

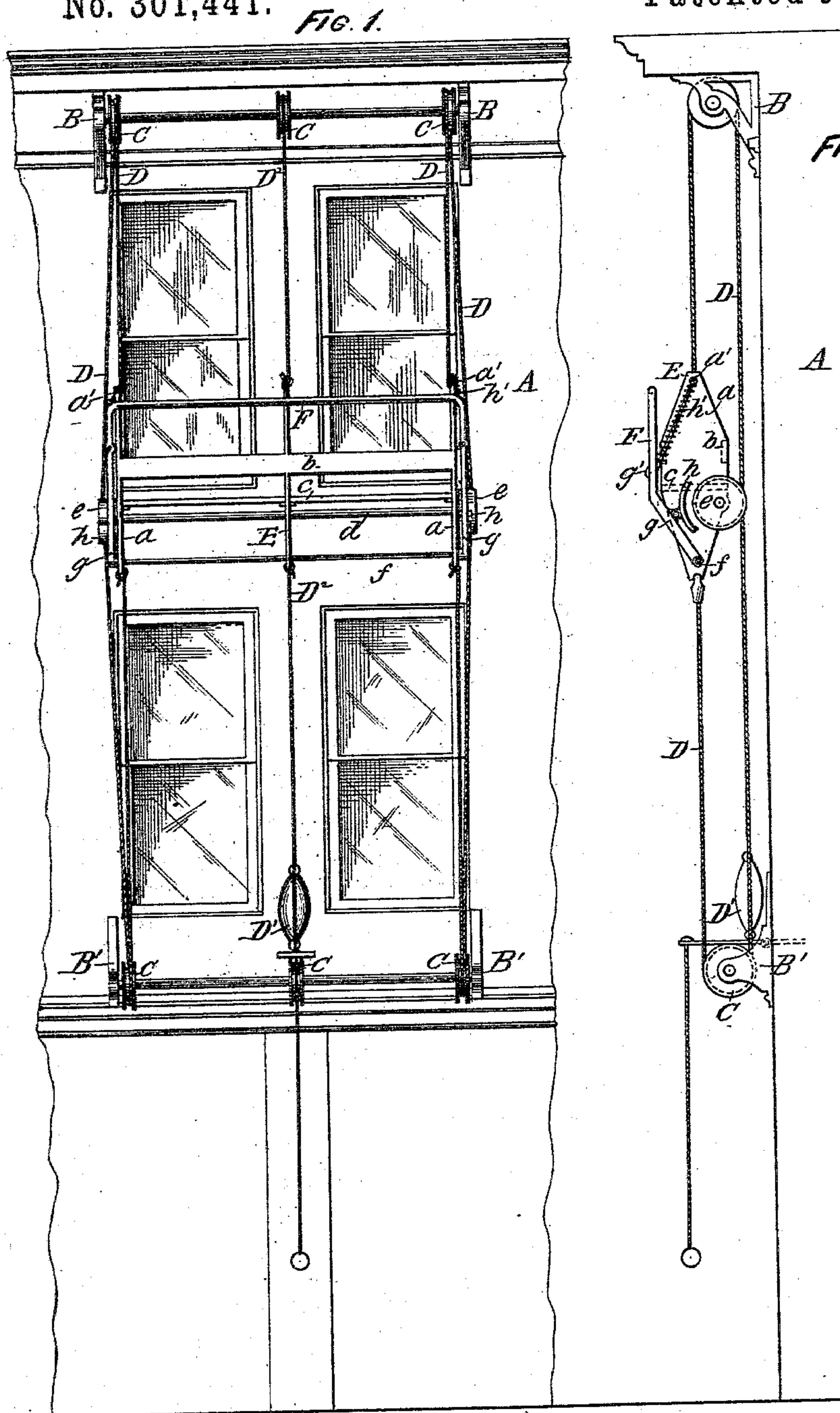
(No Model.)

K. FREEMAN.

FIRE ESCAPE.

No. 301,441.

Patented July 1, 1884.



Witnesses:

E. G. Freeman
J. Bennett

Inventor:
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UNITED STATES PATENT OFFICE.

KASSON FREEMAN, OF GRAND RAPIDS, ASSIGNOR OF ONE-HALF TO LYMAN F. SHERIDAN, OF GLEN ARBOR, MICHIGAN.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 301,441, dated July 1, 1884.

Application filed November 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, KASSON FREEMAN, of Grand Rapids, in the county of Kent and in the State of Michigan, have invented certain
5 new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to fire-escapes, and is an improvement on the device described in
10 the specification forming part of Letters Patent No. 267,179, granted to me November 7, 1882.

This improvement consists in providing the platform or cage of my fire-escape with a self-
15 acting brake, as will be fully hereinafter described and claimed.

In the drawings, Figure 1 is a front view of my improved device applied to the front of a building, and Fig. 2 is a side elevation of the
20 same.

A is the building, and B B and B' B' the top and bottom brackets, in which are journaled the pulleys C C, operating the chains or wire-cables D.

25 D' is the counter-weight, which is more conveniently mounted on a central wire, D².

E is the cage, which consists of the end boards, *a a*, connected together by the bar *b* forming the back of the seat, and by the seat-board *c* itself. Close to the rear edge of said
30 end boards, *a*, is journaled the shaft *d*, carrying on its ends, which project outside of said end boards, the brake-wheels *e e*. The chains or wire cables D are wound once or twice, as
35 may be desirable, around the grooved rim of said wheels *e e*. Journaled in the lower end of said boards *a a* is the hinging-rod *f* of the brake-bearing frame F, the end bars, *g g*, of which are provided with an ear to support in a suitable hinge the brake-shoe *h*. In
40 about the center of said end bars, *g g*, a suitable fastening is provided for the end of the upper wire cable or chain, D, which is first passed through a perforation, *a'*, made for it
45 in the top of each of said end boards, *a*. A coiled spring, *h'*, of proper strength, is set over that part of the cable or chain D between

said perforation *a'* and the fastening-point of said chain or cable. By this peculiar attachment of the cage I secure the automatic action
50 of the brake-shoe *h* against the brake-wheel *e e*, whatever may be the load carried by the cage. This is of great importance in a fire-escape. In the excitement always caused by a fire it is not to be expected that a hand-
55 brake can be safely handled even by persons familiar with its use. My automatic brake does away with this risk, and whether helpless children or women are confided to the cage they will be safely landed down, their
60 own weight actuating the brake, as above described.

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

1. In a fire-escape, a cage provided with a shaft carrying brake-wheels, around which the sustaining wire cables or chains may be suitably wound, in combination with a brake-bearing frame hinged in said cage ends, and
70 which by means of its spring-controlled connection with said sustaining wire cables is adapted to adhere to said brake-wheels in proportion with the load carried by said cage, as set forth.

2. In a fire-escape, the cage E, having end boards, *a a*, top perforations, *a' a'*, shaft *d*, brake-wheels *e e*, cross-bar *b*, and seat-board
75 *c*, in combination with the brake-bearing frame F, having hinging rod *f*, end bars, *g g*,
80 hinged brake-shoe *h*, fastenings *g' g'*, and coiled spring *h'*, and with the wire cable D, sheaves or pulleys C C, sustaining-brackets B and B, and counter-weight D', substantially as shown and described, and for the purpose set forth. 85

In testimony that I claim the foregoing I have hereunto set my hand on this 10th day of August, 1883, in the presence of two witnesses.

KASSON FREEMAN.

Witnesses:

H. G. UNDERWOOD,
M. KAUMHEIMER.