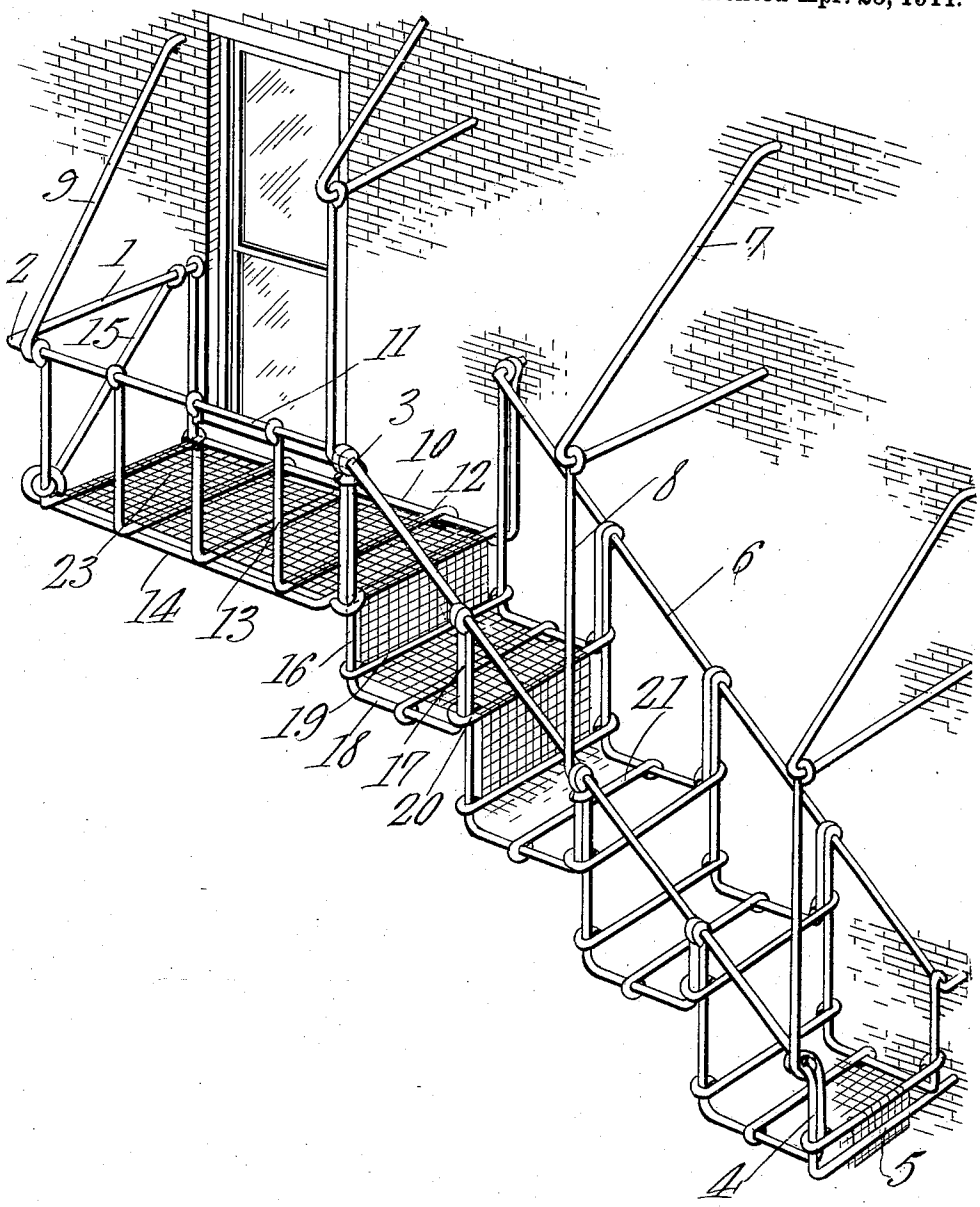
W. C. BURGE.

FIRE ESCAPE.

APPLICATION FILED OCT. 2, 1909.

990,701. Patented Apr. 25, 1911.



Witnesses

J. Gowlin

G. G. Smith

William C. Burge,
Inventor

by C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM CARTER BURGE, OF GREENSBORO, NORTH CAROLINA.

FIRE-ESCAPE.

990,701. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed October 2, 1909. Serial No. 520,607.

To all whom it may concern:

Be it known that I, WILLIAM C. BURGE, a citizen of the United States, residing at Greensboro, in the county of Guilford and State of North Carolina, have invented a new and useful Fire-Escape, of which the following is a specification.

