

(No Model.)

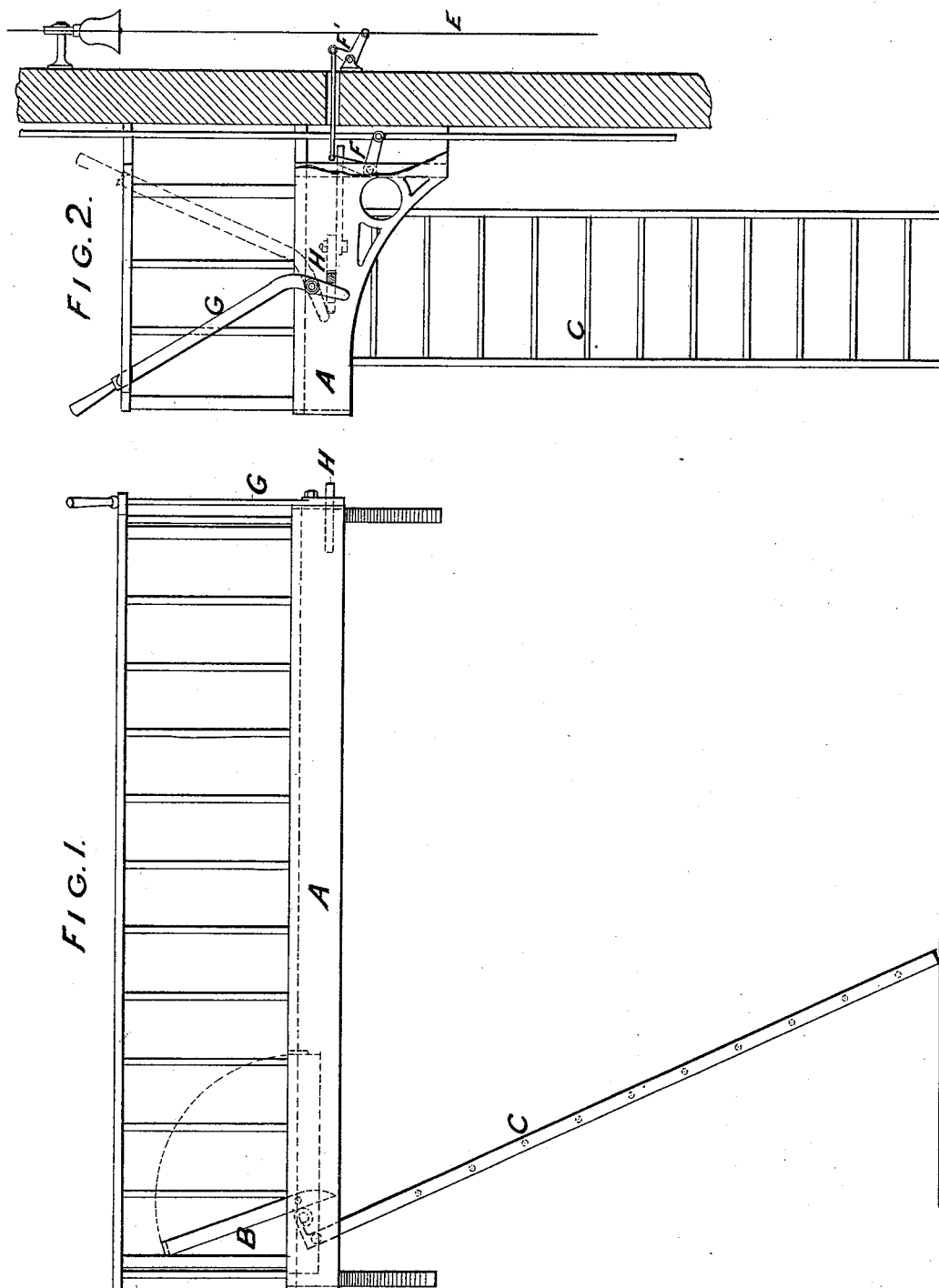
2 Sheets—Sheet 1.

A. ST. GEORGE CUFF.

BALCONY.

No. 343,226.

Patented June 8, 1886.



Witnesses.

J. Wether

J. A. Rae

Inventor.

A. St. George Cuff

per H. L. H. H. H.

Att'y

(No Model.)

2 Sheets—Sheet 2.

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FIG. 3.

