

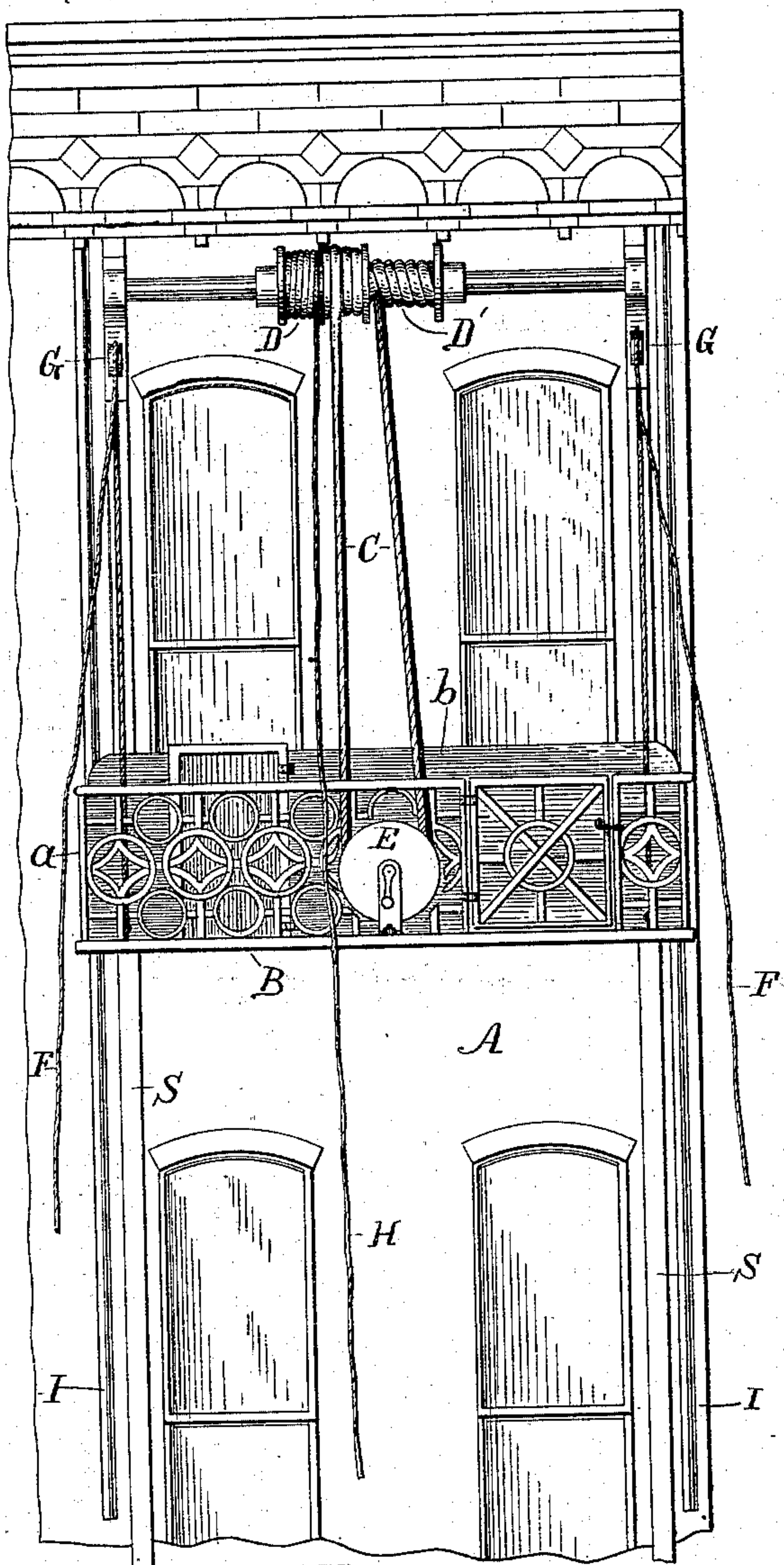
(No Model.)

