

No. 665,533.

Patented Jan. 8, 1901.

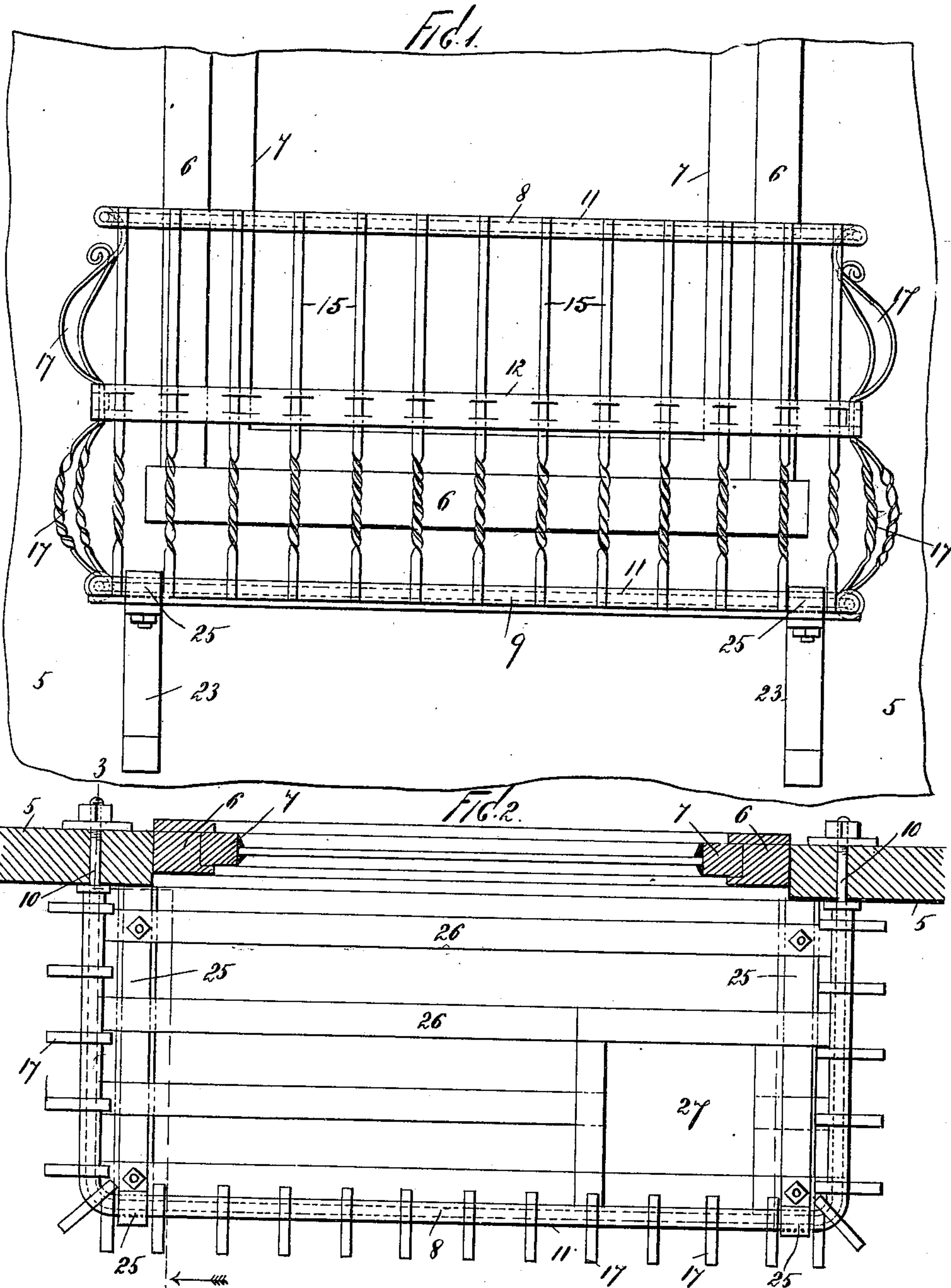
A. KUHL.

BALCONY FOR FIRE ESCAPES OR OTHER PURPOSES.

(No Model.)

(Application filed June 5, 1900.)