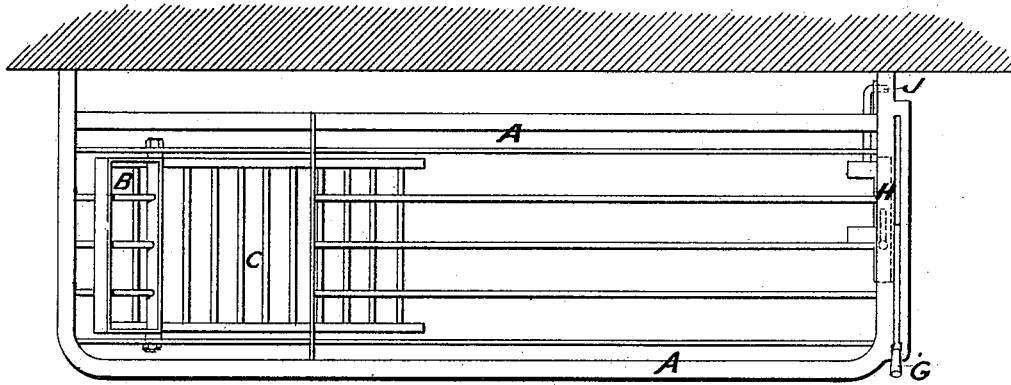
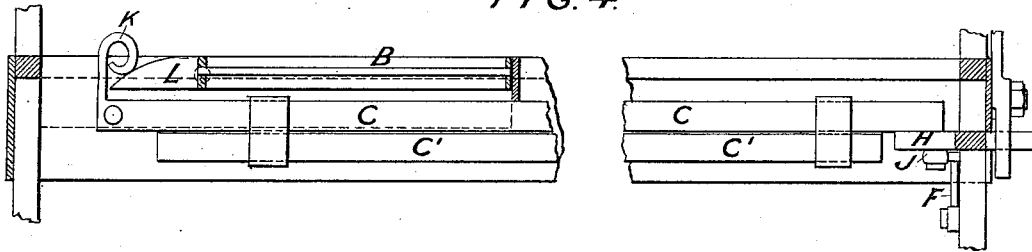


FIG. 4.



Witnesses.

J. Walter
J. A. Ray

Inventor.

A. St. George Cuff
per W. H. Hadden
att'y

UNITED STATES PATENT OFFICE.

A. ST. GEORGE CUFF, OF LONDON, ENGLAND.

BALCONY.

SPECIFICATION forming part of Letters Patent No. 343,226, dated June 8, 1886.

Application filed November 22, 1884. Serial No. 149,136. (No model.) Patented in England October 9, 1884, No. 13,379; in France October 9, 1884, No. 164,701; in Belgium October 9, 1884, No. 66,547, and in Germany October 9, 1884, No. 31,726.

To all whom it may concern:

Be it known that I, ARTHUR ST. GEORGE CUFF, a subject of the Queen of Great Britain, residing at London, England, have invented a new and useful Improved Balcony, of which the following is a specification.

The improvements relate to balconies with the view to render them serviceable as escapes from fire or means of access for repairing and cleaning houses.

The invention consists in making the floors of present balconies or those to be specially constructed for the purpose with a trap-door, gate, or exit-way, and combining therewith a ladder or ladders in such manner that on opening the trap or equivalent the ladder or ladders shall depend from the balcony, and on shutting the trap or equivalent the ladder or ladders shall ascend and lie alongside or underneath the floor of the balcony. For convenience, the trap-door and ladder may be opened and actuated by a bolt or rod combined with an alarm, such bolt or rod being connected with a draw-handle or other convenient device in the house or outside the house, or both, and when outside easily accessible to passers by. The ladder, as also the trap or equivalent, may be furnished with a hand-rail made to fold and lie flat when the trap or equivalent is closed. The ladder may be made in one piece, or of two or more sections arranged to slide one over the other telescopically, so to speak, or hinged one section on the other, and to fold and lie one section over the other when in its closed or shut position, the length and width of the ladder or sections being proportioned to the length and width of the balcony they are intended to serve.

The balcony may be made, as at present, of iron or of stone, brick, &c., or partly of one and partly of the other. When the bottom is of stone or brick, I prefer to use a metal trap or door.

In some cases the ladder need not be liberated by movement from the street by the release-rod. Only an alarm may be given, and the occupant of the chamber to which the balcony is applied can open the trap, &c., and release the ladder himself either by a rod or wire within the chamber or by a lever fitted to the balcony itself.

The accompanying drawings illustrate a convenient mode of performing the invention.

In the drawings, Figure 1 is a front elevation; Fig. 2, an end view; Fig. 3, a plan; Fig. 4, a longitudinal section on an enlarged scale.

In all the figures like letters are intended to indicate like or corresponding parts.

A is the balcony; B, trap-door; C, ladder; C', sliding or additional ladder; D, external operating and alarm rod; E, internal operating-wire; F, external crank; F', internal crank; G, lever-handle for releasing ladder; H, draw-bolt; J, catch; K, curved end of ladder; L, curved hinge of trap B. Figs. 1, 2, and 3 show the trap open and ladder down. Fig. 4 shows the trap shut and ladders drawn up in place.

The apparatus can be operated from the street by the rod D or from the interior of the house by the wire E, either or both of which can be furnished with alarms; or it can be worked from the balcony by the lever-handle G.

When the apparatus is worked from the street, the crank F is operated and withdraws the bolt H; when worked by the rod E from inside the house, the crank F' is operated and withdraws the bolt H. When the handle G is operated, the curved end thereof pushes back the bolt and releases it direct, and in either of the above cases the balcony falls into position shown on the drawings.

I am aware that the utilization of balconies as fire-escapes and the combination therewith of ladders is not new.

I claim—

The combination, with a balcony and ladder, of the sliding ladder C', the external operating and alarm lever, D, the internal operating-wire, E, the cranks F and F', the lever release-handle G, draw-bolt H, catch J, the curved hinge L, all substantially as described and illustrated, and for the purposes set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

A. ST. GEORGE CUFF.

Witnesses:

H. E. HADDAN,
T. A. RAE.