(No Model.) 2 Sheets—Sheet 1.

P. H. MONTAGUE.

FIRE ESCAPE.

No. 331,429. Patented Dec. 1, 1885.

Fig. 1.

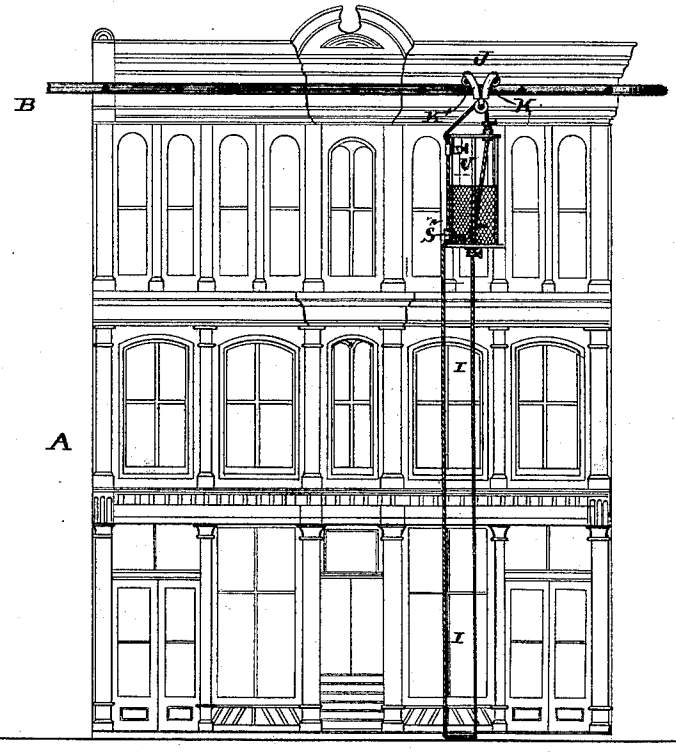


Fig. 2.

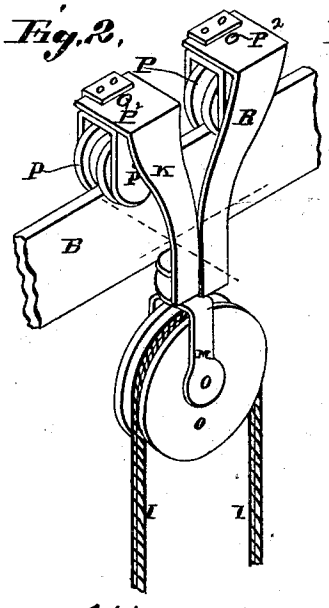


Fig. 3.

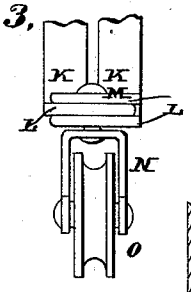


Fig. 4.

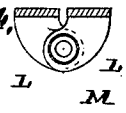
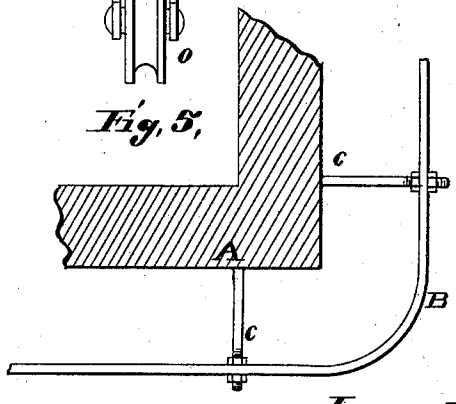


Fig. 5.



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(No Model.) 2 Sheets—Sheet 2.

P. H. MONTAGUE.

FIRE ESCAPE.

No. 331,429. Patented Dec. 1, 1885.

Fig. 6.

