

(No Model.)

S. J. PARDESSUS.
FIRE ESCAPE TOWER.

No. 277,156.

Patented May 8, 1883.

Fig. 1

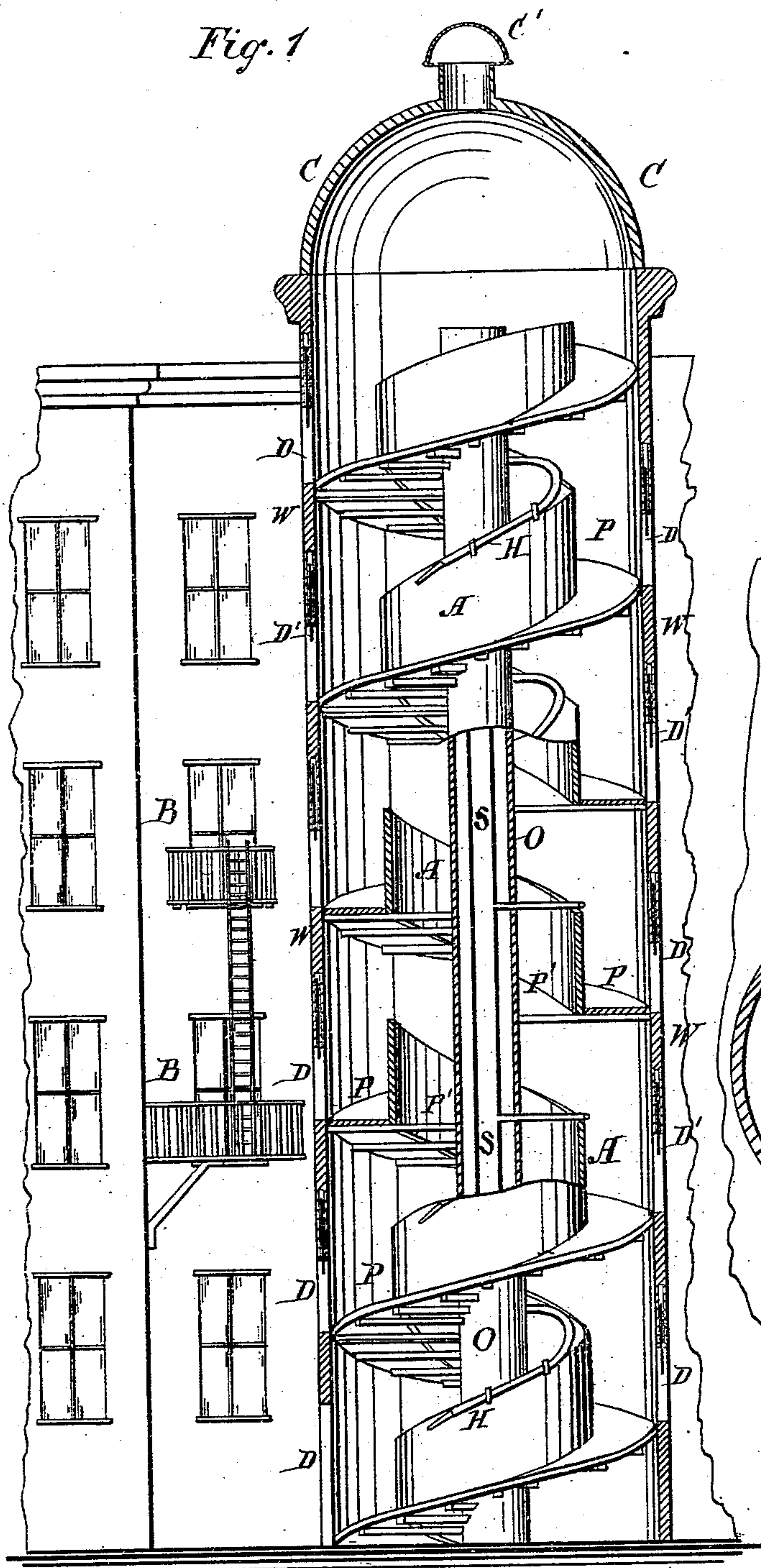


Fig. 3.

