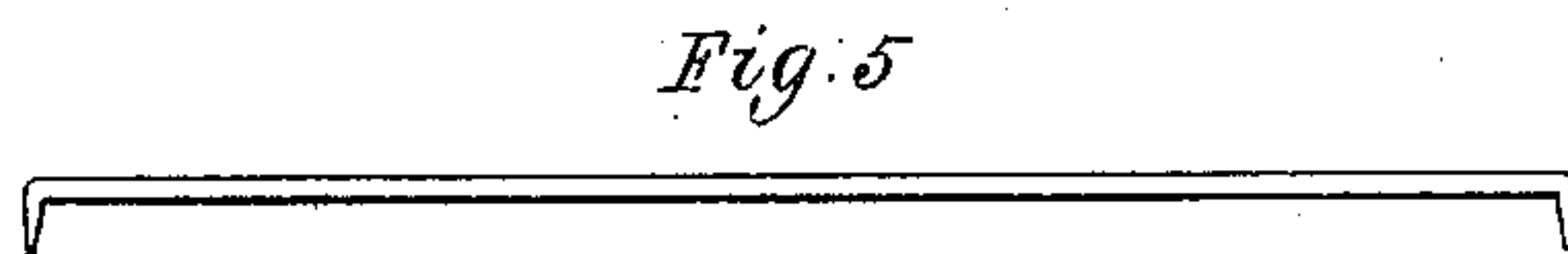
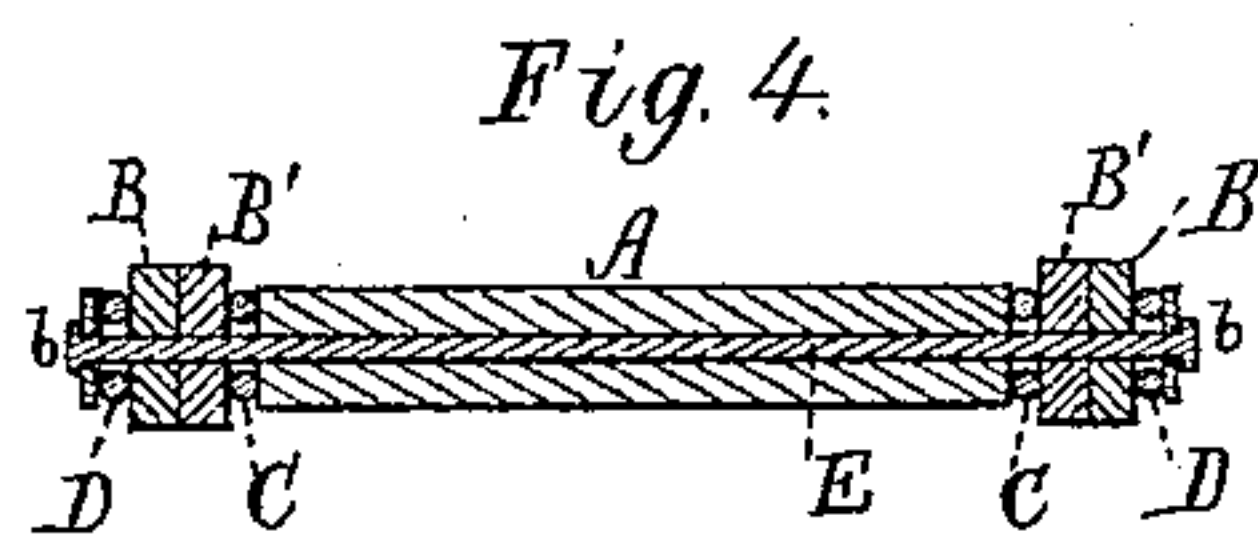
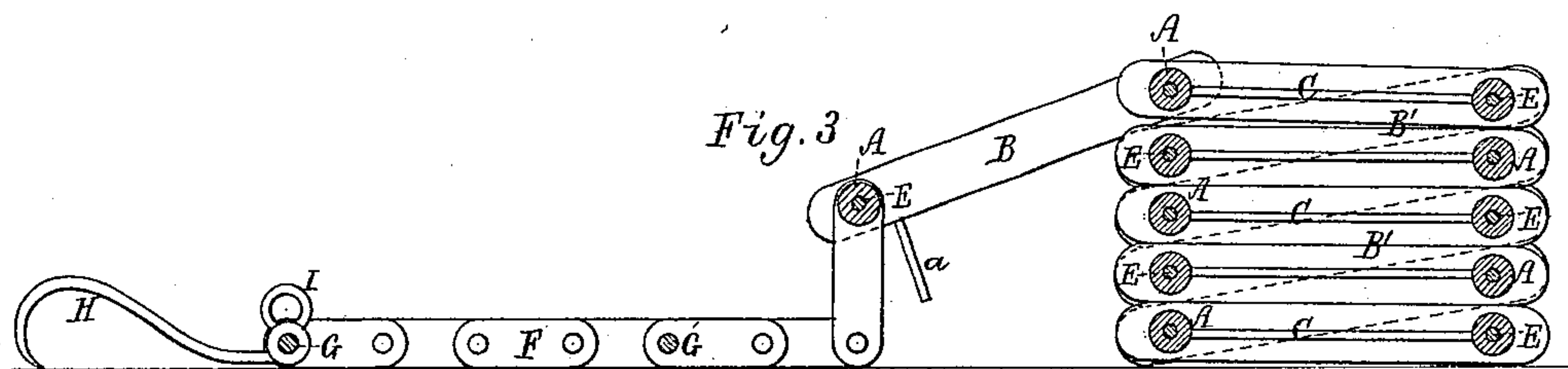