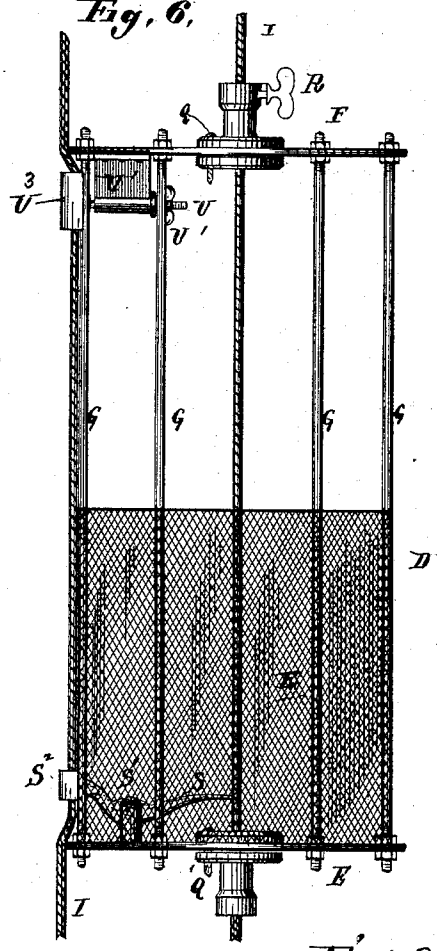


Fig. 7.

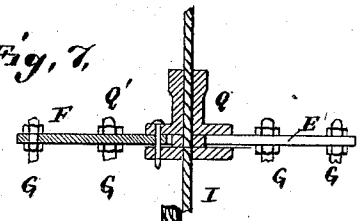


Fig. 11.

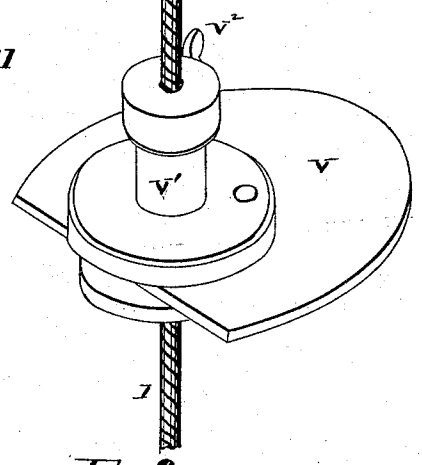


Fig. 9.

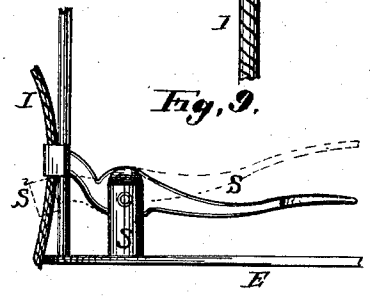


Fig. 8.

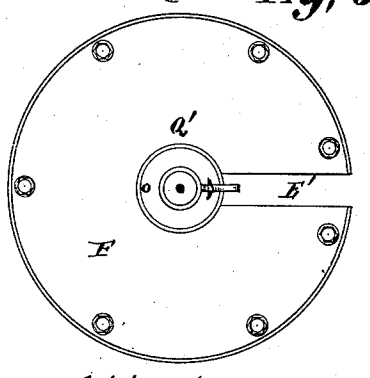
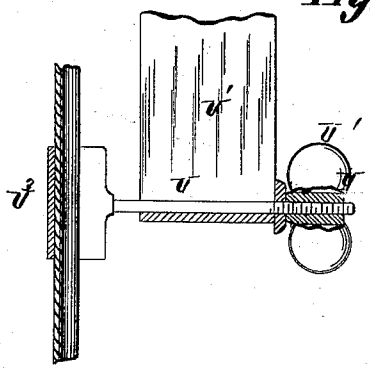


Fig. 10.



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UNITED STATES PATENT OFFICE.

PATRICK H. MONTAGUE, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-FOURTH TO THOMAS F. McDERMOTT, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 331,429, dated December 1, 1885.

Application filed September 24, 1885. Serial No. 178,043. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. MONTAGUE, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Fire-Escapes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is an elevation showing my improved fire-escape secured to a building. Fig. 2 is an enlarged detail perspective view of the traveler. Fig. 3 is a detail view of same. Fig. 4 is a detail view showing the manner of hinging the traveler or brackets at their lower ends. Fig. 5 is a detail view showing part of the corner of a building with the track secured to it. Fig. 6 is an enlarged elevation of the cage, showing it clamped in stationary position. Fig. 7 is a section through the top or bottom of the cage and the collar through which the hoisting-cable passes. Fig. 8 is a top view of the cage. Fig. 9 is an elevation of the brake removed. Fig. 10 is a detail view illustrating the manner of securing the clamp to the cage. Fig. 11 is a detail perspective view showing a modified form of my invention.

