

(No Model.)

C. E. RICE & L. B. McDONALD.
FIRE ESCAPE.

No. 479,527.

Patented July 26, 1892.

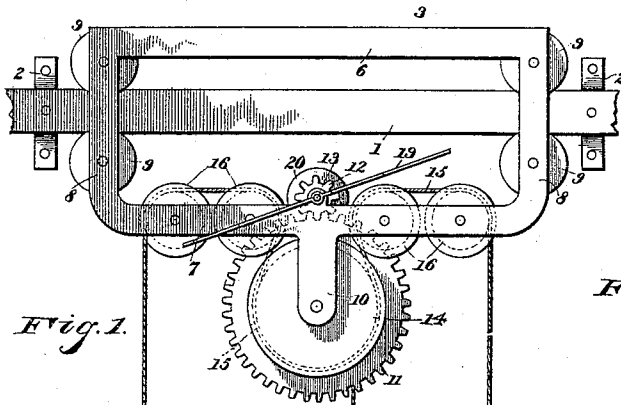


Fig. 1.

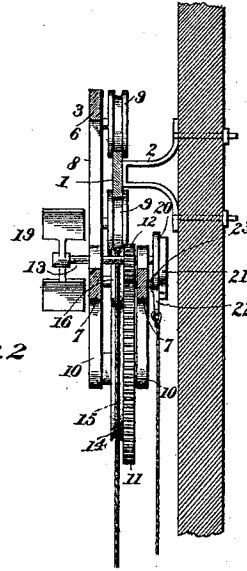
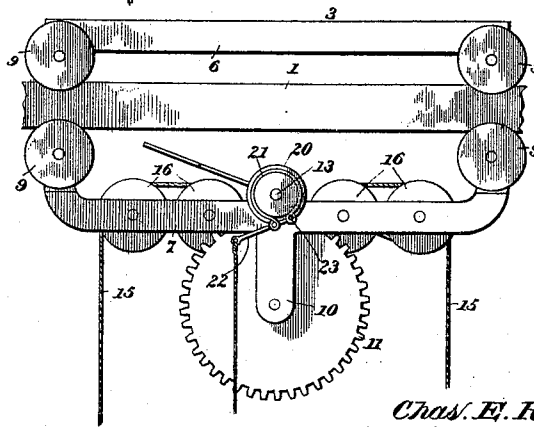


Fig. 2.

Fig. 3.



Witnesses,

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UNITED STATES PATENT OFFICE.

CHARLES E. RICE AND LEWIS B. McDONALD, OF LITTLE ROCK, ARKANSAS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 479,527, dated July 26, 1892.

Application filed July 29, 1891. Serial No. 401,083. (No model.)

To all whom it may concern:

Be it known that we, CHARLES E. RICE and LEWIS B. McDONALD, citizens of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and useful Fire-Escape, of which the following is a specification.

The invention relates to improvements in fire-escapes.

10 The object of the present invention is to provide a fire-escape which will be adapted to be moved along the top of a building to bring it opposite any window thereof and which will have its baskets controlled to prevent too rapid descent.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

20 In the drawings, Figure 1 is a front elevation of a fire-escape embodying the invention. Fig. 2 is a transverse sectional view. Fig. 3 is a rear elevation of a fire-escape.

25 Referring to the accompanying drawings, 1 designates a track-bar designed to be secured by brackets 2 to a side of a building near the top thereof and adapted to support a car or hanger 3, which moves along the track-bar to bring its baskets 4 and 5 opposite any window. The car or hanger 3 is approximately rectangular and consists of top and bottom bars 6 and 7 and end bars 8 and provided at each end with a pair of grooved rollers 9, arranged 35 above and below the track-bar 1 and receiving the same within their grooves, thereby securing the car or hanger to the track-bar. The bottom bar is provided with a depending extension 10, on the lower end of which is mounted a cog-wheel 11, which meshes with a pinion 12, arranged above the cog-wheel 11 and mounted on a shaft 13, journaled in bearings on the upper edge of the lower bar 7. The cog-wheel 11 has rigidly secured to it a pulley 14, around which passes a cable 15, 45 which passes over a pair of guide-pulleys 16, arranged on the bar 7 at each side of the cog-wheel, and which cable has its ends connected to the baskets 4 and 5. As one basket ascends the other descends, and they are controlled by chains 17 and 18, attached to the

bottoms of the baskets. The descent of the baskets is controlled by a fan 19, secured to the shaft 13, which carries the pinion 12, and as the baskets move the cable is drawn over the pairs of pulleys at the sides of the cog-wheel and around the pulley 14, thereby rotating the cog-wheel 11, which meshes with the pinion 12 and actuates the rotary fan 19, and the latter acts as a regulator to control the speed with which the baskets ascend and descend.

By means of the chains 17 and 18 the car or hanger may be moved along the track and arranged opposite any portion of the side of the building upon which the track-bar is secured, and they also control the movements of the baskets and enable them to be stopped wherever desired.

It will be seen that the fire-escape is simple, strong, and durable and is under complete control from below and that the speed at which the baskets ascend and descend is automatically regulated to prevent too fast and sudden falls.

75 The baskets 4 and 5 are designed to be provided with conical tops and bottoms to facilitate their movements and the attachment of the chains and the cable.

The fire-escape is provided with a brake, 80 which consists of a friction-wheel 20, mounted on the shaft 13, a metal band 21, arranged on the periphery of said wheel and adapted to engage the same to retard rotation and to stop the wheel and the fire-escape, and a lever 22, 85 connected with the band and adapted to hold the same in engagement with the wheel 20. The band 21 has one end secured to a pin 23, extending laterally from the bar 7, and its other end is attached to the lever 22, which has one end fulcrumed on the pin 23. The lever 22 is operated from below by a suitable cable, chain, or the like.

What we claim is—

In a fire-escape, the combination of a track-bar, a car or hanger provided with rollers and mounted on the track-bar and provided with a depending extension, a large pulley 14, journaled on the lower end of the extension, the two pairs of small pulleys arranged at opposite sides and above the large pulley 14 and the inner pulleys of each pair having their inner 100

sides located directly over the large pulley 14,
a cable passing under the large pulley 14 and
converging at the top of the same and passing
over the small pulleys, the latter causing the
5 cable to bind against the large pulley 14 and
to produce friction and retard rotation, bas-
kets secured to the ends of the cable, and
means for controlling the descent of the bas-
kets, substantially as described.

In testimony that we claim the foregoing as 10
our own we have hereto affixed our signatures
in presence of two witnesses.

CHARLES E. RICE.
LEWIS B. McDONALD.

Witnesses:

J. KELLOGG,
W. W. GIBBS.