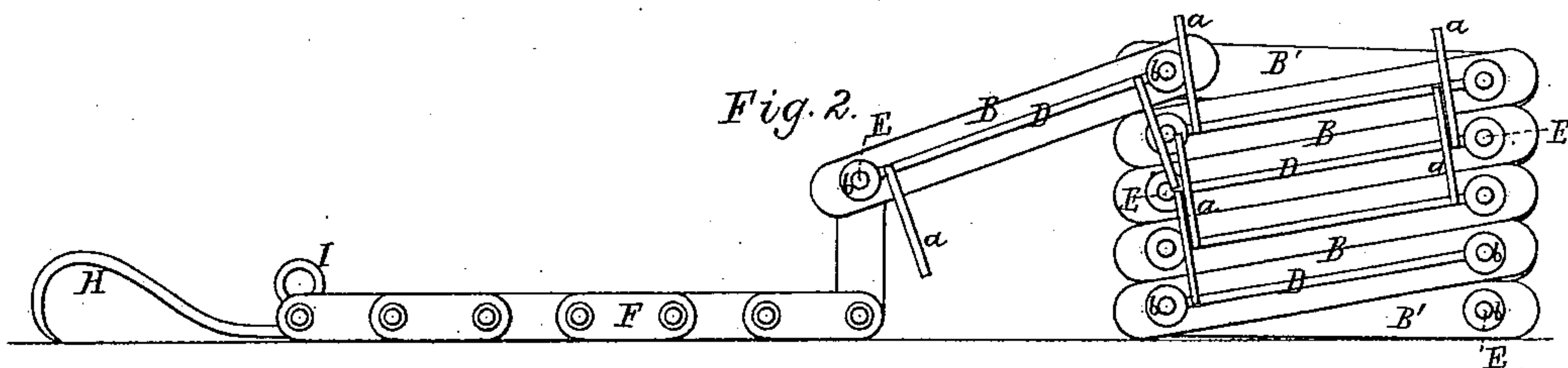
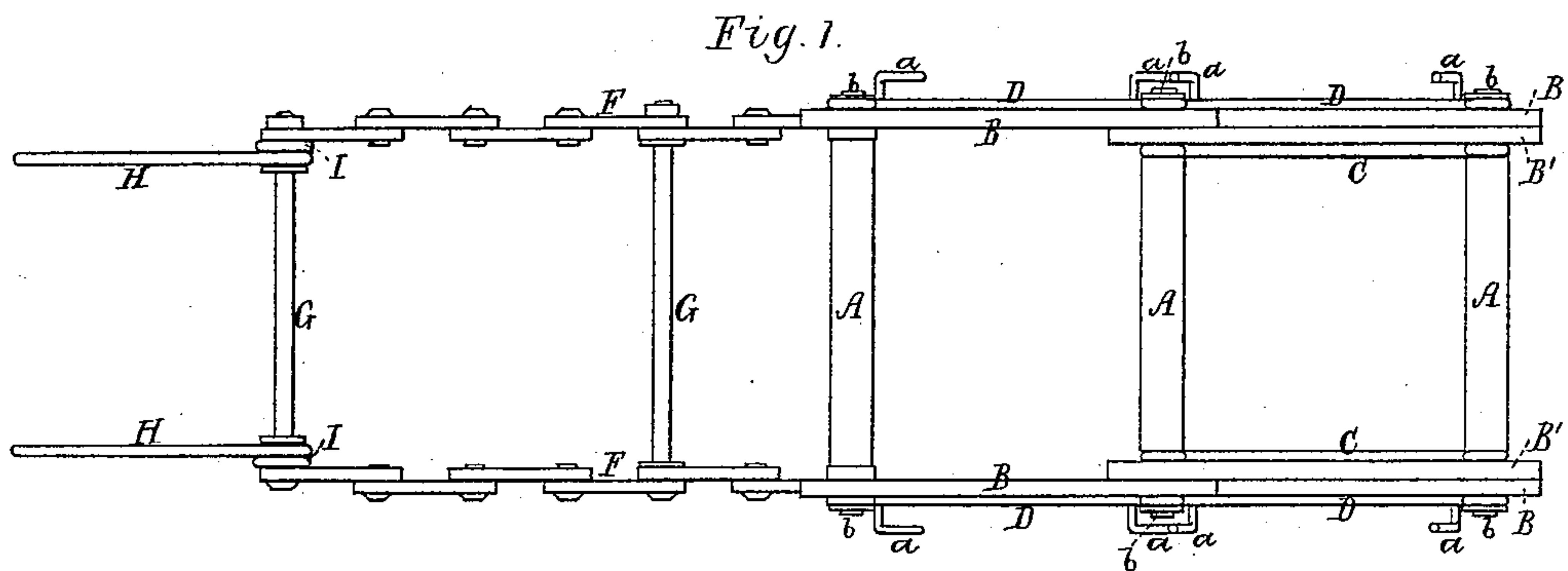