A. WALKER.
FIRE ESCAPE.

No. 284,517.

Patented Sept. 4, 1883.

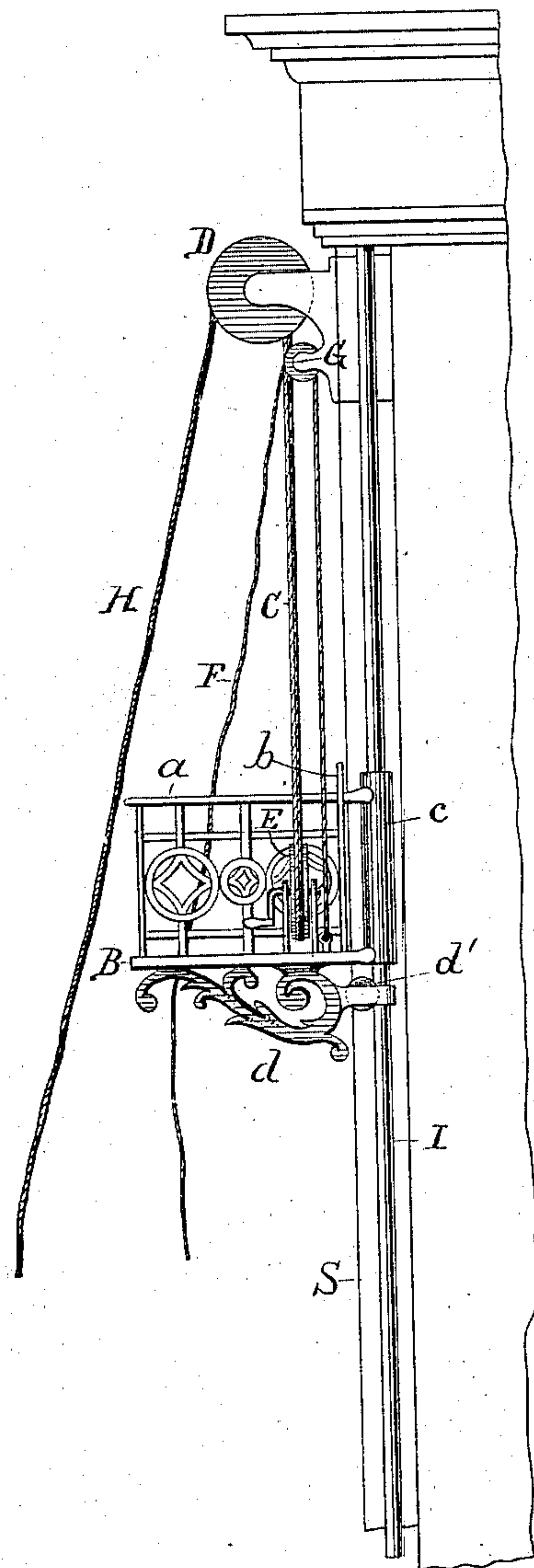
Fig. 1.



WITNESSES:

Thos. Houghton.
Edw. W. Byrnes

Fig. 2.



INVENTOR:

Aaron Walker
BY *Man*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

AARON WALKER, OF KOKOMO, INDIANA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 284,517, dated September 4, 1883.

Application filed April 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, AARON WALKER, of Kokomo, in the county of Howard and State of Indiana, have invented a new and useful
5 Improvement in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a front elevation of my invention applied to a building, and Fig. 2 is a side view of the same.

My invention relates to an improvement in fire-escapes, designed to provide an efficient
15 means for enabling the occupants to descend in safety from the upper stories of a burning building.

It consists in the peculiar arrangement of a platform suspended by ropes and pulleys, and
20 provided with means for guiding it in its ascent and descent, which arrangement of parts is designed to be an attachment to the building, which may take the place of and be used as a veranda or balcony at any of the win-
25 dows or doors, and at the same time be so movable as to be ever ready as a fire-escape, as will be fully described hereinafter.

