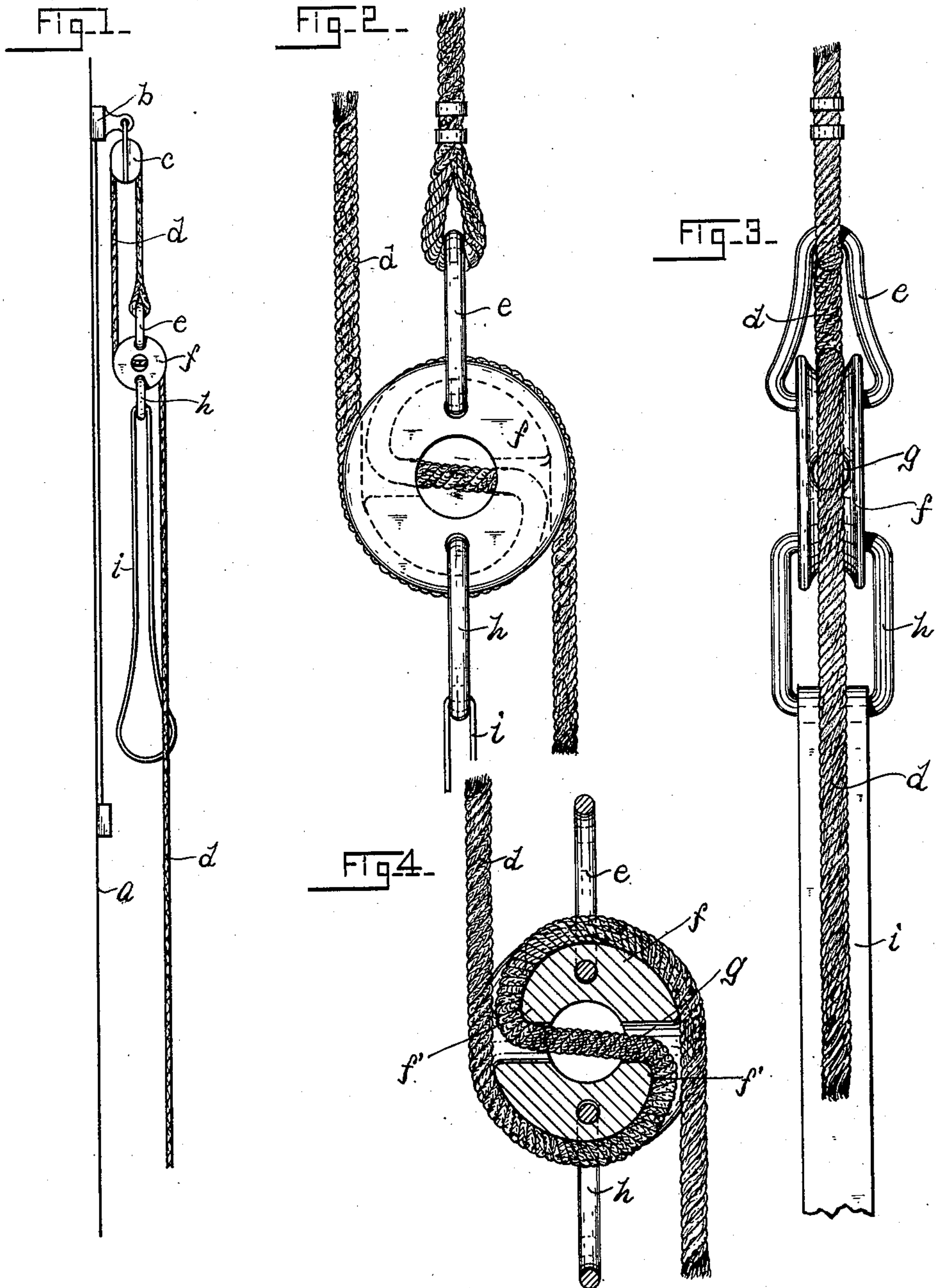


(No Model.)

C. J. BEEBE.
FIRE ESCAPE.

No. 594,318.

Patented Nov. 23, 1897.



WITNESSES

George M. Luther.
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UNITED STATES PATENT OFFICE.

