

(No Model.)

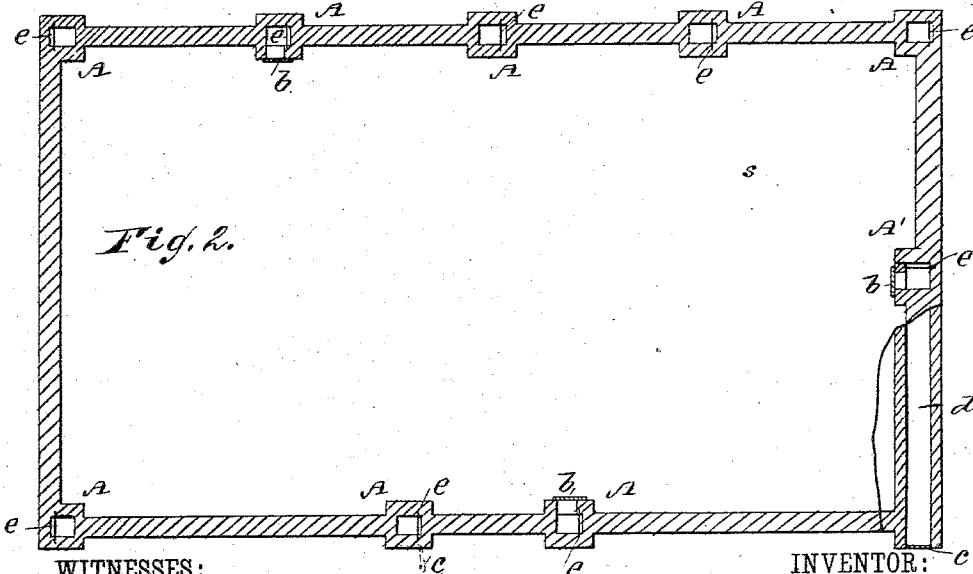
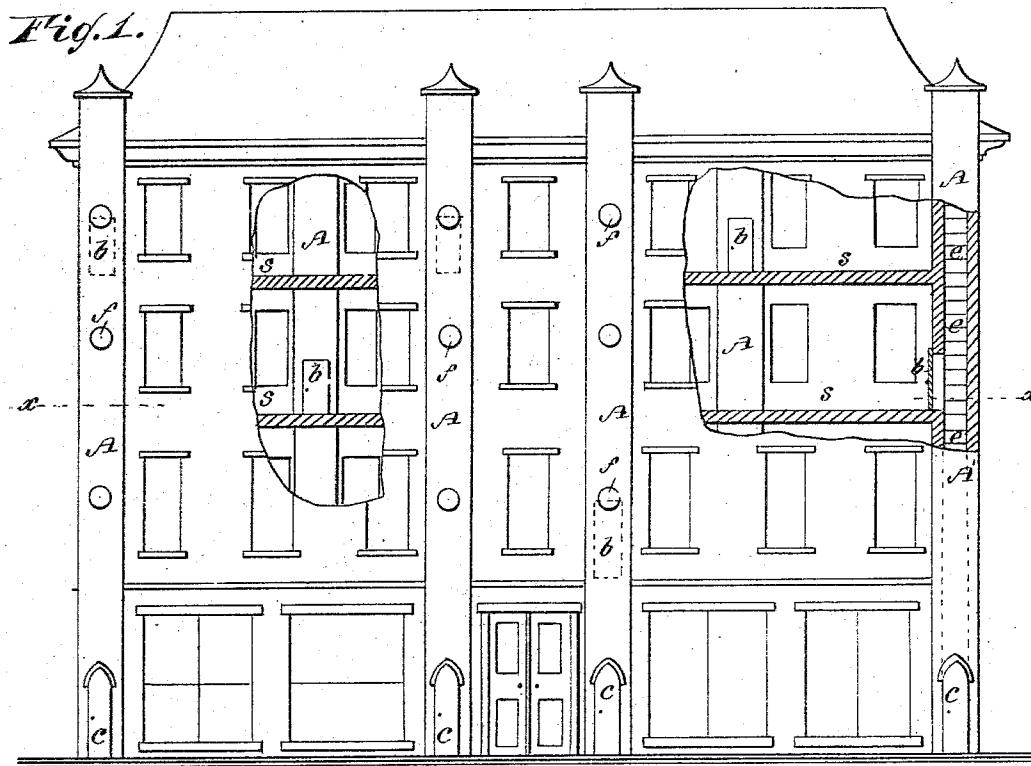
W. WIGHTMAN.

