(No Model.) 2 Sheets—Sheet 1.

# S. RICHARDS.

## COMBINED PORTABLE FIRE ARRESTER AND FIRE ESCAPE.

No. 274,977. Patented Apr. 3, 1883.

Fig. 1.

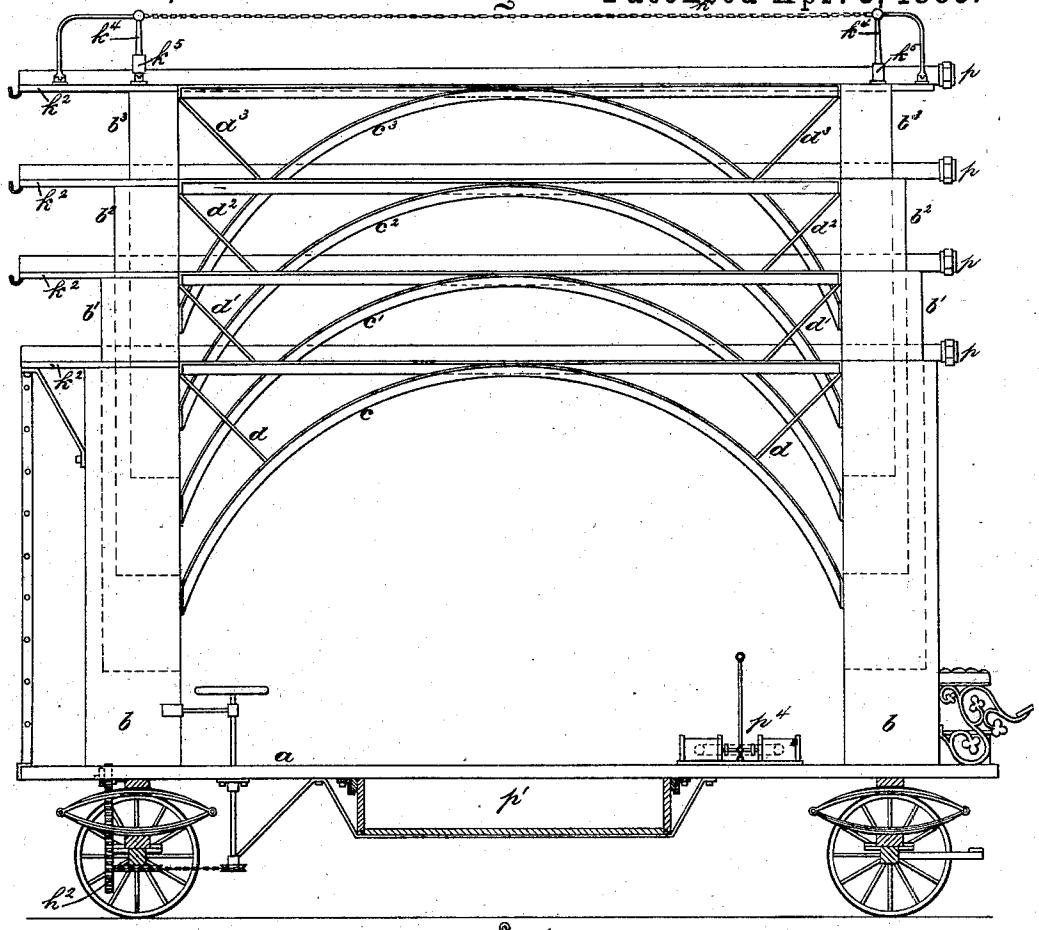
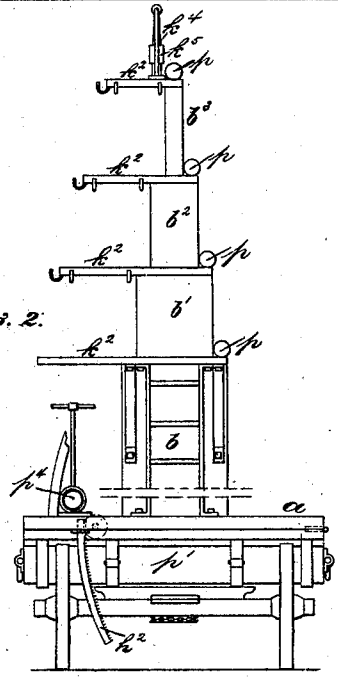



Fig. 2.




