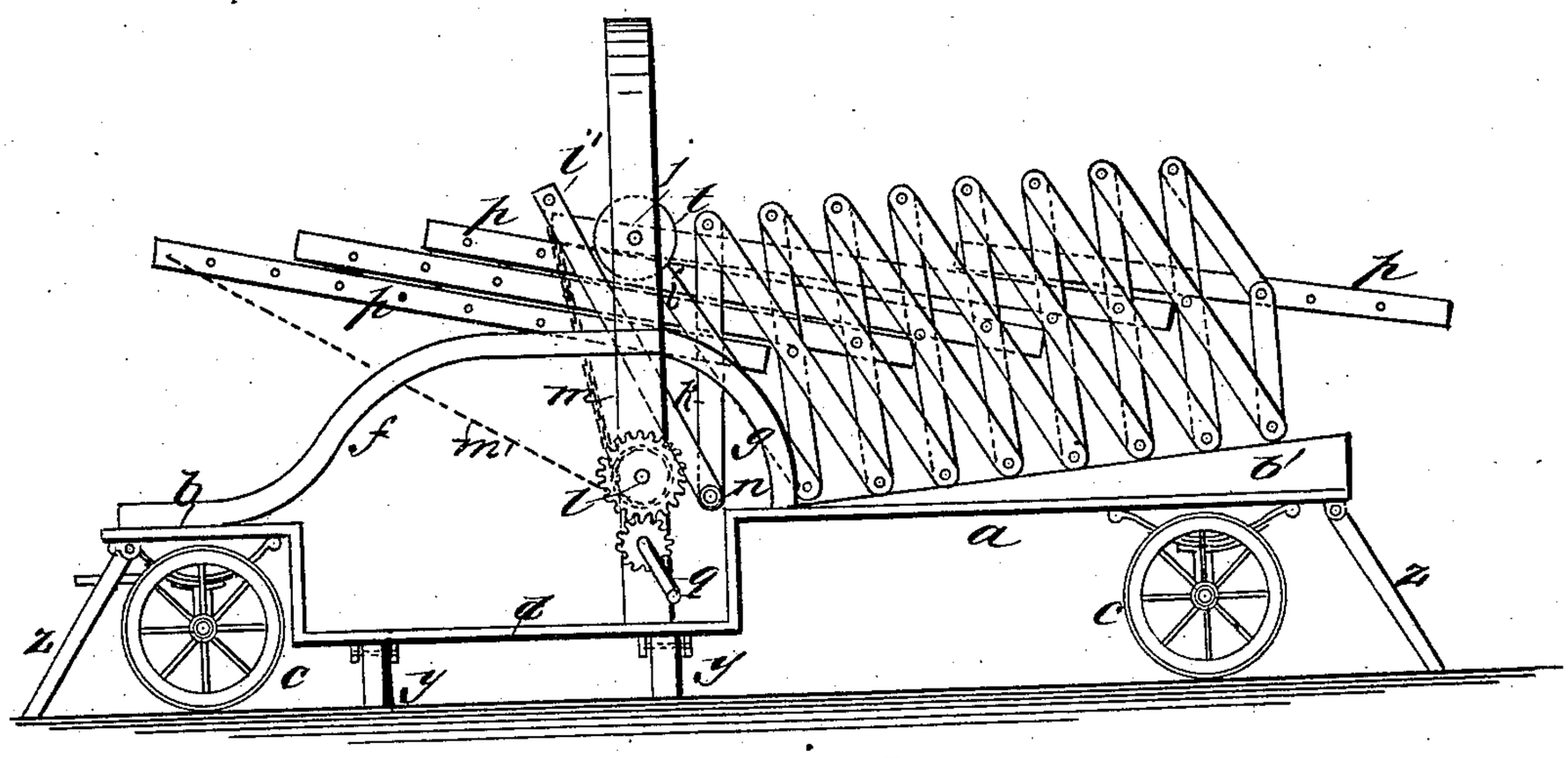
