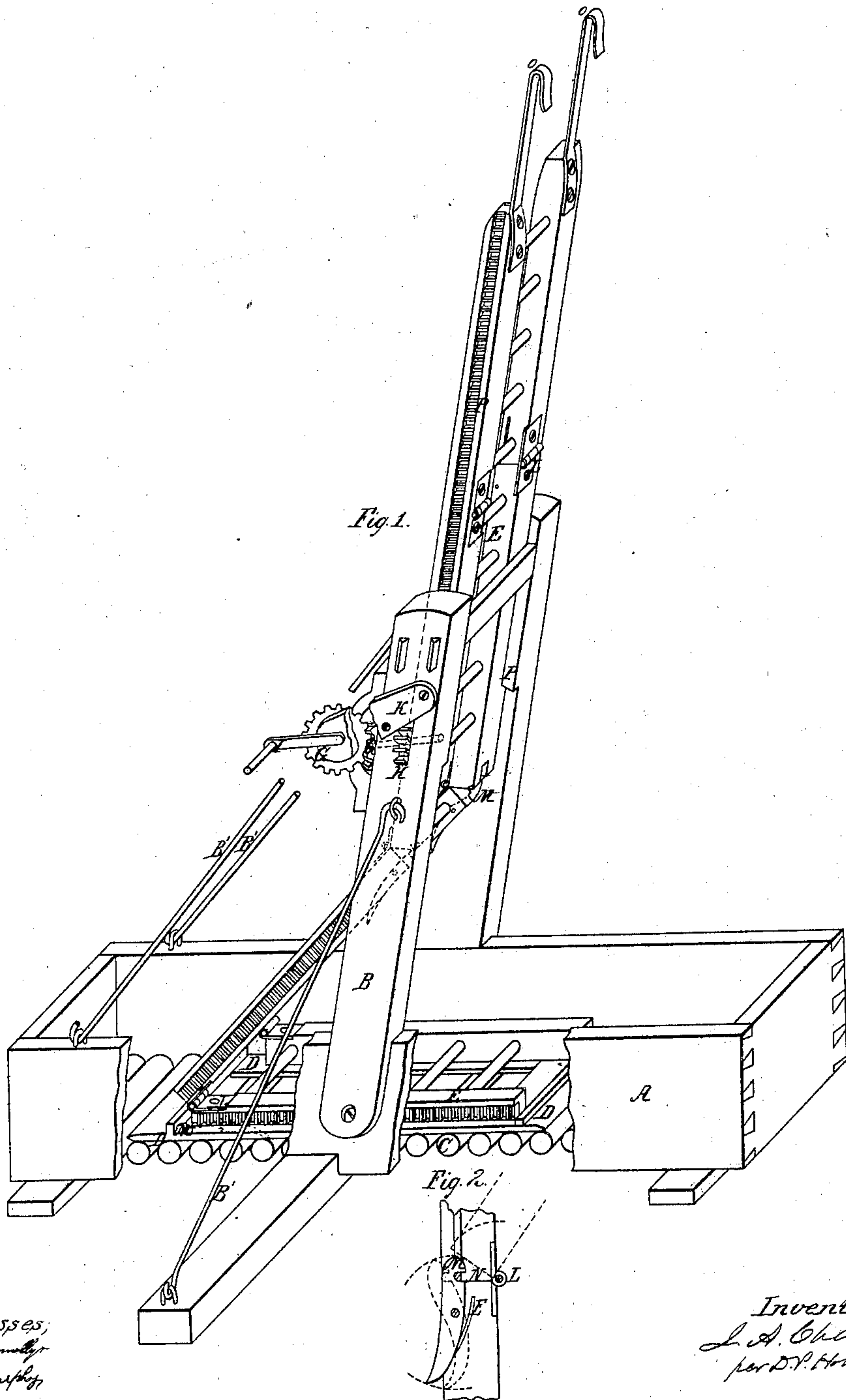


J. A. Chambers.

Fire Escape.

N^o 56,006.

Patented Jul. 3, 1866.



*Witnesses,
J. A. Chambers
L. A. Chambers*

*Inventor;
J. A. Chambers
per D. P. Holloway & Co
Attys*

UNITED STATES PATENT OFFICE.

J. A. CHAMBERS, OF OGDENSBURG, NEW YORK.

IMPROVED FIRE-ESCAPE.

Specification forming part of Letters Patent No. 56,006, dated July 3, 1866.

To all whom it may concern:

Be it known that I, JAMES A. CHAMBERS, of Ogdensburg, in the county of St. Lawrence and State of New York, have invented a new and useful Improvement in Ladders known as "Fire-Escapes;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, made part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a detached section, showing the mode of arranging the springs and catches for securing the sections.

The same letters in both figures refer to identical parts.

A represents a box as the bed of wagon, &c., in which the ladders are carried. To the sides of the box timbers B are attached firmly and stayed by guy-rods B'. The floor of the box or bed A is formed of a series of rollers, the journals of which are inserted in the sides of the box, which is represented in Fig. 1 as broken away. On the face of these rollers the sliding frame D is laid, moving freely from end to end of the box. The ladders rest on this frame. The ladder is composed of a number of sections, E E, hinged together by the hinges L, which are attached alternately on the front and back, so that the ladder may be folded section on section in the box and on the frame D. The ladders are raised by a winch operating the miter-wheels G and G'. The shaft of G' passes through the timber B, and has on its center the spur-wheel H, working in a slot cut for the purpose in the timber B. This spur-wheel is geared into the rack F on the sides of the section E.

K is a brace by which the axle of the wheel G is supported. O O are hooks by which the top of the ladders may be secured to the build-

ing. By turning the winch I the upper section will be raised, the second and third sections being more or less raised, and the frame D slid on the rollers to conform to the movement of the sections. When the foot of the first section has passed the flanges P (of which there are four on the edge of the timbers B) in front and rear, the second one, following these flanges, forces it at once to assume direction in line with the first, the frame D yielding easily to the movement.

M is a catch, shaped as shown in Fig. 2, actuated by a spring, which forces the notched end over a pin, N, passing through the base of the next section above, as shown. This catch secures the ladders and prevents their falling over. Thus the several sections similarly constructed are successively elevated. They are lowered by reversed means.

Having fully explained the construction and operation of my improved fire-escape, what I claim as my invention, and seek to secure by Letters Patent, is—

1. The combination of the rollers C, sectional ladder E, hinged as described, and sliding frame D, substantially as and for the purpose set forth.

2. The supports B, with the flanges P, in combination with the sectional ladder E and the gearing for elevating the same, the parts being severally constructed and arranged for use substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. A. CHAMBERS.

Witnesses:

JOHN D. BLOOR,
D. P. HOLLOWAY.