2 Sheets—Sheet 1



WITNESSES

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ATTORNEYS

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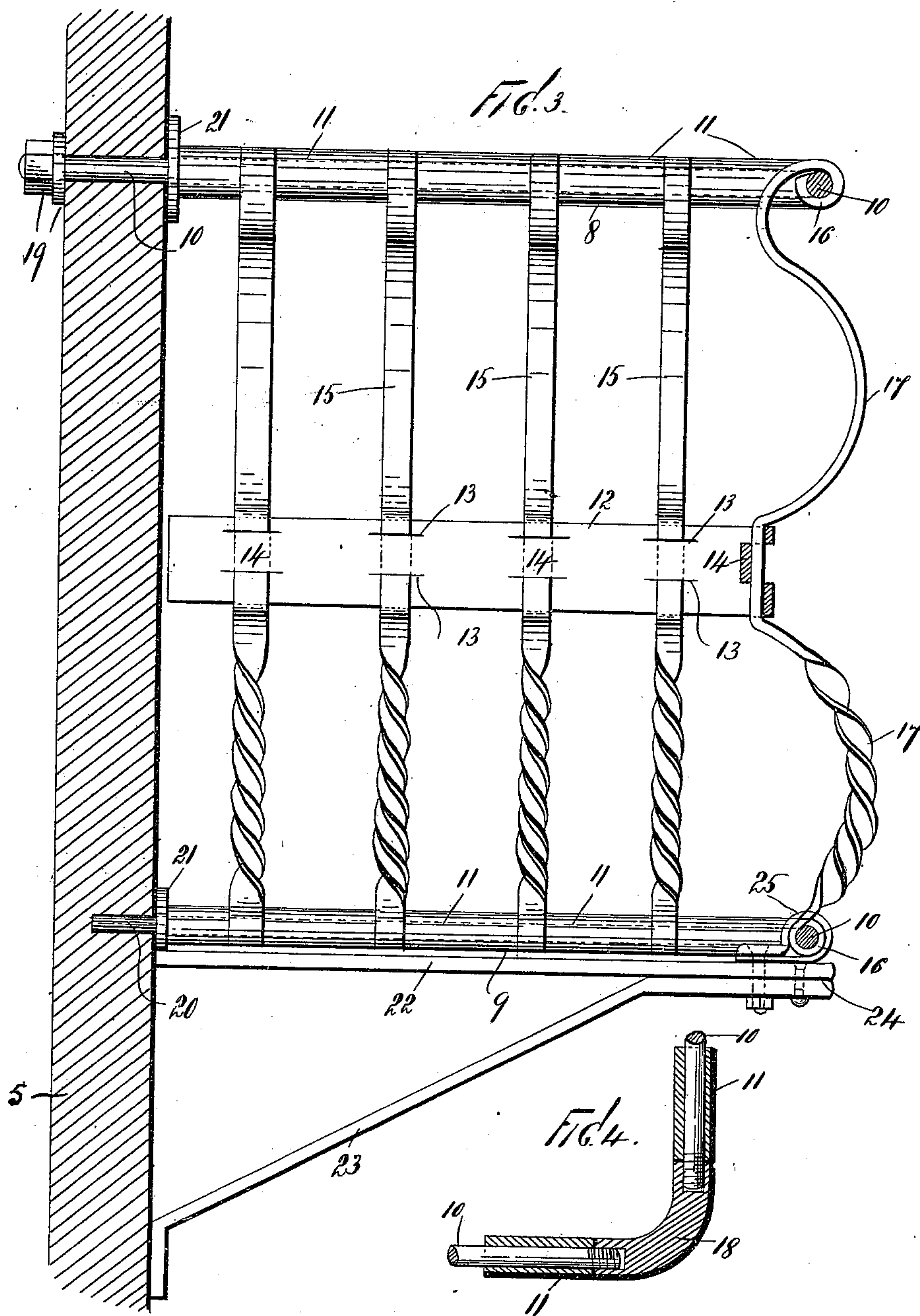
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UNITED STATES PATENT OFFICE.

ALBERT KUHL, OF NEW YORK, N. Y.

BALCONY FOR FIRE-ESCAPES OR OTHER PURPOSES.

SPECIFICATION forming part of Letters Patent No. 665,533, dated January 8, 1901.

Application filed June 5, 1900. Serial No. 19,107. (No model.)

To all whom it may concern:

Be it known that I, ALBERT KUHL, a subject of the Emperor of Germany, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Metallic Balconies for Fire-Escapes or other Purposes, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to fire-escape balconies for use in connection with the windows of houses of various kinds and classes, such as dwelling-houses, flat-houses, apartment-houses, hotels, &c.

It is a well-known fact that balcony-frames or similar structures are ordinarily connected with the walls of buildings so as to inclose the lower portion of the window and that these devices are connected by ladders extending from one to another, each of said devices being provided with a suitable opening in the bottom, through which a person may pass; and the object of this invention is to provide a device of the class described which is simple in construction, strong and durable, and comparatively light and inexpensive, and which may be securely attached to the walls of a building.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a portion of the wall of a house, showing a window and my improved fire-escape balcony connected therewith; Fig. 2, a plan view thereof; Fig. 3, a section on the line 3 3 of Fig. 2, and Fig. 4 a section of a detail of the construction.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same reference characters in each of the views, and in said drawings I have shown at 5 part of a wall of a house, in which is a window-frame 6, provided with the usual sash 7, and in the practice of my invention I provide a fire-escape balcony of the class described which is of the general form shown in Figs. 1 and 2, said balcony being so formed as to inclose the bottom portion of the window, and in the construction of this balcony I provide top and bottom frames 8 and

9, consisting of strong wire rods 10, as shown in Fig. 3, which are bent into the form shown in Figs. 2 and 3, so as to form a substantially rectangular frame which is open on the side next to the house, said rods being shown in dotted lines in Figs. 1 and 2 and in full lines in Figs. 3 and 4.