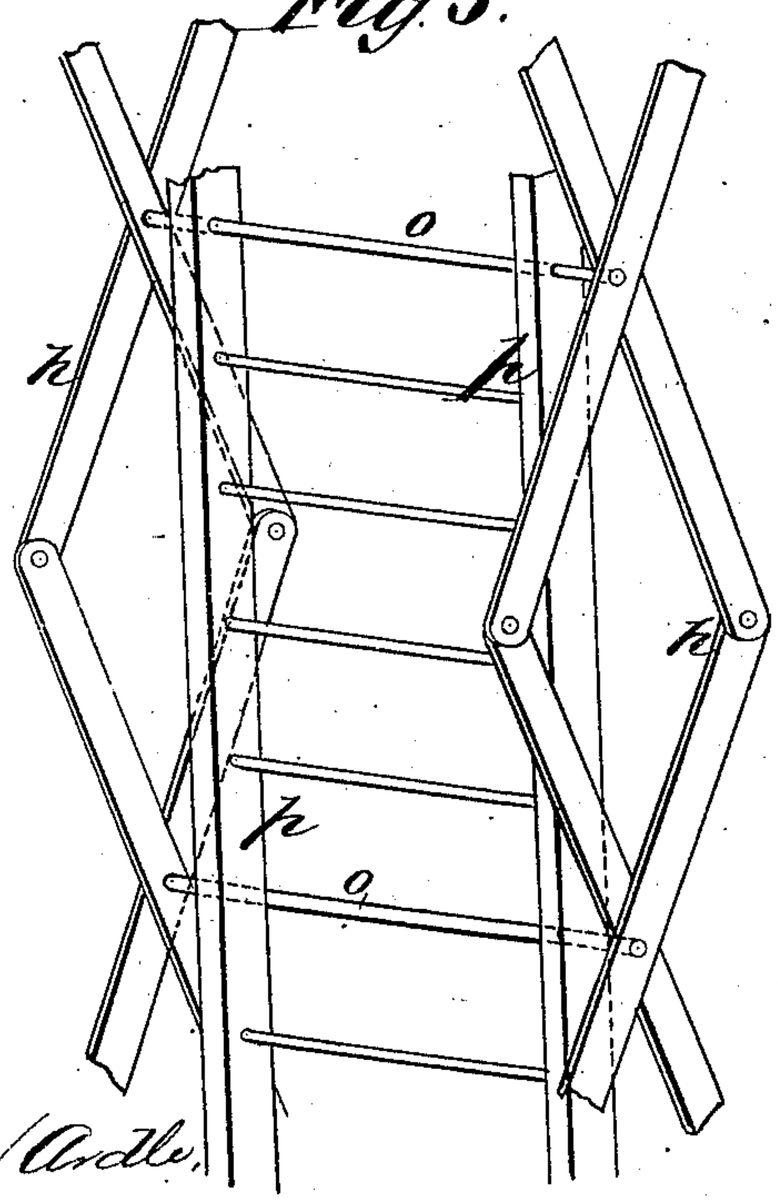