CHARLES J. BEEBE, OF NEW LONDON, CONNECTICUT, ASSIGNOR OF ONE-HALF TO CLARENCE M. CAULKINS, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 594,318, dated November 23, 1897.

Application filed April 19, 1897. Serial No. 632,885. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. BEEBE, of the city and county of New London and State of Connecticut, have invented a certain new and useful Improvement in Fire-Escapes, which improvement is fully set forth and described in the following specification, reference being had to the accompanying sheet of drawings.

This invention has for its object the production of a cheap but effective device by means of which persons may lower themselves from the upper stories of burning buildings and which may be safely operated by any one of average intelligence without special instruction.

To aid in explaining the construction and operation of my said invention, I have provided the annexed sheet of drawings, in which—

Figure 1 is a side elevation of my newly-invented fire-escape complete, showing the manner of supporting the same. Figs. 2 and 3 are respectively side and edge views, somewhat enlarged, of the mechanism to which one end of the rope is secured and by means of which the desired frictional resistance may be applied to the said rope when the fire-escape is in use. Fig. 4 is a view similar to Fig. 2 with the metallic block *f* and the rope-supporting links attached thereto partly cut away to show clearly the manner in which the rope is passed through and around the said block.

Briefly described, my invention consists of a rope that is at least twice the length of the distance to be traveled, means for supporting said rope adjacent to the window of a building, a strap or sling in which the person operating the escape may sit, and a friction device of peculiar form to which the said sling is attached and by means of which the rope may be caused to describe an indirect course in order that the desired degree of frictional resistance may be obtained.

In the drawings the letter *a* indicates the front wall of a building; *b*, a bracket or eyebolt secured to said wall adjacent to the window; *c*, a pulley-block suspended from said

eyebolt, and *d* the fire-escape rope adapted to render freely through the said pulley-block. If desired, the rope could be passed directly through the eyebolt, and the pulley-block could then be dispensed with. Secured to one end of rope *d* by a link *e* is my friction device, consisting of a metallic block *f* of circular form, as here shown, the same being grooved upon its circumferential edge substantially like the sheaves of an ordinary pulley-block. Extending from edge to edge of said block is an opening *g*, which connects the circumferential groove on opposite sides, as is best seen in Fig. 4. Suspended from block *f* by means of a link *h* is a sling *i*, preferably of webbing or leather of strap form, of such shape and size that a person may sit therein or may pass the said strap underneath his arms. The rope *d* extends downward from the pulley-block *c* and is carried half-way around the lower side of the block *f*, then through the transverse opening *g* in said block, then upward around the latter, following the circumferential groove, and, finally, downward, as seen in the drawings, the loose portion of the rope hanging then within easy reach of the person supported in the described sling.

When it is desired to use my fire-escape, the operator seats himself in the said sling and holding onto the loose portion of the rope below the friction-block *f* swings off from the window-sill. Then by gradually easing back the loose portion of the rope the weight of the load overcomes the frictional resistance of the rope as the latter travels in the described indirect course around and through the block *f*, and the person slowly descends to the ground. It will be understood that the frictional resistance may be increased by simply holding onto the free portion of the rope and that the operator thus has perfect control of the device from the time he starts until he reaches the ground. Those portions of the circumferential groove of block *f* that connect with the transverse opening are cut somewhat deeper than the rest of said groove and are slightly rounded, as at *f'*, so that the rope may not be cut by sharp angles and also so that the rope

as it engages and leaves the block may not come in contact with the part that passes indirectly through the transverse opening *g*.

Having thus described my invention, I
5 claim—

10 In a fire-escape, the combination, with a radially-perforated disk, the periphery of which is provided with a groove, the groove at the ends of the radial perforation being deeper
on one side of the perforation than on the other, a rope having one end connected with the disk upon one side of the perforation, the main portion of the rope passing through the

perforation and the portions adjacent thereto passing over the grooved portions of the disk, 15 a loop suspended from the disk upon the opposite side of the perforation to which the rope is secured, and a support for the portion of the rope between the end that is connected with the disk and the portion that is passed 20 through the disk, substantially as set forth.

CHARLES J. BEEBE.

Witnesses:

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ALONZO M. LUTHER.