

(No Model.)

J. B. WILTSHIRE.
FIRE ESCAPE.

No. 300,822.

Patented June 24, 1884.

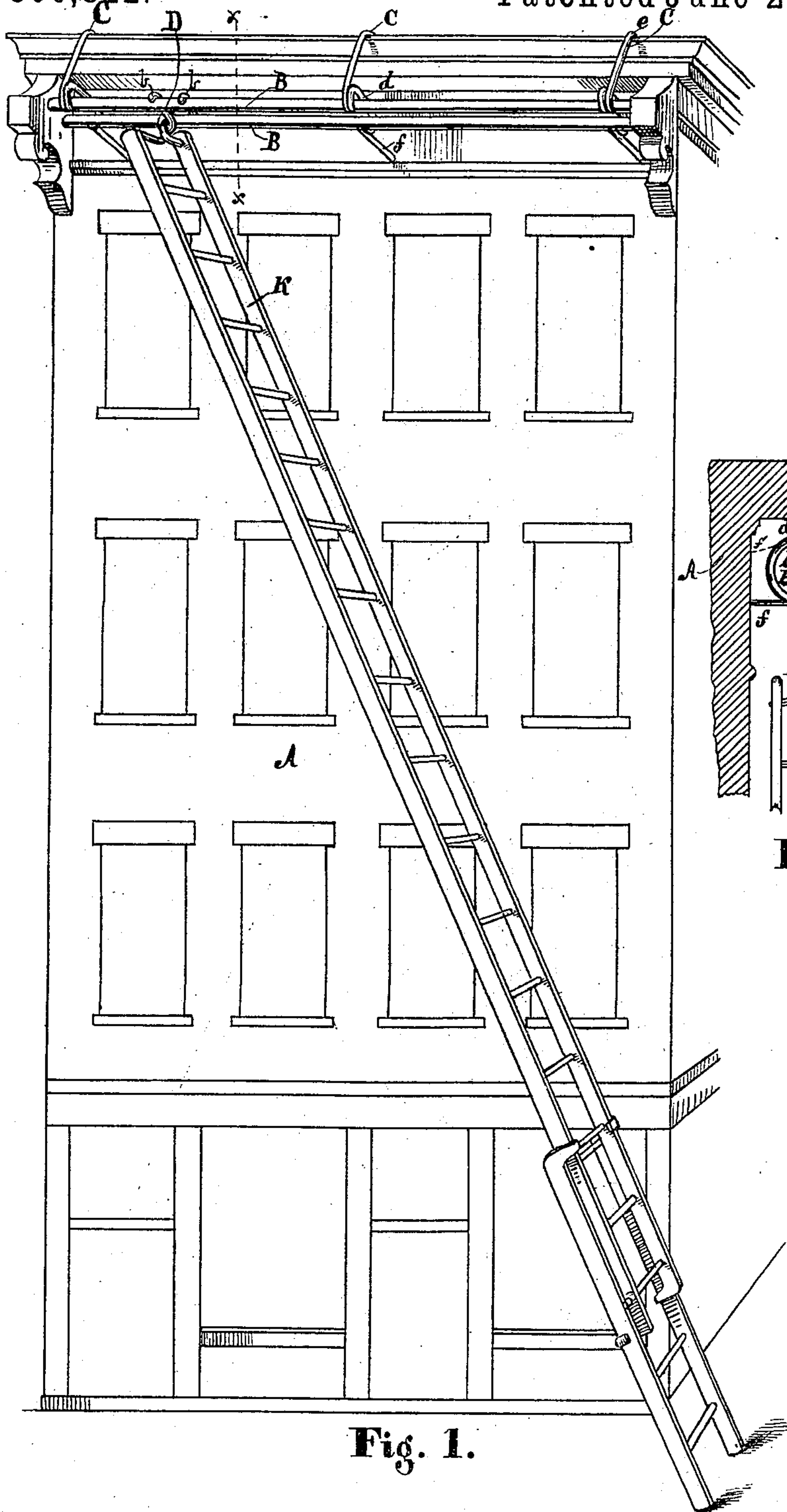


Fig. 1.