WITNESSES:

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L. Douville

INVENTOR:

Samuel Richards

N. PETERS. Photo-Lithographer. Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

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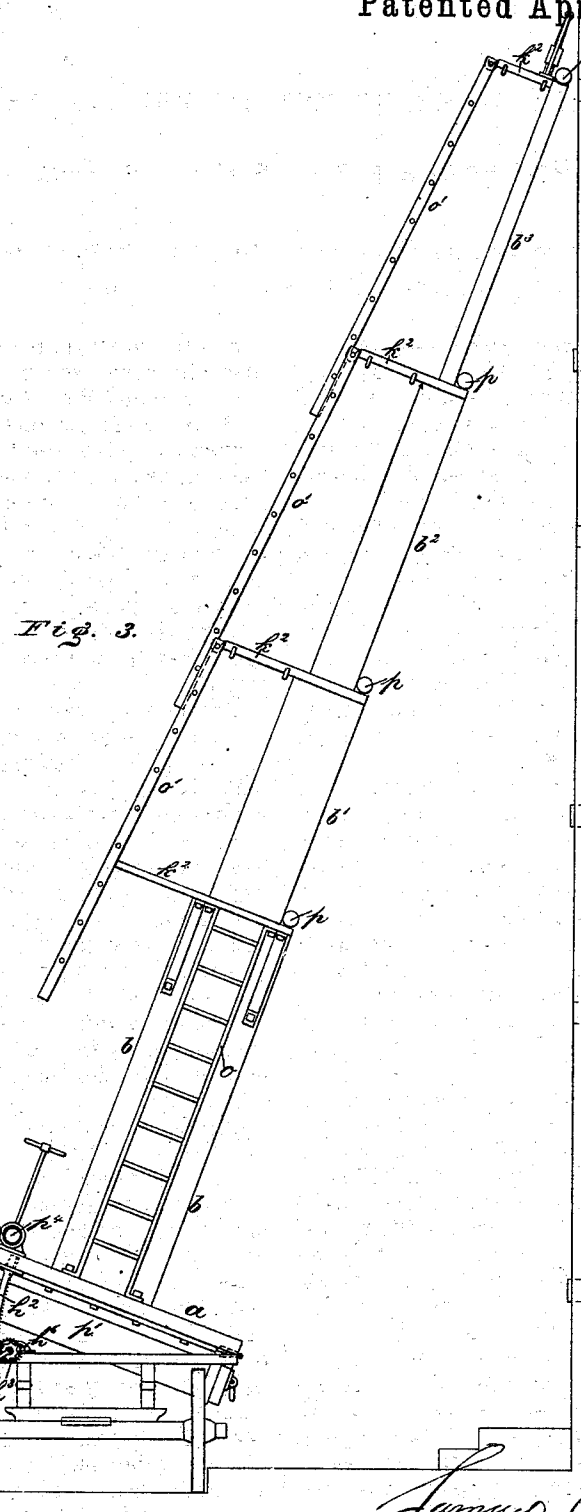


Fig. 3.

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INVENTOR:

James Richards

N. PETERS Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

SAMUEL RICHARDS, OF PHILADELPHIA, PENNSYLVANIA.

## COMBINED PORTABLE FIRE-ARRESTER AND FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 274,977, dated April 3, 1883.

Application filed December 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL RICHARDS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented a new and useful Improvement in Combined Portable Fire-Arresters and Fire-Escapes, of which invention the following is a specification.

This invention relates to and supplements the apparatus forming a movable fire-shield for which United States Letters Patent were allowed to me September 9, 1882; and it consists, first, in constructing at the top of each of the several fixed and adjustable blanket-frames forming parts of said apparatus a platform for firemen's use, and also to be used as landing-places when the apparatus is employed as a fire-escape.

It also consists in making the blanket-drawers described as part of said apparatus water-tight, in order that they can be utilized as receptacles for water to supply a force-pump located on the carriage and employed for elevating water to the distributers at the tops of the respective blanket-frames when the apparatus is used in towns and other places having no water-works or water under pressure.

It also consists in making the parts of the apparatus hereinafter described convertible into a fire-escape.