In the drawings, A represents the wall of a building, to which are applied vertical guard-
30 strips S. These guard-strips are to prevent the platform from rubbing against the wall of the building.

B is the platform, which is made with a guard-rail, *a*, around three of its sides to keep
35 persons from falling off, which guard-rail has a gate in it to let persons off when the ground is reached without the necessity for clambering over the rail. On the side of the platform next to the building is a sheet-metal fire-shield,
40 *b*, to prevent the flames which may be bursting out of a window from scorching the persons on the platform. This shield also has a gate in it, to permit the persons to readily pass out upon the platform from the window. The
45 weight of the platform is sustained by a rope, C, whose opposite ends are fastened to pulleys or drums D D', of different diameters, fixed upon a shaft carried in bearings permanently attached to the upper part of the building. The
50 bight or middle bend of this rope passes around a grooved pulley, E, fastened to the platform, which pulley is provided with a crank-handle

for turning. The opposite branches of this rope are wound in reverse direction upon opposite sides of the two pulleys or drums D D',
55 of different diameters, so as to constitute a species of differential windlass. The platform, as supported upon this rope, remains stationary or in balance at any altitude; but when the pulley on the platform is rotated the said platform
60 is raised or lowered by reason of the fact that the rope at one end is wound or unwound more rapidly than it is at the other. The pulley E on the platform provides means whereby persons on the platform may raise or lower them-
65 selves at will. To permit the platform to be operated by persons from the ground, ropes F F are attached to the platform on each side, and are then passed over independent stationary pulleys G G at the top of the building, and
70 thence descend to the ground. By pulling on these ropes persons upon the ground may raise the platform. To lower it from the ground a separate rope, H, is wound about one of the pulleys (the larger preferably) of the differen-
75 tial windlass, so as to unwind the larger drum or pulley. This rope, like the ropes F, extends to the ground. For heavy loads the platform may be operated both from the pulley on the platform and also by the ground-ropes. In-
80 stead of turning the pulley on the platform by its crank, it is obvious that the same result could be attained by pulling upon the suspending rope on either side of the central or supporting pulley.
85

I I are rods running vertically and attached to the side of the building, on which rods the platform is guided in its vertical travel by guide-tubes *c* and braces *d*, with friction-rollers *d'*, both of which tubes and braces are at-
90 tached to the platform, and which, in conjunction with the rods I, prevent the platform from careening or swaying. If desired, additional braces may be placed above the platform, connecting the latter to the guide-rods,
95 in a manner corresponding to those below it, at *d*.

In constructing my invention I may make it of either wood or iron, or any material, or combination of materials, and the ropes may be
100 either of cotton, hemp, or wire. I may also construct the platform in such ornamental form as to take the place of a veranda or balcony, or it may be made plain. Instead, further-

more, of making it a permanent fixture to a building, the guards S and rods I may be made detachable therefrom and adapted to be placed beside a building.

5 To secure additional power in operating the fire-escape, blocks and pulleys may be attached to the end ropes.

The platform may extend past only one or several windows of the building.

10 Having thus described my invention, what I claim as new is—

1. A fire-escape consisting of a differential windlass or two pulleys of different diameters on the same shaft, a rope wound reversely thereon at its opposite ends, and a platform
15 with a pulley suspended in the bight or loop of the rope, all combined substantially as shown and described.

2. The combination, with the platform and its suspending pulley-rope and differential 20 windlass, of the end ropes, F F, passing over stationary pulleys at the top of the building, and the independent rope H, wound upon the differential windlass, both extending to the ground, substantially as and for the purpose 25 described.

3. The combination, with the suspended fire-escape platform, of the fire-screen arranged on the side next to the building and provided with a door, as and for the purpose described.

AARON WALKER.

Witnesses:

A. B. WALKER,
N. B. SMITH.