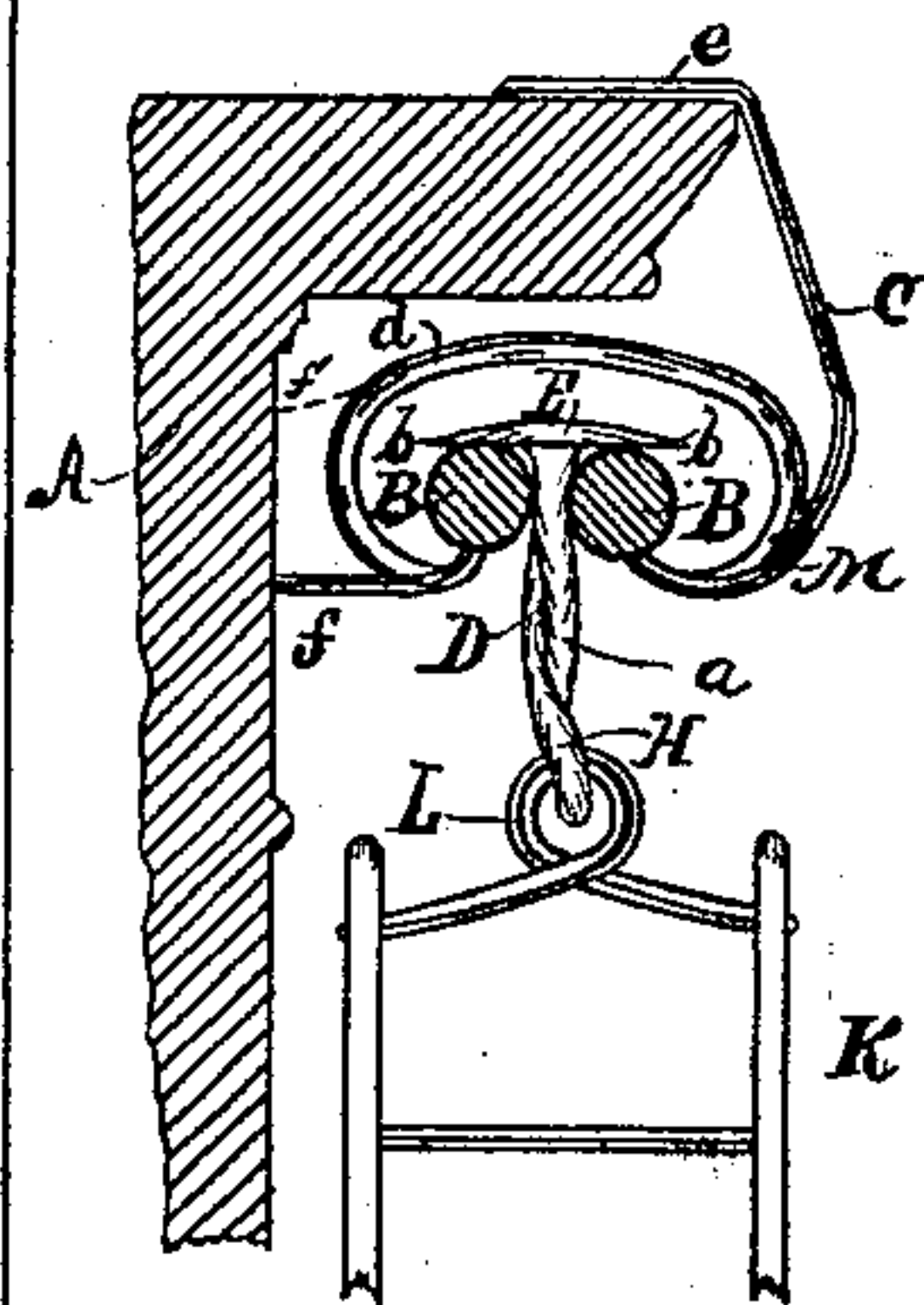


Fig. 2.

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UNITED STATES PATENT OFFICE.

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 300,822, dated June 24, 1884.

Application filed March 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. WILTSHIRE, a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

The principal object of my invention is to provide means, substantially as hereinafter described, whereby a ladder, rope, or pole may be connected to a building and be moved along the same to a desired point, enabling a person to ascend to or descend from said point.

The various features of my invention and their several advantages, when employed separately or when two or more are employed together, will be apparent from the following description.

In the accompanying drawings, making a part of this specification, Figure 1 is a side elevation of house and a ladder, and connections therewith, illustrating my invention; and Fig. 2 shows a transverse vertical section of the upper portion of the house, ladder, and connections shown in Fig. 1, taken at the dotted line *x x*, Fig. 1, and looking toward the left hand of said last-mentioned figure.

