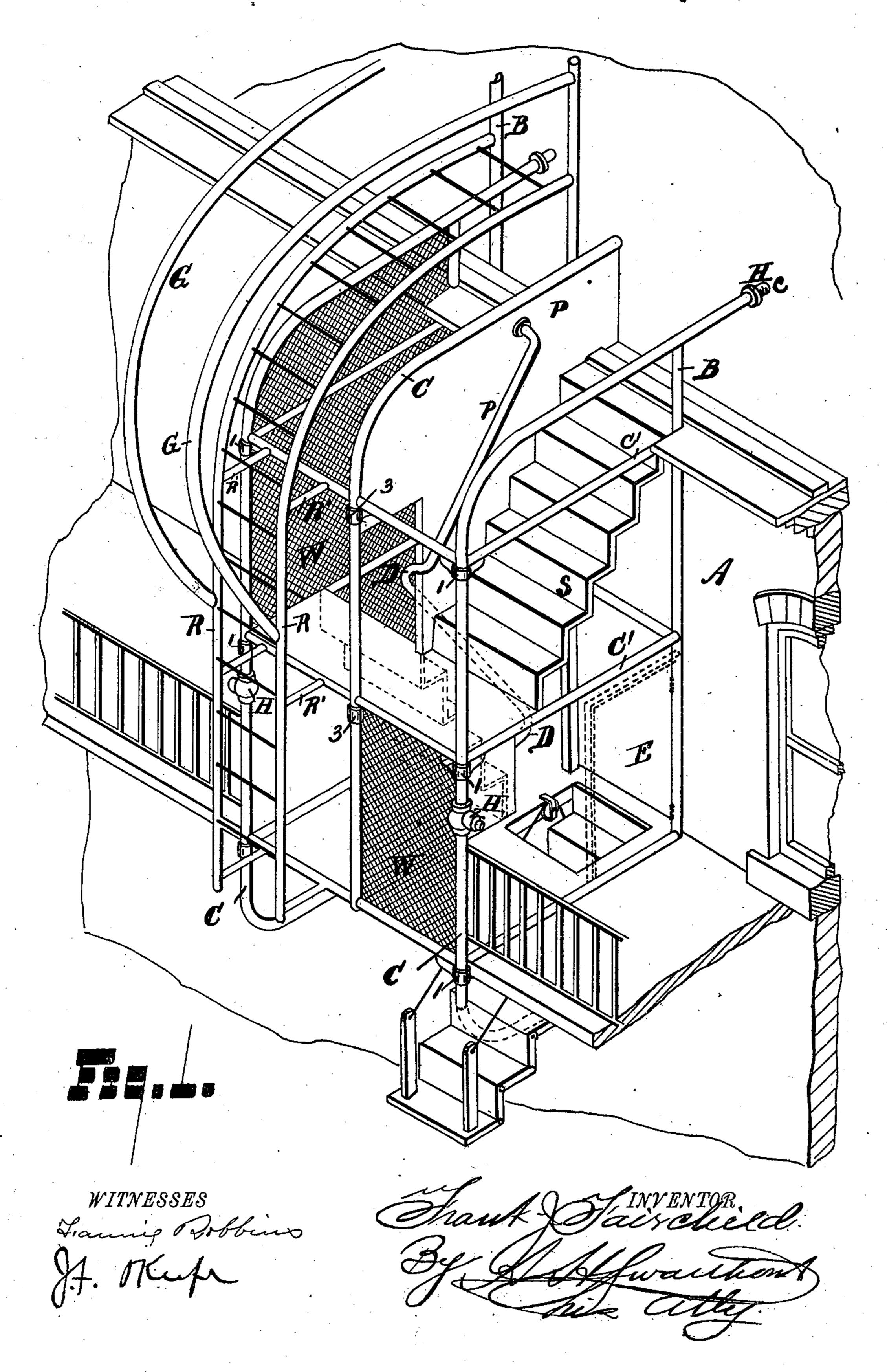
F. J. FAIRCHILD. FIRE ESCAPE.

No. 502,070.

Patented July 25, 1893.



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FIRE ESCAPE. No. 502,070. Patented July 25, 1893. WITNESSES

United States Patent Office.

FRANK J. FAIRCHILD, OF SAGINAW, MICHIGAN, ASSIGNOR OF ONE-HALF TO JAMES J. WALL, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 502,070, dated July 25, 1893.

Application filed March 13, 1893. Serial No. 465,699. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. FAIRCHILD, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention is a fire-escape, and consists in the special construction shown and claimed.

Figure 1 is a perspective of the top story of the escape secured to a building. Fig. 2 is a plan view. Fig. 3 is a view of hose coupling; 20 Fig. 4 a perspective view of clasp and its lugs supporting the stair. Fig. 5 is a top view of clasp and lugs. Fig. 6 is a perspective of first story showing folding stair.

A is the building.

