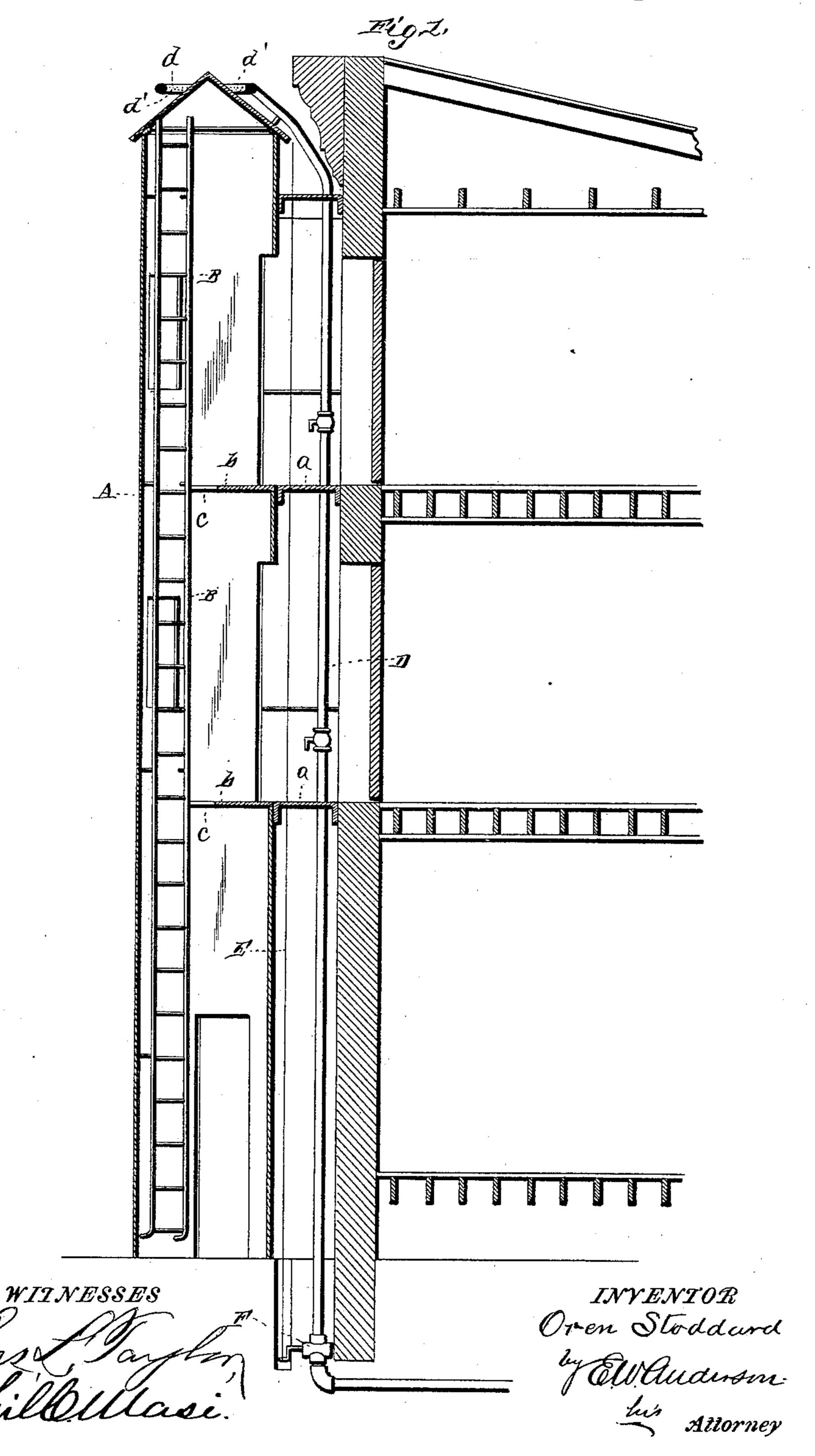
2 Sheets—Sheet 1.

