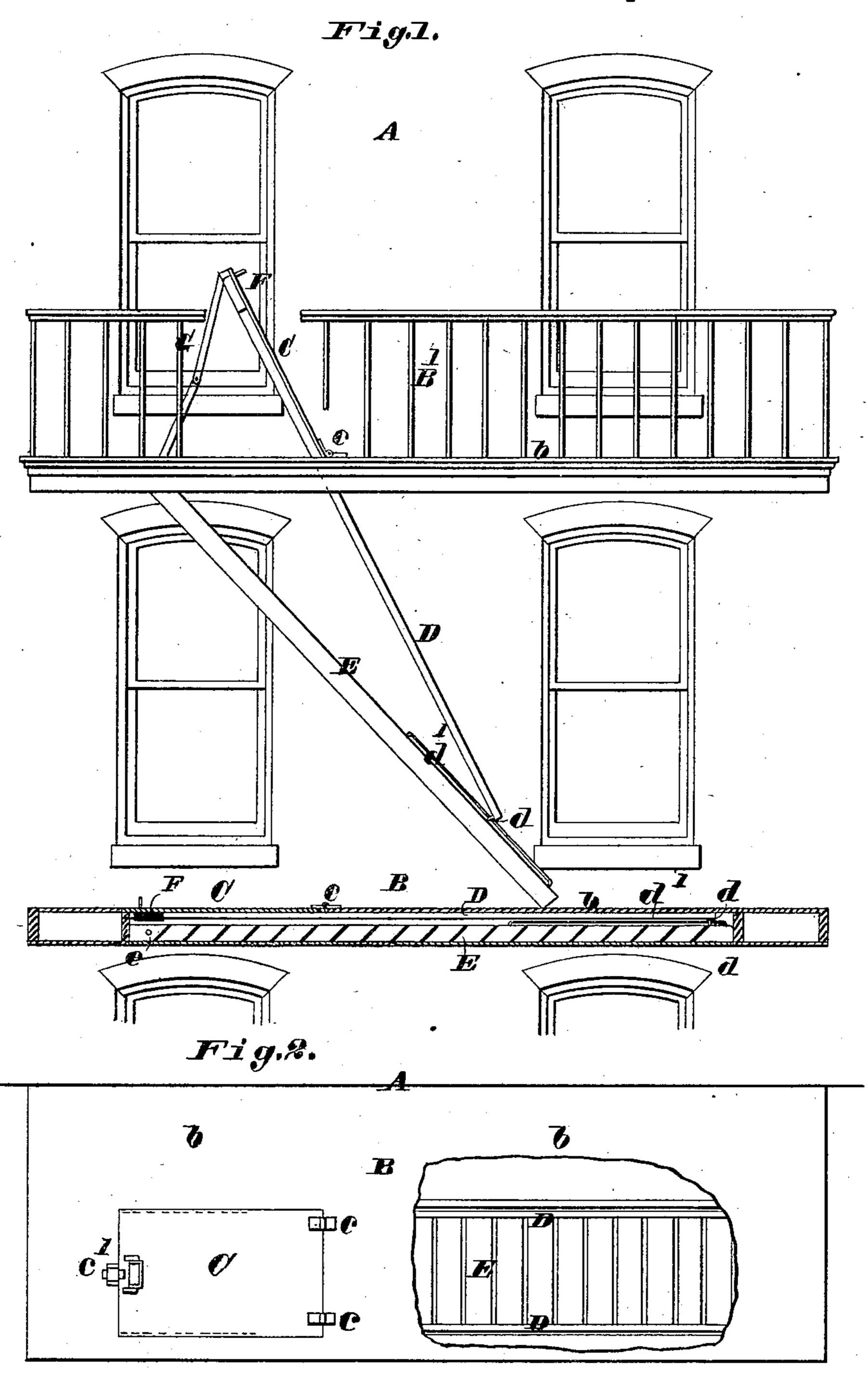
A. T. CWERDINSKI.