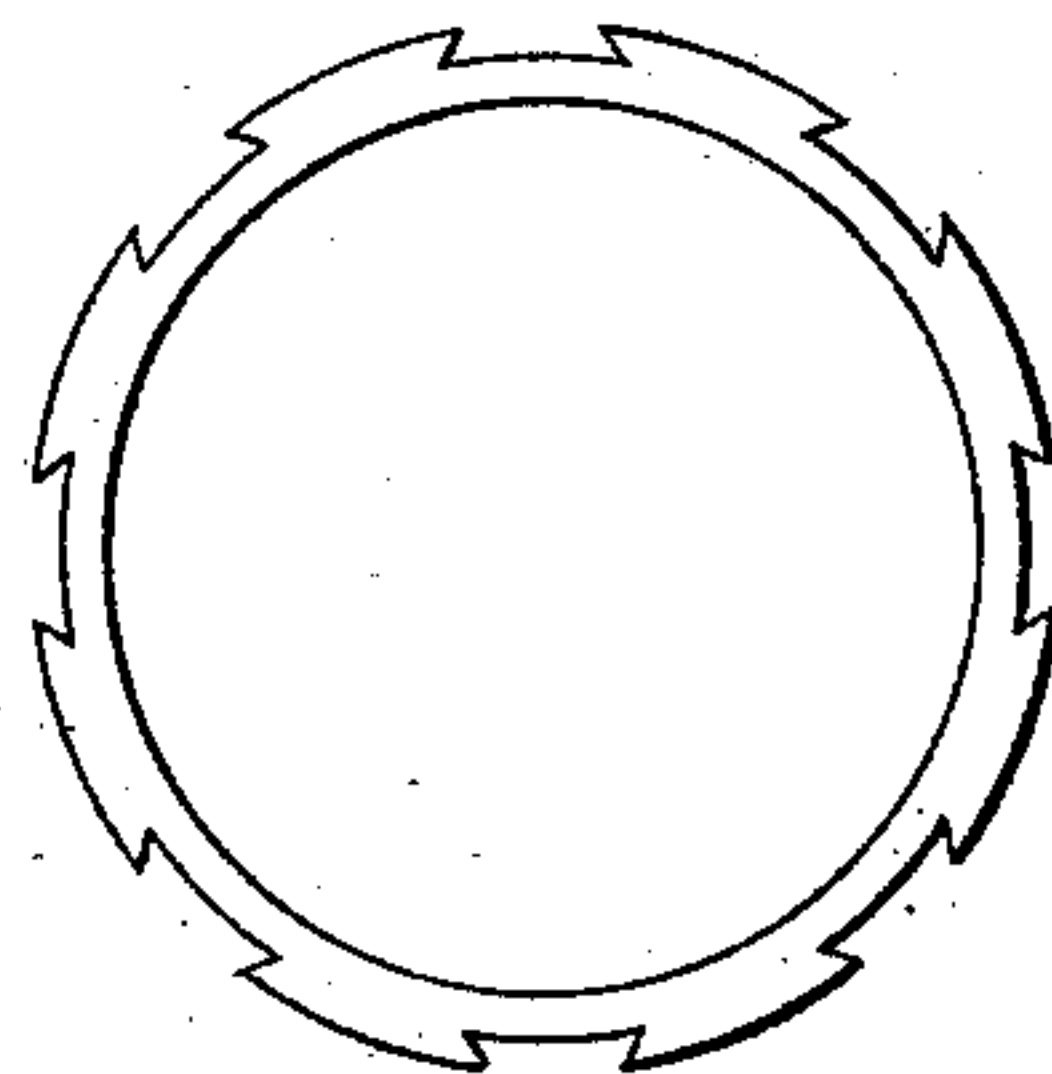
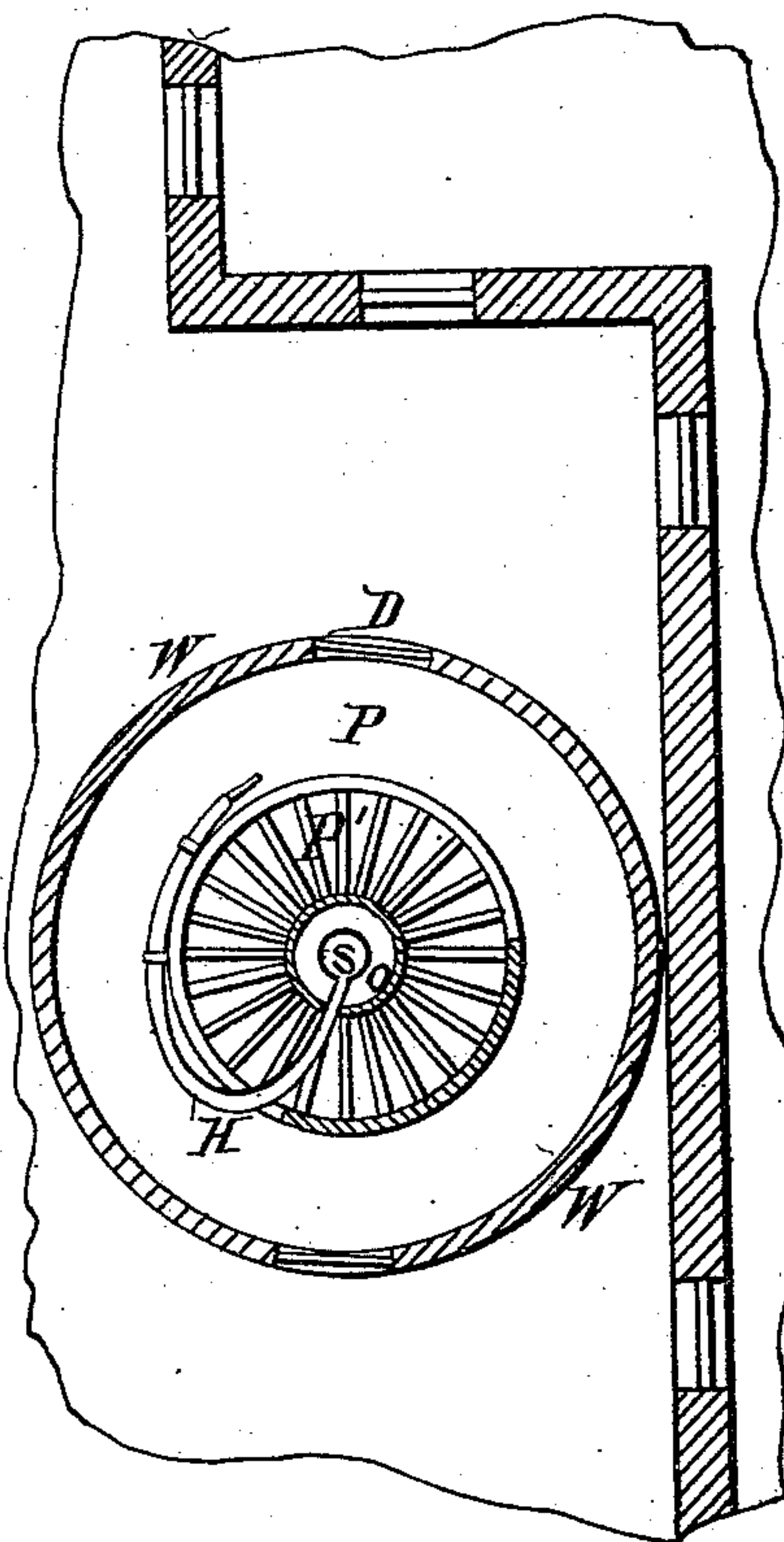