In the drawings, Figure 1 is a sectional elevation of said apparatus, (omitting the blankets or cloths and the devices for elevating the frames and other parts not modified in form, and therefore not material in this specification,) showing the platform built with or attached to the fixed frame and to each of the adjustable frames at the tops of the respective frames, showing also the force-pump located on the carriage-platform. Fig. 2 is a rear end elevation of the same; and Fig. 3, a like view of the same, showing the carriage-platform tilted and the several frames (partly elevated) for the blankets or cloths also tilted, so as to bring the top of the series of frames against a building when the apparatus is used as a fire-escape.

Similar letters are employed to designate similar parts in the several views.

*a* represents the carriage-platform, which is jointed on one side to the carriage-body.

*b* is the fixed frame, and $b'$ $b^2$ $b^3$ are the adjustable frames for the blankets or cloths.

$c$ $c'$ $c^2$ $c^3$ and $d$ $d'$ $d^2$ $d^3$ are braces.

$k^2$ are platforms, one being built with or attached to each of the frames $b$ $b'$ $b^2$ $b^3$. Each of the platforms is supplied with a guard-chain—such as $k^3$, Fig. 1—supported by jointed posts—such as $k^4$, Fig. 1—which lie flat when not in use and are held upright, when required, by sliding sleeves $k^5$, which are made to cover their respective joints.

*p* are the slotted or perforated pipes, forming water-distributers, one in this case to each frame.

The blanket-drawers $p'$ are made water-tight, so that the blankets can be conveniently wet in them before they are applied to the frames, and also so that said drawers can be used as reservoirs for water to supply an ordinary force-pump, $p^4$, which is located on the carriage-platform and employed for the purpose of supplying water to the distributers *p* at the tops of the frames $b$ $b'$ $b^2$ $b^3$ when the apparatus is used in towns and other localities where there is not a supply of water under pressure.

*o* is a fixed or detachable ladder, and $o'$ are detachable ladders, which are carried on the carriage-platform when not in use. They are hooked onto the ends of the top rails of the respective frames $b'$ $b^2$ $b^3$ when it is desired to reach the platforms $k^2$, and also when the apparatus is to be used as a fire-escape.

$k^2$ is a segmental rack projecting downwardly from the carriage-platform. $k^3$, Fig. 3, is a pinion; $k^4$, a detachable lever, having a pawl, $k^5$, pivoted to it. $k^6$ is also a pawl. The drawings show these devices at one end only of the carriage; but similar devices are placed at the opposite end of the carriage. They constitute the machinery for inclining the platform *a*, and thus bringing the top of the topmost frame, $b^3$, against the wall $k^7$ of a building from which persons may wish to escape in case of fire.

It is preferable that the drawers $p'$ should be made water-tight to form reservoirs, as above described; but this is not essential, since a separate vessel of any kind could be used as a reservoir for the pump's supply.

It is sometimes desirable to use only the single fixed frame in connection with its blanket

or cloth and the force-pump, all mounted on the carriage, as described, and the water-reservoir for the pump, omitting the adjustable frames, their blankets, and other adjuncts.

The carriage-platform is shown to be supported on wheels; but sleigh-runners may be substituted when there is snow.

I claim—

1. In fire-shields, the combination, with a carriage, of a fixed frame, *b*, mounted thereon, one or more adjustable frames, $b'$ $b^2$ $b^3$, telescoping within said fixed frame, the blankets or other cloths applied to said frames, the platforms $k^2$, attached to said frames, and the detachable ladders *o'*, in the manner and for the purpose substantially as set forth.

2. In combination with a carriage, a fixed frame, *b*, with or without one or more adjustable frames, the blankets or cloths applied to said frames, one or more water-tight drawers, and a force-pump, all located on said carriage, in the manner and for the purpose substantially as set forth.

3. In combination with a carriage, a fixed frame, *b*, with or without one or more adjustable frames, the blankets or cloths applied to said frames, and a force-pump, all located on said carriage, with a water-reservoir, in the manner and for the purpose substantially as set forth.

4. In combination, a carriage having a jointed platform, *a*, the fixed and adjustable frames, the blankets or cloths applied to said frames, the platforms $k^2$, attached to said frames, and the ladders, with devices for tilting or inclining said platform *a*, and thus bringing the top of the series of frames against a building to form a fire-escape, substantially as set forth.

SAMUEL RICHARDS.

Witnesses:

HARRY TALGE,

J. E. SHAW.