It is the object of the invention to provide an improved construction of fire escape and the invention relates more particularly to that class of such structures which are permanently secured upon the wall of a building and which embody a balcony and a step structure leading from the balcony.

In the drawings there is shown a perspective view of the fire escape embodying the present invention.

In the figure of the drawings, the escape is illustrated as including, among other elements, a rail 1 which is formed from a length of rod material bent near one end as at 2 and secured at the extremity of its bent portion in the building wall upon which the escape is mounted. The rail 1 is also bent at 3 so as to constitute a hand rail both for the balcony and for the stairway structure. At its opposite end, the rail is bent to extend downwardly vertically as at 4 and bent to extend toward the building wall as at 5, it being secured at the extremity of its last mentioned portion in the said wall. In addition to the hand rail 1 there is provided a hand rail 6 formed of a suitable length of rod material bent at its ends and secured in the wall of the building upon which the escape is mounted. This hand rail 6 corresponds in length and in function to that portion of the hand rail 1 extending between the bend 3 and the portion 4, or in other words, constitutes the other hand rail for the stair structure.

Inasmuch as the portions of the rail 1 between the bend 2 and the portion 4 is considerably spaced from the wall of the building, it is necessary that means be provided for supporting and bracing this portion of the rail and this means is embodied in brackets 7 secured upon the wall and projecting therefrom and hanger rods 8 which are suspended from the outer ends of the brackets and at their lower ends are secured to the said portion of the rail 1. In addition to the brackets 7 and hanger rods 8, the rail 1 is supported by a rigid brace rod 9 which rod is secured at its upper end in the wall and at its lower end is bent around the rail 1 at the bend 2 therein.

A rod 10 is bent at right angles near each end to form suspending arms 11 and at their upper ends these arms are bent one around the rail 6 at its upper end and the other around the rail 1 at its upper end, the said member lying close to the wall. To the connecting portion of the member 10 are secured the ends of the horizontal arms 12 of frame members 13, these members being formed from rod material bent between its ends to form right angularly extending portions. The vertically extending portion of each frame member is secured to the rail 1 between the bends 2 and 3. A rod 14 is secured at its ends to the end ones of the said frame members 13 at their bends. A diagonally extending brace rod 15 is secured at its upper end to the upper end of the rail 1 and at its lower end to the adjacent one of the frame members 13.

The stairway structure includes members formed from lengths of rod material bent to form each a long arm 16, a shorter arm 17, and a connecting portion 18 and these members are secured at the upper ends of their arms 15 and 17 to the rail 1 between the bend 3 and the portion 4 and to the rail 6 between its ends. It will be observed that the said members at each side of the stairway structure are arranged or suspended with the longer arm 16 of one member next to the shorter arm 17 of the member next above. The connecting portions 18 are all, however, horizontal. Connecting rods 19 are secured therein to opposite ones of the frame members at the point of juncture of their longer arms with their connecting portions and similar rods 20 are secured at their ends to the said opposite ones of the frame members at the points of juncture of their shorter arms 17 and their connecting portions and these latter rods 20 also have their ends bent or otherwise secured to the longer arms 16 which rest against the said arms 17. Cross rods 21 connect the connecting portions 18 of opposite ones of the frame members of which the portions 18 constitute a part.

A strip of heavy wire mesh indicated by the numeral 23 is extended over the arms 12 of the frame members of the balcony and over each cross rod 20 and 21 but beneath the cross rods 19 so that leading from the

balcony is a series of steps as shown in the figure of the drawings.

What is claimed is:

1. In a structure of the class described, a hand rail constituting the hand rail of a balcony and stair frame, a rail positioned opposite a portion of the first mentioned rail, a hanger suspended from the two rails, frame members suspended from the hanger and the first mentioned rail, stair frame members suspended from the said hand rail and arranged opposite each other, cross rods connecting opposite ones of the stair frame members, and a sheet of flooring material extending over portions of the first mentioned frame members and over certain of the cross rods and beneath others of the cross rods.

2. In a structure of the class described, a hand rail constituting the hand rail of a balcony and stair frame, a rail positioned opposite a portion of the first mentioned rail, a hanger suspended from the two rails, frame members suspended from the hanger and the first mentioned rail, stair frame members suspended from the said hand rail and arranged opposite each other, cross rods connecting opposite ones of the stair frame members, and a sheet of flooring material extending over portions of the first mentioned frame members and over certain of the cross rods and beneath others of the cross rods, the stair frame members consisting each of a length of rod material bent to form a long and a short arm and a connecting portion between the arms, the arms being secured at their upper ends to the respective hand rails.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM CARTER BURGE.

Witnesses:
D. F. HAYES,
J. D. KASE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."