A indicates a building. Connected to the upright wall of the building, and at any suitable height above the ground, are the bars or runways B. To these bars is connected a suitable hanger, D, capable of sliding upon these bars. The ends of these bars are supported by suitable means, as brackets, &c. When the bars are to be connected to the front or face portion of a building provided with a gutter, the brackets C, supporting the gutter, are convenient means for supporting these bars, the ends of the respective bars being fixed in or to the respective brackets. When the bars are rigid, as shown in the drawings, the hanger is preferably made as shown in Figs. 1 and 2, and consists of two portions, E E, each of an anchor shape—viz., consisting of a shank, *a*, and two flukes or hooks, *b b*, diverging from the upper portion of the shank *a*. The shanks of these portions E E are preferably either united together or to the device H, which latter, when employed, is connected to the ladder, pole, or rope. A preferred form of such de-

vice H is an eye, or loop, or swivel formed with or forged on the shanks *a* of the portions E E. The upper portion of the ladder K, or its equivalent, or a rope or pole, carries a loop, hook, or swivel, L, which is attached by a loose connection to the device H. One hook or fluke *b* of a portion E rests and slides upon one of the bars B, while the other hook *b* of said portion E rests and slides upon the other of the bars B.

It is desirable that the hanger D should rest upon the bars B so that it shall be rendered steady, and that it may slide easily and without binding upon said bars. This result may be accomplished in various ways—as, for example, by extending the surface of the hanger D upon the bars B. Another way of accomplishing similar results is that herein shown, and consists in placing hooked portions of parts E of the hanger at some distance apart. The ladder, or rope, or pole need not touch the ground. By moving the lower end of such ladder, &c., and pulling or pushing on same, the upper end of the ladder, &c., will be easily slid back and forth, the hanger D sliding upon the bars B. Thus the ladder can be readily and easily brought to that opening or other point along that wall or surface of the building in front of which the bars B are placed which is desired, and an opportunity given for a person at such opening or other point to descend from such point, or to ascend to any point above which the ladder, &c., may reach. Opportunity is also afforded for the ascent from the ground by said ladder, &c., to a desired point on said building.

Another advantage derived from my invention is that the ladder, or pole, or suspended rope may be used while in a position perfectly vertical, or approximately so, without danger of falling down, its top being secured. Furthermore, when the connection between the hanger and the ladder, when ladder is employed, partakes, as is preferably the case, of the nature of a swivel-joint, the ladder, when of sufficient length, may be somewhat inclined, and yet be kept close to the building, (see Fig. 1,) and to the point it becomes desirable to reach through the agency of the ladder. In such event the edge of one side of the ladder

will be adjacent to the wall or side of the building.

Obviously the specific means for carrying into effect the principal features of my invention may be varied and yet included within the scope of my invention.

One bar B may be used instead of two, or one or more cords, ropes, or chains be employed, the ladder or its hanger sliding upon same, and in the event of the employment of such flexible ligaments the latter may be made to move from one point of suspension to another, and, when desired, take the form of an endless belt, rope, cord, or chain sliding on sheaves or pulleys, the upper portion of the ladder, rope, or pole being suitably connected to and suspended therefrom.

When it becomes desirable to brace the bar or bars B, or a ligament or ligaments which may take the place thereof, a convenient, cheap, and economical style of brace which may be employed when the bar or ligament B is located, or at the edge of the roof or under a gutter, where the latter is present, consists in braces, as M, each of which consists of the curved portion *d*, surrounding the bars, one end of said portion being inserted in a hole in the lower side of one of the bars, and the other end being inserted in a hole in the under side of the other bar, one side of portion *d* being connected to a rod, *e*, rigidly connected to the roof or top of the gutter, and the other side being connected to a rod, *f*, rigidly secured into or to the wall of the building. In the event of one ligament being used, the rod *f* might take the direction of the dotted line *f'*

shown in Fig. 1. These braces may, when desired, be employed to support the ends of the bars or ligaments.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination of the bar or ligaments B, supporting-brackets, hanger D, swivel or eye, and the ladder, rope, or pole suspended therefrom, substantially as and for the purposes specified.

2. The combination of the bars or ligaments B, a hanger consisting of portions E E, having hooks *b*, and a suspended ladder, substantially as and for the purpose set forth.

3. In combination with the bars or ligaments B, a hanger consisting of portions E E, having hooks *b*, and provided with an eye or swivel, and a suspended ladder, rope, or pole connected at or near its upper end to said eye or swivel, substantially as and for the purposes specified.

4. In combination with the suspensory bar or bars or ligament or ligaments, the braces M, having curved part *d*, rod *e*, and rod *f'* or *f*, and a hanger, and suitable means for connecting the upper portion of a ladder, rope, or pole to said bar or bars, ligament or ligaments, and suspending the same therefrom, and for enabling the same, in connection with said bar or bars, ligament or ligaments, to be moved laterally, substantially as and for the purposes specified.

JAMES B. WILTSHIRE.

Witnesses:

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