BBB are flat iron bars bolted to the building and extending from the top of the build-

ing to the bottom.

C C C are hose pipes forming the outer corner supports of the escape, extending from the 30 ground to the top of the building, bending over at the top as shown, and, except the middle pipe, provided at their top and bottom ends, also at the different stories, with hose couplings. These pipes are stayed and braced 35 by rods C' extending from the wall pieces B B to the pipes C C and from one pipe to the other. The braces are secured to the wall pieces and pipes in manner following, viz: 2, 2 are brackets bolted to the wall pieces at 40 points desired, and to the tops of these brackets the rods C' are bolted. 1 and 3 are bands clasped to the pipes C C as shown in Fig. 5 and provided with one or two lugs extending inwardly, forming a shelf to which the braces 45 C' are bolted.

P is a partition extending in the middle of the escape from top to bottom thereof.

S S is a series of stairs extending from the top of the building to the first story. These stairs, instead of extending downward along the wall of the building as is common, start from the top at the right hand side of the es-

cape and extend three or more steps downward to the front of the escape and away from the building, then through an opening in the 55 partition P, down three steps on the left side to the wall of the building, and so on, from and to the building, right and left, to the first story. These series of steps S are made in one piece bent in the form of stairs or steps, 60 the top step being secured to brackets 2 on the wall pieces BB, the lower step secured to brackets 1 and 3 on the pipes C C. At each story an opening into the escape is provided in the outer wall of the escape, from the bal- 65 cony, as E E. The outer wall of the escape W W may be of sheet iron or wire meshing, as desired.

D D is a railing extending from the top of the stairs to the bottom, secured by brackets 70 to the partition P.

R R is a fireman's ladder extending from the first story of the escape to the top, secured by braces R' to the front of the escape.

G is a railing on each side of the ladder at 75 the top where it bows over the escape. This ladder is on the left hand side of the escape so as not to be in the way of entering the escape at the top of the building.

S' is a folding stair extending from the top 80 of the first story to the ground. It folds up on the right side of the escape under the stair S, and is held in place by weights 5 and 6 secured to the ends of ropes 7, 7, attached to the standards 8, 8 on the last step at the foot of 85 the folding stair, and running over pulleys 9 and 10 above. By means of these ropes 7, 7, the folding stair is raised and then held up by the counter weights 5 and 6. It is my intention to arrange a trip for this stair, so that 90 as the door is opened into the right side from the first story, the stair will be lowered. Any ordinary trip may be used, and I do not show or describe any particular kind.

One of the special advantages of my escape 95 is the ability to take a person from the top of the building, or any story, to the ground without special hazard or risk of being over crowded. It can be made of such a width that two persons cannot descend abreast, and 100 not to exceed three on any stair at a time; so that there is no possibility of a rush or jam in the flight from top to bottom.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent therefor, is—

1. A fire escape consisting of the pieces B B secured to the wall, the hose pipes C C pro-5 vided with hose coupling at each story and on top and bottom, braces C' C' staying pipes C C to wall pieces B B, the partition P, the series of right and left stairs on each side of the partition, extending from and to the building, 10 and the railing D and a covering for the escape, substantially as described, and as and

for the purpose set forth.

2. In a fire escape, the combination with the frame of the escape consisting of wall pieces 15 B B and hose pipes C C C properly stayed and braced, of the stairs SS arranged in flights each flight S comprising a series of steps made in one piece, each flight being secured to the wall pieces and pipes by brackets, one flight 20 being secured so as to extend from the wall outward, another from the outer wall of the escape inward, and located at the side of the first flight, the next flight secured at a proper distance under the first flight in the same 25 manner, and so on from story to story, and the partitions P between the flights, with an opening at each landing, and the railing, substantially as described and as and for the purpose set forth.

3. In a fire escape, the combination with wall supports for the escape, of hose pipes forming

outer corners of the frame work of the escape, clasps 3 provided with one or more lugs secured to the pipes and to which the stays and braces and stairs are secured, the braces, the 35 series of stairs, and the railing, substantially as described, and as and for the purpose set forth.

4. A clasp C' consisting of a piece of band iron bent into a band with ends bent outward 40 and provided with corresponding holes for securing a bolt, and the bolt 3' passing through the hole, and the nut whereby when the nut is tightened the band is tightened to the pipe, and one or more lugs extending horizontally 45 forming a bracket, substantially as described,

and as and for the purpose set forth.

5. In a fire escape, the combination with the wall pieces B B, the hose pipes C C, the connecting braces B' B', brackets 1, 2, 3, coup- 50 lings H H, of a series of flights of stairs, each series being in one piece and arranged as described, the partition P, the railing B, folding ladder S' from ground to top of first story, and the fireman's ladder R, substantially as de- 55 scribed, and as and for the purpose set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

FRANK J. FAIRCHILD.

Witnesses:

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A. H. SWARTHOUT, FANNIE ROBBINS.