FIRE ESCAPE.

No. 246,871.

Patented Sept. 13, 1881.



Attest: Chailes Fichles Ino, N. Straat

Inventor: alphones T. Liverdinski by L. D. Moody, athy.

United States Patent Office.

ALPHONSE T. CWERDINSKI, OF ST. LOUIS, MISSOURI.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 246,871, dated September 13, 1881.

Application filed July 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, Alphonse T. Cwer-Dinski, of St. Louis, Missouri, have made a new and useful Improvement in Fire-Escapes, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is an elevation of a building having the improvement, and Fig. 2 a plan of one of the balconies, a portion of the floor being broken away to exhibit the stairway beneath.

The same letters denote the same parts.

The present invention is an improvement in that class of fire-escapes which are applied as fixtures to buildings.

Referring to the drawings, A represents the front or side of a building.

B B' represent balconies attached to the building, and, saving the present improvement, being of any of the customary forms.

O represents a trap-door in the floor b of the balcony, hinged to the balcony at c, and furnished with the arms D D.

A stairway or ladder, E, is hinged to the balcony at e, enabling it to be let down from the under side of the balcony. The arms D D of the trap-door extend and are jointed to the stairway E at dd. This connects the trap-door and stairway so that they move and work together, the operation being as follows: When the trap-door is closed down it, through the arms D D, acts as a lever to raise the stairway upon the hinges ee, and to fold the stairway against or into the under side of the balcony, as indicated in the balcony B, the parts being preferably so made and finished that when the stairway is folded into the balcony the

under side of the latter presents a smooth finish, the stairway forming a portion of the ceiling of the balcony. When, on the other hand,
it is desired to use the escape, the trap-door is
raised. This both releases and causes the
stairway to drop down, as indicated in contentation with the upper balcony, B', in the
drawings. Fig. 1, and into position for a per-

drawings, Fig. 1, and into position for a person to descend to the balcony B beneath and and finally to the ground, as one or more of the balconies having the combined trap-door and stairway may be used upon the building, according to the height.

The trap-door is preferably weighted at F to form a counter-balance to the stairway.

The trap-door, when closed, may be fasten-

ed down to the floor, as at c', and uphold the stairway irrespective of the counter-balance. The arms D D serve also as side rails to the stairway E. The preferable mode of connecting them with the stairway is that shown, the stairway being furnished with guide-bars d', to 60 which the arms D D are connected, and upon which they slide as the stairway is moved up and down.

To prevent persons using the escape from passing sidewise into the trap-door opening, 65 a guard, G, is used, being preferably in the form of a jointed arm, hinged at one end to the trap-door and at the other end to the floor b.

The present device is especially designed for a fire-escape. I do not, however, desire to 70 confine its use to this particular purpose. It may be employed in many other places where it is desired to fold the stairway, when not in use, out of the way against or in the floor above, and from which the stairway leads down. 75

In Fig. 1 the lower balcony, B, is shown in vertical section.

The present improvement is especially valuable in that the stairway can very readily be brought into position for using, and as readily be raised so as to be out of the way and so as not to disfigure or alter the appearance of the building, and not to give opportunity for entering the building from the outside.

A spring may be used in place of the counter- 85 balance F, and in such case the spring should be suitably applied to depress the trap-door, substantially as now done by the weight.

I claim—

1. The combination of the floor b, the door 90 C, the arms D D, and the stairway E, substantially as described.

2. The combination of the floor b, the door C, the arms D D, the stairway E, and the weight F, substantially as described.

3. The combination of the floor b, door C, fastening c', arms D D, and stairway E, substantially as described.

4. The combination of the floor b, stairway E, bars d', and arms D D, substantially as described.

5. The combination of the floor b, door C, arms D D, stairway E, and arm G, substantially as described.

A. T. CWERDINSKI.

Witnesses:

C. D. MOODY, CHARLES PICKLES.