FIRE ESCAPE.

No. 288,902.

Patented Nov. 20, 1883.

Fig. 1.



WITNESSES:

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 288,902, dated November 20, 1883.

Application filed May 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WIGHTMAN, of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description.

This invention relates to means of escape from burning buildings, in which one or more upright shafts communicating by a door or doors with the upper floors of the building are provided, and serve to allow of persons escaping by or down them.

In carrying out my invention, which is applicable to public and other buildings, I provide each upper floor of a building, or from the third floor upward, with one, two, or more shafts, which communicate, respectively, by an iron door with the particular floor to which each shaft relates, but with no opening between said floor and the street, with which said shafts connect or communicate under cover, so that no smoke or fire can get into the shaft, and a person may pass down it without any annoyance, even though a fierce fire may be burning in the floors beneath. These shafts may either be built in the walls of a building, so that the wall of the building itself will form one side of the shaft, or they may be built in any part of the building, or within it, extending from basement to roof, in which latter case a securely-walled passage leading to an alley or the street is necessary. Said shafts should be large enough to admit of a person readily moving up and down within them, and should have ladder-like rounds, which may be made of gas-pipe, arranged at a suitable distance apart down or near one side of them, and the ends of the said rounds inserted and firmly secured in the walls of the shaft. The shafts may be built either of brick or stone, or, where it is desired to economize space, of iron in sections lined with brick, and with the rounds fast to the sections. If desired, instead of the ladder-like rounds, or in addition to them, a pole may be placed up within each shaft for a person to slide down by. Escape-shafts thus separately connecting the several upper floors of a building with an alley or the street, or with a close passage leading thereto, may be applied to buildings already erected, as well as to those in

course of construction, and, where practicable, may be lighted with "bull's-eyes" inserted in their outer walls. The doors in the shafts on the floors with which the shafts respectively connect should be made capable of being readily opened from their floors, while the doors at the bottom of said shafts, which open into the street or alley, or close passage leading thereto, and which may be of ornamental appearance, if desired, should be fastened with a latch opening from the inside, and may be made to open by a key from the outside. Applied to buildings having Mansard roofs and corner escape-shafts, said shafts may be arranged to go above the wall, and may have a door arranged toward the inside of the building, with an iron pathway and passage connecting with the dormers. These corner shafts might also have a door opening on the upper floor of the building.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a partly-sectional elevation of a building having my improvement in means for escaping from fire applied, and Fig. 2 a horizontal section of the same on the line *xx* in Fig. 1.

A A' indicate a series of shafts built in the walls of a building, and arranged to extend upward from the ground or basement of the building to or above the several upper floors, with which they respectively connect—that is, one, two, or more shafts with each floor *s*—separately by means of iron doors *b b*, and so that they have no communication with the floors beneath said doors, to prevent any interference of escape by the shafts from smoke or flames caused by fire on any of the under floors or in the basement of the building, said shafts opening at their bottom, by means of doors *c c*, either directly into the street or it may be into an alley or other outside space, or, as shown for the shaft *A'*, indirectly opening into or connecting with the exterior of the building by means of a close or walled-in subterranean or ground passage-way, *d*. This indirect communication will be found serviceable in cases where the escape-shaft is in or against the party-wall of a building, or where

provision is to be made for escape from the basement. These shafts A A' are or may be provided each with ladders formed by rounds *e e* down or near the one side of them, and 5 having their ends securely built in or connected with opposite sides of the shaft, as hereinbefore referred to; or any other escaping appliances may be provided within the shafts, which, where practicable, may be lighted 10 by bull's-eyes *f*, or glazed iron frames set in the shafts and forming glazed openings.

A system or means of escape such as described from a burning building affords the greatest security and protection from exposure either to the fire or to a multitude on the outside of the building, which will be found of great advantage in the case of ladies and others, especially during the night, when only 15 scantily clad, and in the case of nervous persons, 20 who would hesitate to escape by ladders from the outside, that expose the person to the flames issuing from the windows beneath.

Properly distributed, such improved means of escape will afford every capacity of escape for all the inmates of a crowded building under 25 cover, without regard to burning stairs or elevator, or other shafts only opening into the basement and not connecting directly or indirectly by a closed passage with the street, and which only form flues to augment the danger. 30

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

A method of constructing buildings so as to afford an escape, in case of fire, from the upper 35 stories thereof, which consists in making vertical chambers within the building-walls, each chamber connecting with a separate story and at the bottom with the outside of the building, as described.

WILLIAM WIGHTMAN.

Witnesses:

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