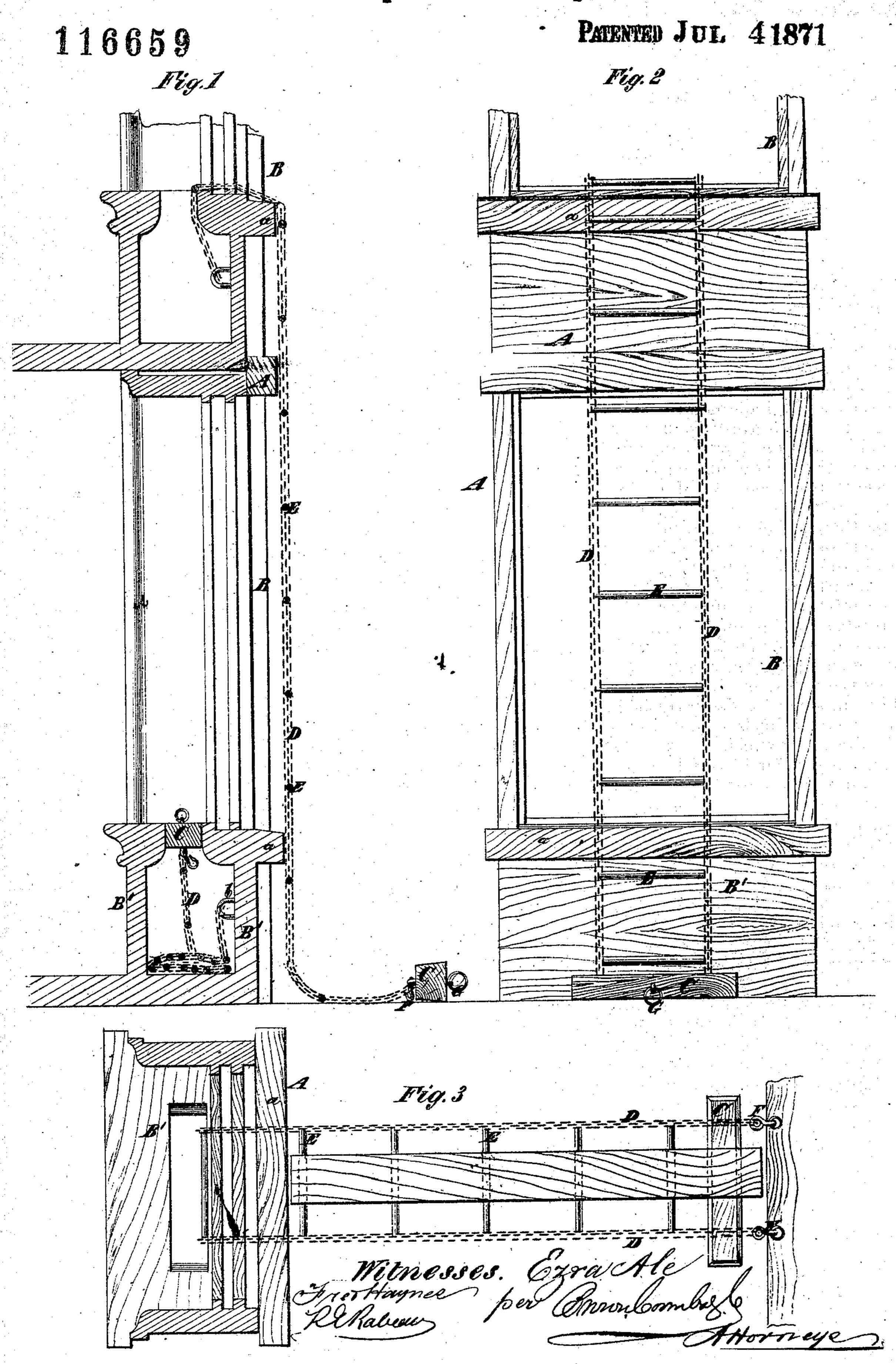
Erre Ale's Imp & Fire Escape



UNITED STATES PATENT OFFICE.

EZRA ALE, OF CLEARFIELD, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND J. BLAKE WALTERS, OF SAME PLACE.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 116,659, dated July 4, 1871.

To all whom it may concern:

Be it known that I, Ezra Ale, of the city and county of Clearfield, in the State of Pennsylvania, have invented a new and Improved Fire-Escape; and I do hereby declare that the following is a full clear, and exact description thereof, reference being had to the accompanying drawing

forming a part of this specification.

This invention consists in a flexible ladder of iron or other metal, arranged so that when not in use it is concealed within the lower box-like portion of the window-casing or within a box provided therefor below the window within the house, one end of the said ladder being firmly secured within the said box or casing and the other having attached to it a block which serves as a cover or lid to the opening provided in the top of said box or easing for inserting the ladder thereinto, and which, on being withdrawn from the said opening and thrown out of the window, extends the ladder on the exterior of the building. The said cover is also furnished with means of securing it readily to some distant support to form a bridge over which the inmates of the house might pass when it would be impracticable, on account of fire below it, to drop the ladder to the street.

In the accompanying drawing, Figure 1 is a central vertical section of a portion of the front of a house, showing my fire-escape applied, and representing it both in use and in place in the window-casing. Fig. 2 is a front view of the same; and Fig. 3 is a plan of the same, showing the fire-escape extended to form a bridge.

Similar letters of reference indicate correspond-

ing parts in all the figures.

A represents a section of a portion of the front of a house, and B the window-casing, the lower portion of which below the sills a a is of the ordinary construction, forming a box, B', and has a longitudinal opening, e, in its top, fitted with a block, C, which serves as a cover. This block has secured to it a ring-bolt, G. D D are two chains, which form the sides of the flexible lad-

der, made of iron or other suitable metal, and each secured at one end to one of two staples, bb, provided therefor in the interior of the said lower box-like portion of the window-casing, and connected at regular intervals throughout their length with metal rods, which form rungs or stretchers E E. The other ends of the said chains are secured to the under side of the block C, and are provided near their ends with hooks F F.

The fire-escape thus constructed is out of sight when not in use, and the great advantages which it possesses over those now in use are, it is always just where it is wanted, can be operated by any one, and can be applied to any window with-

out disfiguring it.

In ordinary cases all that is necessary to render the fire-escape operative is to lift out the block or cover C and allow it to drop out of the window down to the ground, and so carry the lower ends of the chains with it and extend the ladder; but in some cases, when a fire is raging below the room from which it is desirable to escape, and descent therefrom prevented, the fireescape may be dropped from the window as before—for, being constructed wholly of metal, it will not be burned—and a rope may be attached to the ring-bolt G provided on the block C, and that end of the fire-escape raised and hooked to an opposite house or other suitable support by means of the hooks F F provided on the block, and be thereby made to form a bridge on which boards may be placed for the escape of inmates of the room. Flexible wire rope might be substituted for the chains D D.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The combination of the flexible metal ladder, the box B' within the window-casing or room, and the cover or block C, substantially as and for the purpose herein described.

EZRA ALE.

Witnesses:

WM. RADEBAUGH, D. ADAMS, Jr.