Mounted on the rods 10, composing the top and bottom frames 8 and 9, are short sleeves 11, and midway between the top and bottom frames is an intermediate frame 12 of the same form as the top and bottom frames 8 and 9 and consisting of heavy sheet metal or a metal plate bent into the form of the top and bottom frames, and said intermediate frame is slitted at regular intervals both near the upper and lower side thereof, as shown at 13, so as to form metal loops 14, and connected with the top, bottom, and intermediate frames 8, 9, and 12 are vertically-arranged metal strips 15, which at their upper and lower ends are folded around the rods 10, which form the top and bottom frames 8 and 9, as shown at 16 in Fig. 3, and said metal strips are passed through the intermediate middle frame 12 or through the slits 13 formed therein, as is also clearly shown in said figure, and said metal strips are also curved outwardly between the top and bottom and intermediate frames, as shown at 17, so as to form scroll-work, and the lower portions of said strips between the bottom and intermediate frames are twisted spirally, as shown in Figs. 1 and 3.

The rods 10, which form the main portion or core of the top and bottom frames, are connected at the outer corners by elbow-couplings 18, as shown in Fig. 4, and the sleeves 11, placed on said rods, may be of any desired length, it being understood that the spaces between the vertically-arranged strips 15 are regulated by the length of these sleeves and by the longitudinal distance between the slits 13 in the intermediate frame 12.

By means of this construction I provide a balcony of the class described which is strong and durable and which is also inexpensive and which may be made as ornamental as desired, and in securing the balcony to the wall the ends of the rod 10, which forms the central portion or core of the upper frame 8, are passed through the wall, as shown in Fig. 3, and secured by means of nuts and washers

19, and the ends of the rod 10, which forms the central portion or core of the lower frame 9, are passed into the wall, as shown at 20, and suitable washers 21 are also provided between the wall-sections of the sleeves 11 and the wall. I also provide brackets consisting of horizontal bars 22 and downwardly-inclined brace-bars 23, which serve to support or to aid in supporting the fire-escape balcony, and the bars 22 and 23 are brought together at their outer ends, as shown at 24, and securely bolted thereto are loop-shaped eyes or rings 25, which encircle the outer portion of the bottom frame 9, as clearly shown in Fig. 3, two of these brackets being shown in Fig. 2, and on these brackets are placed the bottom slats 26, which form the bottom of the fire-escape balcony, in one corner of which is the usual opening 27.

It will be observed that there are no rivets, screws, or other fastening devices of this class used in the construction of the main or body portion of my improved fire-escape balcony, and by reason of this fact the said balcony is much more durable and much more easily put together, while being at the same time lighter and possessing all the requisite strength.

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

1. A fire-escape balcony for use in connection with the windows of buildings, comprising a basket-frame composed of top and bottom frames, and an intermediate frame connected by vertically-arranged metal strips, the top and bottom frames being composed of rods bent into proper form and provided with sleeves between which the metal strips are connected with said rods by means of eyes or loops formed at the ends of said strips, and the intermediate frame being composed of metal slitted to form loops through which said strips are passed, substantially as shown and described.

2. A fire-escape balcony for use in connection with the windows of buildings, comprising a basket-frame composed of top and bottom frames, and an intermediate frame connected by vertically-arranged metal strips, the top and bottom frames being composed of rods bent into proper form and provided with sleeves between which the metal strips are connected with said rods by means of eyes or loops formed at the ends of said strips, and the intermediate frame being composed of metal slitted to form loops through which said strips are passed, said balcony being provided with means for securing it to a wall, substantially as shown and described.

3. A fire-escape balcony for use in connection with the windows of buildings, comprising a basket-frame composed of top and bottom frames, and an intermediate frame connected by vertically-arranged metal strips, the top and bottom frames being composed of rods bent into proper form and provided with sleeves between which the metal strips are connected with said rods by means of eyes or loops formed at the ends of said strips, and the intermediate frame being composed of metal slitted to form loops through which said strips are passed, said balcony being provided with means for securing it to a wall, and with bottom brackets on which are placed strips which form the bottom thereof, substantially as shown and described.

4. A fire-escape balcony of the class described, composed of top and bottom rods bent into proper form, and an intermediate frame bent into similar form, said top and bottom rods being provided with sleeves, and said intermediate frame being slitted at regular intervals, both near the top and bottom thereof, and vertically-arranged metal strips connected with said rods by eyes or loops at the ends thereof through which said rods are passed, said strips being also passed through the slits in the intermediate frame, and the spaces between said vertically-arranged strips being regulated by the sleeves on said rods, substantially as shown and described.

5. A fire-escape balcony of the class described, composed of top and bottom rods bent into proper form, and an intermediate frame bent into similar form, said top and bottom rods being provided with sleeves, and said intermediate frame being slitted at regular intervals, both near the top and bottom thereof, and vertically-arranged metal strips connected with said rods by eyes or loops at the ends thereof through which said rods are passed, said strips being also passed through the slits in the intermediate frame, and the spaces between said vertically-arranged strips being regulated by the sleeves on said rods, said balcony being provided with means for securing it to a wall, and with bottom braces or brackets on which are placed strips which form a bottom thereof, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 4th day of June, 1900.

ALBERT KUHL.

Witnesses:

F. A. STEWART,
C. C. OLSEN.