Fig. 5.



WITNESSES:

Francis McArdle.

C. Sedgwick

INVENTOR:

T. P. Letton

BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

THEODORE P. LETTON, OF PARSONS, KANSAS, ASSIGNOR TO HIMSELF AND EMMA M. CURTIS, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 294,887, dated March 11, 1884.

Application filed July 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, THEODORE PHILLIPS LETTON, of Parsons, in the county of Labette and State of Kansas, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

My invention relates to improvements in fire-escapes; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of my improved fire-escape as extended for use. Figs. 2 and 3 represent details of the construction. Fig. 4 is a side elevation of the said fire-escape folded down on the truck; and Fig. 5 is a perspective view of a section of the extension frame and ladder on an enlarged scale.

On a truck having a bed or platform, *a b*, extending over the wheels *c*, and being depressed between the wheels at *d*, I arrange an upright supporting-frame, *e*, for the extension device, said frame being substantially stayed by the front braces, *f*, and the hind braces, *g*, suitably connected to it and to the truck-platform. To this frame I connect at each side and near the upper end a lazy-tongs extension-frame, *h*, by one of the bars *i* of a joint, said bar being pivoted to said frame at *j*. The other bar, *k*, of said joint has a bar, *i'*, of another joint connected to it and extending downward over the drum *l* of a windlass, to which it is connected by chain *m* or a wire rope, and said bar *k* has a friction-roller, *n*, at its joint with said bar *i'*, that is to roll along brace *g* for support. These two extension-frames are connected together by rods *o*, forming the pivots of each joint of the said frames. To each alternate connecting pivot-rod *o*, a short ladder, *p*, is connected at its upper end, the lower end of the lowest ladder resting on the drum *l*, and the lower ends of the rest of the ladders resting on the next ladder below. The windlass-drum *l* is geared with a hand crank-shaft, *q*, by which it will be seen the extension-frames will be projected upward, as represented in Fig. 1, when the crank is turned, so as to wind the chains upon the drum, and by unwinding said chains the frames and ladders will be lowered and folded down on the truck, as represented in Fig. 4. If necessary, another chain, *s*, may be connected to the drum and to the lowermost rod, *o*, so as to wind on the drum when chains *m* unwind to pull the ladder down.

For substantial lateral support to the extension-frames, I pivot the bars *i* to the frame *e*, between disks *t*, firmly attached to said frame, and I arrange the stops *u* between said disks, to arrest the frames when elevated to the desired extent, and for bearings wherein the strain of the chains of the windlass will be resisted, so that the windlass may be strained up and made fast to bind said bars *i* firmly between said bearings, to stay the frames rigidly in their working position.

To the upper rod, *o*, I connect a pulley-block, *v*, having a hoist-rope, *w*, fitted in it to raise and lower a basket or crib, *x*, when it may be preferred to employ that means of escape for persons or for letting down goods.

To the part *d* of the platform I attach braces *y*, to stay it laterally, said braces being detachable, to be removed when the truck is shifted, and to the ends I pivot chocks *z* to be swung down on the ground to stay the truck against rolling on the wheels when the machine is in use, as shown by dotted line *m'*, Fig. 4.

I propose in practice to construct the truck with side rails, *b'*, to the part *a* of the bed, whereon the extension device may rest when folded down, to maintain a space below, in which common fire-ladders *c'* and hooks *d'* may be carried for use.

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

1. In a fire-escape, the combination, with the lazy-tongs extension-frames *h*, connected together by the joint-rods *o*, the ladders *p*, hinged at their upper ends to the alternate joint-rods *o*, and overlapping and resting against each other at their lower ends, windlass *l*, and frame *e*, having the disks *t*, of the joint-bars *i*, pivoted to said disks, joint-bars

i' k, cords *m*, braces *g*, and rollers *n*, riding on said braces, substantially as shown and described.

2. In a fire-escape, the combination, with the lazy-tongs extension-frames *h*, ladders *p*, jointed thereto at their upper ends, frame *e*, braces *g*, jointed bars *i i' k*, rollers *n*, and windlass *l*, having the ropes *m*, of a truck having a platform, *a b*, provided with side rails, *b'*, and extending over its wheels, and depressed at *d* between the wheels, and detachable braces *y*, substantially as shown and described.

3. The combination of braces *g* and friction-rollers *n* with the joint-bars *i' k* of the extension-frames *h*, connected by bars *i* with the supporting-frame *e*, substantially as described.

4. The bars *i* of the extension-frames pivoted to the supporting-frame *e* between the laterally-supporting disks *t* and the stop-lugs *u*, substantially as described.

THEODORE P. LETTON.

Witnesses:
F. M. CURTIS,
WILL G. BOYD.