## O. STODDARD. FIRE ESCAPE.

No. 435,778.

Patented Sept. 2, 1890.



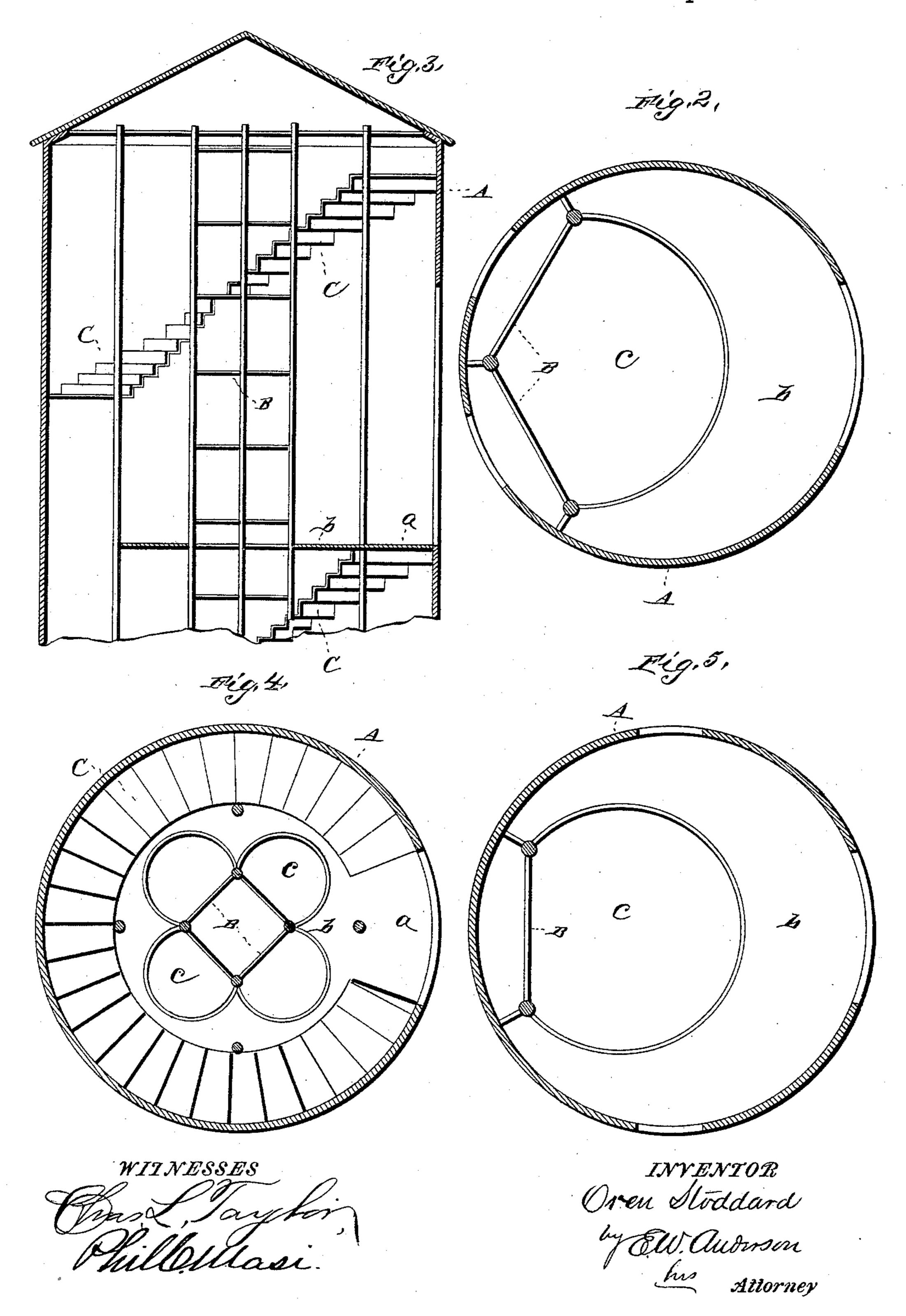
(No Model.)

