(No Model.)

W. H. WYLAND.

FIRE ESCAPE.

No. 444,788. Patented Jan. 13, 1891.

Fig. 1.

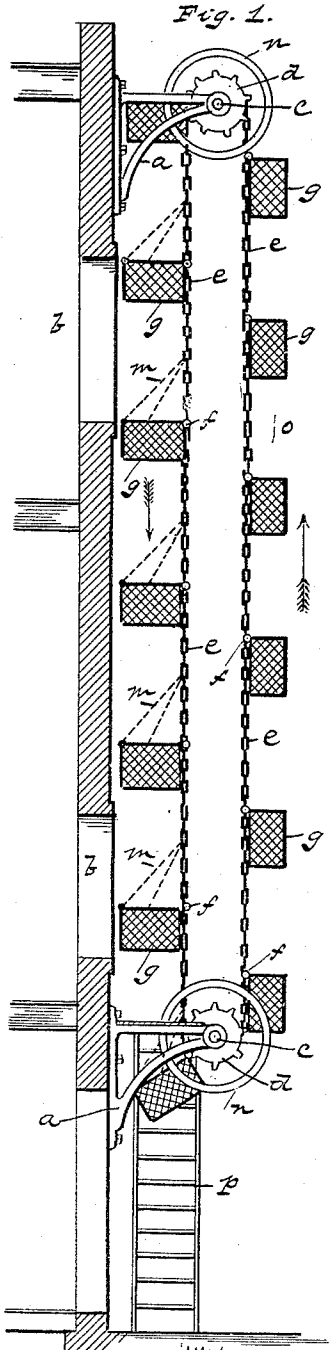


Fig. 2.

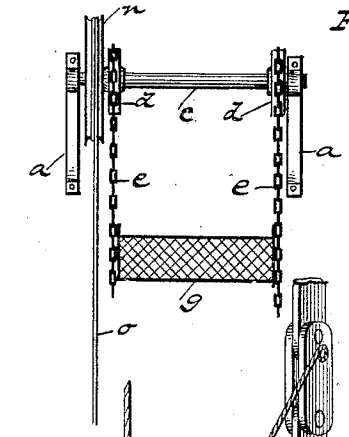


Fig. 4.

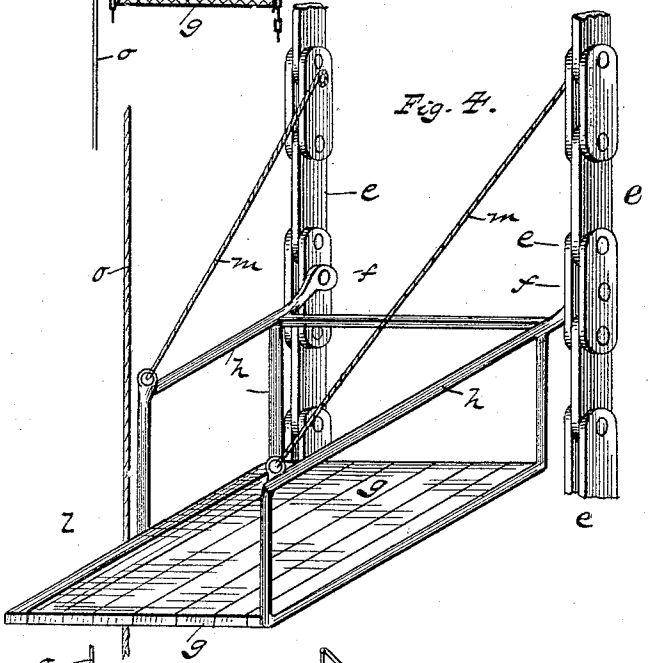
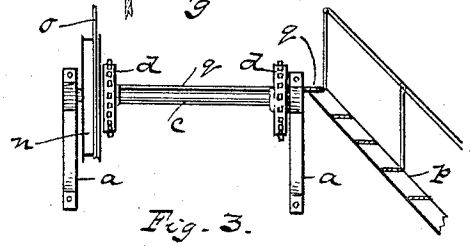


Fig. 3.



Witnesses:

John E. Thompson

Richard S. Harrison

Inventor.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. WYLAND, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JULIUS ARND, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 444,788, dated January 13, 1891.

Application filed July 1, 1890. Serial No. 357,408. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WYLAND, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Escape Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved fire-escape; and it consists in certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of my improved fire-escape, which is constructed in accordance with my invention. Fig. 2 is a front elevation of the top portion of the same. Fig. 3 is a front elevation of the lower portion of the apparatus. Fig. 4 is an enlarged perspective view of one of the platforms, having the wire-netting or railing removed therefrom.

To construct a fire-escape apparatus in accordance with my invention, I provide four brackets *a*, and secure two at a point near the top of a building *b* and directly above a series of windows communicating with the several floors or stories of the building. The other pair of brackets *a* I arrange a short distance above the ground floor and in line with the upper set *a*. Mounted in bearings in these brackets *a* are two strong shafts *c*, having rigidly secured to each two sprocket-wheels *d*, over which are placed two endless chains *e*, which engage with the teeth of the sprockets *d* and are operated by the same. Secured by hinged connections *f* to these chains *e* are a number of platforms *g*, consisting of oblong box-shaped frames *h*, surrounded on three sides with a wire-netting, and having an open end toward the building *b* and an opening *l* on one side. These hinged platforms *g* are supported in a horizontal position by means of short flexible braces *m*, attached to the chains *e* at a point above the platforms *g* and to the outer portions of the frames *h* of the same.

Secured to the upper and lower shafts *c* are two large flanged wheels *n*, having an endless rope wound several times about the one and passed over the other wheel, which serves as a means for operating, revolving, or checking the motion of the platforms *g*. Arranged at the lower brackets *a* is a landing *q*, to which a short pair of stairs or ladder *p* is hinged, which reaches to the pavement or ground, and when not in use may be elevated out of reach.

In operation the platform *g* next the building *b* hangs suspended in a horizontal position, while those opposite are folded, or the platform *g* hangs in a vertical position. A person desiring to escape from the building in case of a fire steps from one of the windows onto the platform *g*, which increases the weight on that side of the apparatus, which causes that side to fall or be gently lowered. By grasping the endless check-cord *o* the operator may check the apparatus at any point or keep the platforms continually moving.

When the occupants of the various platforms *g* have reached the lower landing *q*, they step off onto the same and may land safely on the ground by means of the stairway *p*. Should the persons when on the platforms *g* be excited and not step out on the landing *q*, the platform *g*, when passing round the lower sprocket-wheels *d*, will assume an inclined and perpendicular position, which will drop the occupants of the platforms *g* to the ground. The distance being short will prevent injury.

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

The herein-described fire-escape, consisting of two endless chains arranged side by side and operating over sprocket-wheels, the platforms *g*, hinged to the said chains and supported by flexible braces *m*, said platforms *g* consisting of a box-shaped frame *h*, surrounded on three sides with wire-netting and having an open end toward the building and an opening *l* at one side thereof, whereby the occupants of said platforms may have access to the landing *q* below, the two large flanged wheels *n*, secured to the upper and lower shaft *c*, and an endless rope wound several

times about the upper wheel n and passed over the lower wheel as a means of regulating and controlling the speed of the apparatus, and a short stair or ladder hinged to the landing in a manner that the same may be raised or lowered at will, substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature this 23d day of June, A. D. 1890.

WILLIAM H. WYLAND. [L. S.]

In presence of—

JOHN C. THOMPSON,

RICHARD S. HARRISON.