(No Model.)

T. HOWE.
FIRE ESCAPE LADDER.

No. 265,263.

Patented Oct. 3, 1882.



Witnesses
S. N. Piper.
C. B. Rath.

Inventor.
Timothy Howe.
by R. H. Eady atty

UNITED STATES PATENT OFFICE.

TIMOTHY HOWE, OF FOXBOROUGH, MASSACHUSETTS.

FIRE-ESCAPE LADDER.

SPECIFICATION forming part of Letters Patent No. 265,263, dated October 3, 1882.

Application filed May 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY HOWE, of Foxborough, in the county of Norfolk, of the State of Massachusetts, have invented a new and useful Improvement in Fire-Escapes; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of a fire-escape embodying my invention and partially folded. Fig. 4 is a transverse section of it, taken through one of its tubular rounds, and the connection-bolt going through the same. Fig. 5 is a supporting-rod.

This fire-escape is a folding ladder, constructed partly of wood and partly of wire or metal—that is to say, the rounds A are tubular and of wood, and their side connection-bars, B B', are also made of wood. The bars B' are arranged between and lap on the bars B, and the rounds extend, as shown, between the two ranges of bars. Furthermore, against the inner side of each bar B' is a connection-rod, C, having eyes at its ends, and there is also against the outer side of each bar B another such connection-rod, D, having two arms, *a a*, extended from it in manner as shown. A metallic rod, E, goes lengthwise through each round and the wooden side bars and the eyes of the next adjacent metallic connection-rods C and D, such bar being at its ends provided with heads *b* to keep it in place. From the uppermost rod, E, two chains, F, connected by cross-bars G, extend and are provided with hooks H and eyes I, arranged on the upper cross-bar of such chains, all being as represented. The hooks, when hooked upon the sill of a window, are to support the fire-escape depending from such window; but should it be difficult or inconvenient to so apply the hooks a rod formed with spurs, as shown in Fig. 5, may be passed through the eyes and against the window-frame

on its inner side, such being to support the fire-escape hanging from the window.

Should one or more of the wooden rounds or one or more of the wooden side bars become burned while the fire-escape may be in use, the metallic cross-rods and connection-rods will hold the ladder together and support the rest of it. The arms are to keep at a proper distance from a building the ladder when hanging from a window of such building, such arms then extending from the ladder with their ends against the building.

I am aware that a folding ladder for a fire-escape is now new. Therefore I make no claim to such in the abstract; but

I claim as my invention—

1. A folding fire-escape constructed substantially as described—viz., of the wooden side connection-bars, B B', and the tubular rounds A, their joining headed transverse rods E, the series of internal metallic connection-rods, C, and the series of external connection-rods, D, provided with arms *a*, all being arranged and combined essentially and to operate as set forth.

2. A folding fire-escape or ladder composed of wooden and iron side links, arranged as represented, and suitable rungs extending through such links, and forming or aiding in forming hinge-joints for both sets thereof, all being substantially as set forth.

3. A folding fire-escape or ladder composed of wooden and iron side links and tubular rounds and suitable metallic rungs or rods extending through the said rounds and both sets of links, and forming or aiding in forming hinge-joints for such sets, all being substantially as set forth.

TIMOTHY HOWE.

Witnesses:

MICHAEL RYAN,
JAMES F. LEONARD.