My invention relates to an improved fire-escape; and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents a building, around which is placed a track, B, secured to the building by suitable arms, C.

D represents the cage of my improved fire-escape, consisting, preferably, of a bottom, E, top F, connecting-bars G, and wire-gauze body H.

I represents an endless hoisting-rope, that reaches from the top of the building to the ground. It is connected to a traveler, J, consisting of two arms or hangers, K, hinged together at their lower inturned ends, L, by the upper end, M, of a yoke, N, in the lower arm of which is secured a groove-pulley, O, and in the upper end of each arm or hanger K is swiveled a groove-pulley, P, that fits on the track. The pulleys are held in yokes p', provided with journals p^2, which fit in sockets of the hangers, so that they are allowed to turn independently of each other to permit the easy turning of the traveler around the track, so that the rollers will not bind and cause unnecessary friction upon the track when turning the corner; and to avoid this unnecessary friction the lower ends of the hangers are hinged together, as above stated, so that the hanger that reaches the corner first can turn independently of the other. Both the top F and bottom E of the cage are slotted, as shown at E′, Figs. 7 and 8, to receive grooved collars Q, through which the hoisting-cable I passes. These collars, as will be plainly understood, can be inserted and removed from place at will, and when in place on the cage are held from movement by pins Q′. In case of a fire the cage is brought out and attached to the cable by means of these collars and hoisted to any vertical part of the building by pulling the free part of the rope, and to prevent the cable slipping through the collars one or both of them is provided with a set-screw, R. When the cage is raised to the proper elevation, it may be moved to any horizontal part of the building by pulling on the rope, which will cause the traveler to move on the track. When the cage is filled, it can be lowered to the ground at any rate of speed, this movement being regulated by a brake consisting of a lever, S, pivoted to a standard, S′, projecting upward from the bottom of the cage. The outer end of the lever has a head, S^2, and by depressing on its inner end the rope is pressed between the head and the body of the cage, thus limiting the speed with which the cage descends, owing to the friction brought upon the cable. Should it be desired to add any additional brake, it may be done by a bolt, U, passing through a bracket, U′, depending from the top F of the cage. The bolt has a thumb-screw, U^2, on its inner end, and its outer end is provided with a shoe or head, U^3. By tightening on the screw the rope is pressed between the shoe U^3 and the body of the cage, and the friction thus brought upon the rope acts to limit the downward movement of the cage. The action of the brake is shown most plainly in Fig. 9, and the manner of securing the bolt U to the cage is illustrated in Fig. 10.

In Fig. 11 I have shown a simple seat se-

cured to the cable instead of the cage. It is held to the cage by a clamp, V, provided with a brake-lever, V^2, to limit the speed with which the person would descend.

By using a set-screw instead of a lever, the speed of the descent of a person will be regulated by the people on the ground letting the rope pass through their hands with the desired speed.

I claim as my invention—

1. The combination of the track, traveler, endless cable, and collars for securing the cage to the cable, as set forth.

2. The combination of the track-cage having slotted tops and bottom, traveler, collars fitting in the slots of the cage, and endless cable passing through the collars, as set forth.

3. In a fire-escape, the combination of the track and traveler, consisting of arms hinged together and pulleys pivoted to the arms, as set forth.

4. In a fire-escape, the combination of arms provided with pivoted pulleys and hinged together at their lower ends, pulley pivoted to the arms, and endless cable passing through last-mentioned pulley, as set forth.

5. In a fire-escape, the combination of the track, traveler consisting of arms hinged together and pulleys, the cable, cage, collars for securing the cable to the cage, and brake-lever provided with a shoe, substantially as set forth.

6. In a fire-escape, the combination of the track, traveler, cage, collars for securing the cable to the cage, and upper and lower brakes for clamping the cable against the cage, substantially as and for the purpose set forth.

PATRICK H. MONTAGUE.

In presence of—
GEO. H. KNIGHT,
SAML. KNIGHT.