Fig. 2.



Witnesses.

James A. Skilton.
W. H. Maginnis.

Inventor.

Samuel J. Pardessus.

UNITED STATES PATENT OFFICE.

SEMON J. PARDESSUS, OF BROOKLYN, NEW YORK.

FIRE-ESCAPE TOWER.

SPECIFICATION forming part of Letters Patent No. 277,156, dated May 8, 1883.

Application filed February 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, SEMON JACQUES PARDESSUS, a citizen of the United States, residing at No. 1268 Pacific street, in the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Fire-Escape Towers, (for which I have obtained no patent whatever,) of which the following is a specification.

My invention relates to improvements in fire-proof towers, either independent of or directly connected with and forming a part of the building from which it is a means of escape in case of fire.

My objects are to provide a means of escape from every story of the building and from the roof for invalids, children, infirm persons, and others, free from staircases, landings, corners, or other obstructions, whereby people suddenly awakened and alarmed may readily find their way out and down from a building on fire, even through darkness or smoke, without confusion or collision with firemen and others at work in arresting conflagration; and my objects are further to provide, at the same time and in the same structure, an independent avenue and means of access to and egress from the burning building for firemen and the like, separated but accessible from the escape-avenue at any time, and so ventilated that smoke cannot become dense or obstructive until, perhaps, in the last stages of the conflagration. I attain these objects by means of the structure and arrangements shown in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of the tower, and in part an elevation of a portion of the building associated therewith. Fig. 2 is a sectional view of the same, and Fig. 3 is a sectional view of the interior shaft.

Similar letters refer to similar parts throughout the several views.

