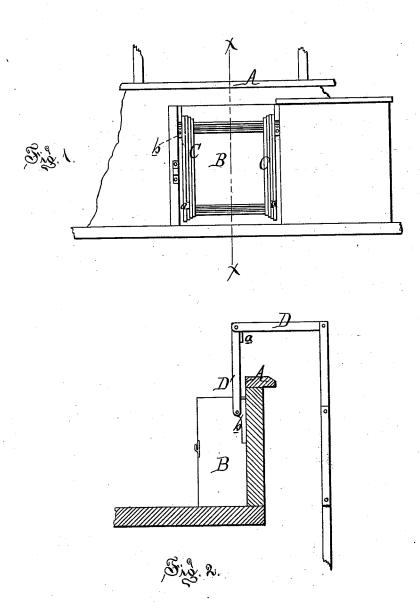
F. JAKEL. FIRE-ESCAPES.

No. 195,134.

Patented Sept. 11, 1877.



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## NITED STATES PATENT OFFICE.

FERDINAND JAKEL, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH OLFS, OF SAME PLACE.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 195,134, dated September 11, 1877; application filed May 26, 1877.

To all whom it may concern:

Be it known that I, FERDINAND JAKEL, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Fire-Escapes, of which the following is a specification:

The nature of my invention relates to an improvement in fire escapes of that class wherein a folding chain ladder is secured to the outer wall of a room under a window, from which it is to be let down to the ground when required for use; and it consists in a pair of folding brackets, connecting the end of the ladder with the wall of the building under the window, so constructed that when put out of the window the ladder will be supported above the window-sill, and will clear all belt-courses, hoods, and other projections from the face of the building, except wide balconies, from which the user can clear the ladder as he descends.

Figure 1 is an elevation of the ladder folded in its closet under a window, with the closetdoor open. Fig. 2 is a cross-section at x x, showing the ladder thrown out of the window ready for use.

In the drawings, A represents a window-sill, under the inner edge of which is a closet, B, to contain a folded fire-escape ladder, C, composed of thin steel plates, forming the sides, pivoted together at the ends by steel rods or rungs.

The upper links are pivoted by their rounds to the ends of two parallel bars, D, which are

in turn pivoted to the ends of bracket-standards D'D', whose lower ends are pivoted to brackets b, inside the closet, secured to the wall below the sill A.

Each standard D' has a stop, a, forged on the outer edge, near the top, so that when they are turned up and the bars D thrown out the latter will be arrested in a horizontal plane, serving as a bracket, from which the ladder is suspended far enough from the face of the building to clear its projections.

The closet serves to conceal the fire-escape, and may be ornamented or utilized as a win-

dow-seat, if desired.

I am aware that a folding fire-escape ladder has been supported clear of projections on a building by horizontal arms resting on the window sill; but this cannot be as easily set into position, and is not as convenient in use as mine, which clears the window-sill, and is held by pivoted brackets.

What I claim as my invention is-

In a fire-escape, substantially as described, the combination, with the folding chain-ladder C, of the bars D, bracket-standards D', having stops a and brackets b, whereby the said bars D are supported above the windowsill, and the ladder held clear of obstructions, constructed and arranged as shown and set forth.

FERDINAND JAKEL.

Witnesses:

H. F. EBERTS, H. L. AULLS.