2 Sheets—Sheet 2.

## O. STODDARD. FIRE ESCAPE.

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## UNITED STATES PATENT OFFICE.

OREN STODDARD, OF BUSTI, NEW YORK.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 435,778, dated September 2, 1890.

Application filed May 12, 1890. Serial No. 351,456. (No model.)

To all whom it may concern:

Be it known that I, OREN STODDARD, a citizen of the United States, and a resident of Busti, in the county of Chautauqua and State 5 of New York, have invented certain new and useful Improvements in Fire-Escapes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical section. Figs. 2, 4, and 5 are horizontal sections. Fig. 3 is a vertical section showing flights of

stairs.

This invention relates to certain improve-20 ments in fire-escapes; and it consists in the construction and novel combination of parts, as will appear from the following description

and accompanying illustrations.

In the drawings, A refers to a shaft or tower, 25 preferably cylindric and made of light sheet metal suitably braced in position and located contiguous to the building—say four (more or less) feet therefrom. In height the tower or shaft should be convenient of access from 30 the roof of the building, and it is connected with each upper floor of the latter by "gangways" or bridges a, which are also protected by light-closures, and the doorways communicating therewith are in practice provided 35 with self-closing doors to cut off the access of flames to the gangways or bridges.

In the tower or shaft A is provided a series of ladders B, arranged centrally thereof and connected, on a level with each gangway or 40 bridge a, to a "landing" or floor b within said tower or shaft. The sides and rounds of the ladder are preferably of gas-pipe iron, and in the floors or landings b opposite the ladders B are openings c, through which convenient 45 access is had to the ladders by those descending or ascending the latter. The tower or shaft A may also be supplied with winding flights or series of stair-steps C, thus augmenting the facilities or means for escape, adapting 50 the same in their form for places of public gatherings—such as theaters and halls—and for hotels.

Up through the shaft or tower A extends a water-pipe D, which connects with a service water-pipe underground, and is arranged 55 close to the gangways or bridges a, directly above which it is provided with outlets for the escape or discharge of the water upon the said gangways or bridges, preventing the same from becoming heated. At the upper 60 end of the water-pipe D, which reaches to the top of the tower or shaft A, is a circular pipe or extension d, entirely encircling the tower or shaft upon the outside and having a series of outlet-openings d', the water passing out  $\delta 5$ through which flows or passes down around the tower in a sheet, thus preventing the latter from becoming heated.

It will be observed that by means of this

tower or shaft fire-escape not only is means 70 provided for the escape in safety of persons fleeing from a burning building, but the firemen are enabled to reach any upper story of the building from the outside, and thus get nearer the heart of the fire, giving them con- 75 trol over the same in throwing the water thereon. If desired, only one ladder may be used in addition to dispensing entirely with stair-steps, or any other less number of lad-

ders than the number first given (four) may 80 be used, according to the requirements of the

case.

A rod E or its equivalent is connected to a cock or valve F, provided in the service waterpipe below the surface to protect it from the 85 frost, and extends upward through the shaft or tower A within convenient reach of the operator or any person in the latter to permit the ready turning on of the water to prevent the shaft or tower from becoming heated 90 by the burning building.

Having described this invention, what I claim, and desire to secure by Letters Patent,

1. The herein-described fire-escape, having 95 the shaft or tower provided with landings on the same level with the upper floors of the building, ladders passing up through said landings, and a water-pipe extending therethrough, its upper end terminating in a cir- 100 cular pipe on the outside of the tower or shaft adapted to discharge the water upon the latter, substantially as set forth.

2. In fire-escapes, the combination, with the

tower or shaft, of the water-pipe having its upper end connected to a circular pipe on the outside of said tower or shaft, said pipe having a cock or valve adapted to be operated 5 by a rod connected thereto and reaching upward within convenient reach of the operator, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

OREN STODDARD.

 $: \mathbf{Witnesses}:$ 

WM. NORTHROP, Jr.,
THOS. JACKSON.