As shown, the tower has only a single outer wall, W. I contemplate the use of a double wall instead, with sufficient intervening space to receive any required piping, as for gas, water, sewer, or other purposes, &c., if desired. This wall is pierced at intervals, D D, to furnish entrance from each floor of the building, and the openings may be furnished with doors D', consisting of iron plates, capable

of moving vertically, as shown, or otherwise, as desired. The interior of the tower is divided into two separate spiral passage-ways, P and P', separated, say, by a low partition, A. Both of these passages are without steps, being made with a gentle incline and smooth like a floor for the purpose of avoiding as much as possible all danger of tripping when persons are fleeing from a building on fire. Stairways, landings, and steps are very dangerous under such circumstances, and I therefore entirely avoid them. The outer passage has a substantially tight or closed floor; but the inner one, for the use of firemen, &c., has an open or slatted floor to permit ventilation from the bottom to the top of the tower, in order to cause the removal of any smoke that may intrude through a casually-open door or slide, or through any cracks around the same. This open flooring may furnish a better footing to firemen or to persons going to the rescue of people in peril. The partition A being low, or not extending to the ceiling, firemen may vault over it, if they wish to reach the doorways D at any point for the purpose of fighting the fire by using the hose and nozzle H for throwing water through the door or through a small aperture therein, or for any other purpose.

O is a shaft located in the center of the tower, and may be used to contain a stand-pipe, S, with which short lengths of hose H H are connected to furnish means for putting out the fire from the tower.

B B are balconies, from which extensions may be made to any adjacent doors or openings D in the tower.

C' is a ventilating-dome placed upon the top of dome C proper of the tower, like that shown in my Letters Patent No. 222,939, dated December 23, 1879. The inner slatted passage at all times permits air to traverse the tower from bottom to top, and thereby keep the tower cool. I contemplate the use of the center shaft, O, for gas, sewer, hot-air, and other pipes, as desired.

Instead of a floor made smooth for the outer passage, I may use sheet metal, perforated to some extent—that is, with the metal cut out at intervals. This would give a better footing than wood or plain metal, be reasonably fire-proof, and, the other passage constituting the

ventilating flue, these holes would not be so numerous as to be objectionable by reason of the admission of smoke.

The vertical sliding doors may be made of iron, backed or filled in with cement or other fire-proof material, may be balanced by weights, and also bolted in any usual way.

The shaft O may be made of masonry, if desired; but I prefer to provide for this part of my invention a cast-iron column, a section of which is shown in Fig. 3. It has upon its outside vertical dovetail grooves cast therein to receive the inner ends of the floor-beams, which are shaped to fit the same, may be slipped into the grooves from above, and either there pinned after they have reached the point where they are to remain, or they may be blocked up and supported from below, as the spiral passage is constructed by means of blocks fitting the grooves. This method of construction will facilitate the work of securing the proper inclination of the passage-floor.

Through and along the spiral passage shown and described sick people may be carried readily, or even dragged without being removed from their beds. The absence of all steps, stairs, or landings, and the substitution of a regularly inclined passage will aid not only the escaping people, but also the rescuers, and give a confidence in their movements to all who may have occasion to use it which otherwise they could not have. A fertile cause of disaster in the emergencies contemplated is the tripping and falling of one person in a crowd, whereupon many, and in some instances all, of those who come after also trip and fall

over the increasing pile of people, until the misfortune of one results in causing the death of many. This my invention avoids.

I have shown a tower with a spiral passage 40 free from steps, stairs, and tripping devices of all kinds. I do so in part to economize space; but I contemplate the adaptation of the same principle, where there is abundance of room, by using a series of straight inclines connected 45 together or opening freely into each other at the ends in which a considerable portion of the advantages of my invention may be realized.

In passing up or down either of the passage-ways the top of the intervening partition, A, 50 may be used as a hand-rail, by following which the whole passage may be readily traversed in safety. A rail may also be provided along the outer wall as well. The two spiral passage-ways lead to and open upon the roof, permit- 55 ting escape in that direction or from it, as well as from below.

I claim as my invention—

1. A fire-escape tower provided with the two spiral passage-ways, P and P', separated 60 from each other, as shown and described.
2. In a fire-escape tower provided with the two spiral passage-ways P and P', the inner passage-way, P', provided with a slatted floor, in the manner and for the purposes set forth. 65
3. In a fire-escape tower, the continuous spiral passage-ways P and P', in combination with the vertical shaft O, as set forth.

SEMON J. PARDESSUS.

Witnesses:

JAMES A. SKILTON,
W. H. MAGINNIS.