

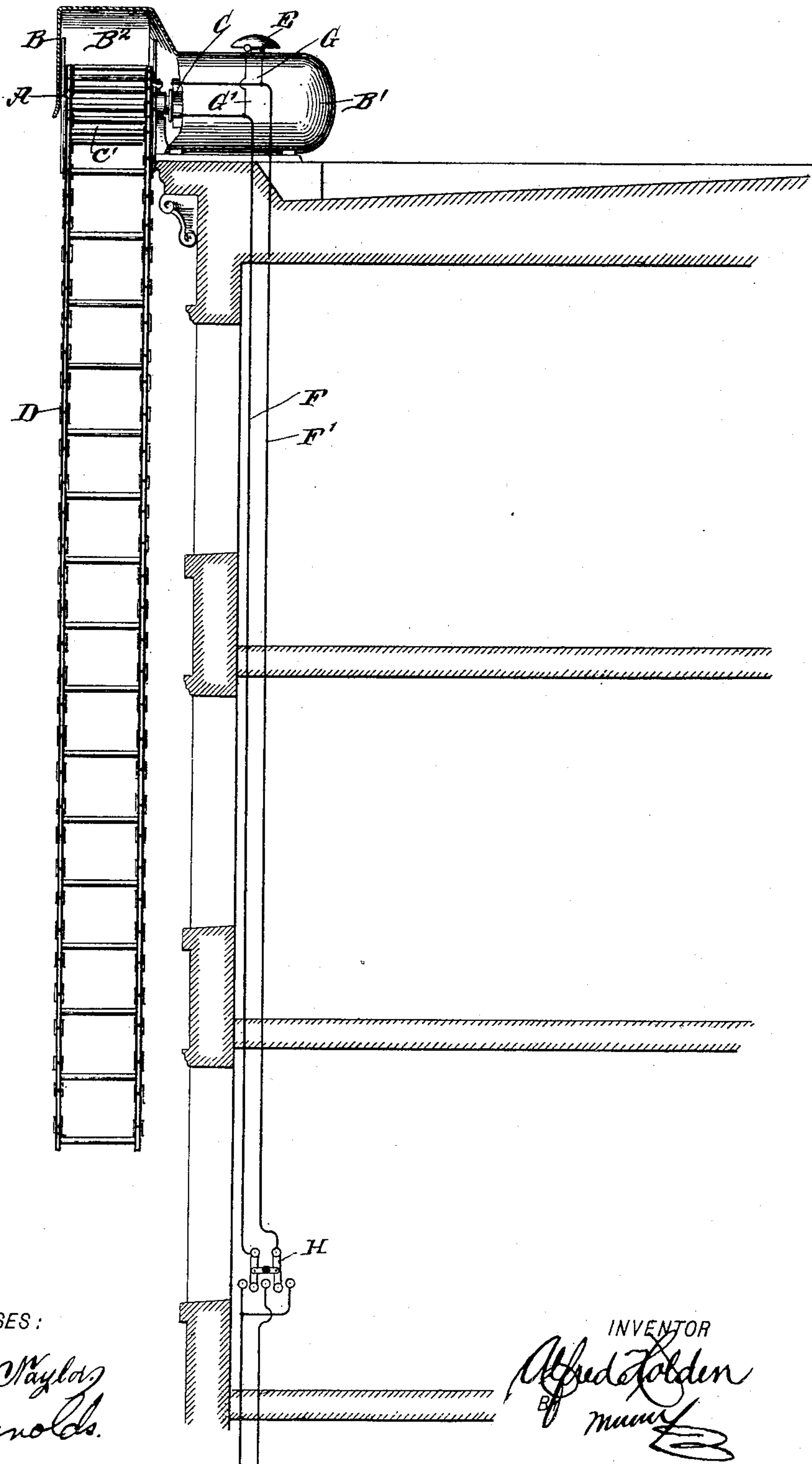
No. 641,512.

Patented Jan. 16, 1900.

A. HOLDEN.
FIRE ESCAPE.

(Application filed Aug. 19, 1899.)

(No Model.)



WITNESSES:

Geo. W. Maylor
H. L. Reynolds

INVENTOR

Alfred Holden
BY *man*

ATTORNEYS

UNITED STATES PATENT OFFICE.

ALFRED HOLDEN, OF NEW YORK, N. Y.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 641,512, dated January 16, 1900.

Application filed August 19, 1899. Serial No. 727,782. (No model.)

To all whom it may concern:

Be it known that I, ALFRED HOLDEN, of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

My invention relates to an improvement in fire-escapes, and comprises the novel features which are hereinafter described and claimed.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure shows a vertical section of a portion of a building having my fire-escape attached thereto.

The fire-escape comprises a drum upon which a chain or rope ladder may be wound and is mounted at the top of a building and is connected with an electric motor, so that the drum may be turned so as to either let out or wind up the ladder, the motor being operated by means of a switch which is located on the ground or at any easily-accessible place at a distance from the motor. The device is inclosed within a casing to protect it from the weather.

In the drawing, D designates a ladder, which is therein shown as being constructed of chain and as being partially let down. This ladder is wound upon a drum A, which is mounted upon a horizontal axial extension C' of the shaft of a motor C, the motor being supported at the edge of the roof of a building and the extension thereof projecting beyond the roof, as shown.

B designates a hood which is provided with a closed end section B', inclosing the motor C and protecting it from the weather, and a section B², extending over the shaft extension C' and having an open lower end to permit the ladder to pass through.

The motor C is a reversible motor, so that it may turn the drum to wind up or let out the ladder, as desired, and its wires F and F', which convey the electricity to the motor, are conducted to a point near the ground, where a switch H is provided, by means of which the motor may be operated.

It is evident that with this construction the chain ladder may be lowered whenever desired and wound up without it being necessary for any person to go near the drum carrying the ladder. In consequence fire issuing from an upper window will have no appreciable effect upon the operation of the device unless it becomes sufficiently hot to burn up the motor.

To prevent tampering with the device and operating it when it is not needed—as, for instance, with burglarious intent—a gong E is used, which is provided with an electric ringing device, the wires G and G', which provide the current for the same, being shunt-connected into the wires providing the current for operating the motor, so that whenever the motor is operated the bell will be rung. This bell should be of such size as to arouse the inmates of the house, so that if the device is used either for fire purposes or with burglarious intent the inmates of the house will be aroused.

By the use of the motor it will be possible to use this fire-escape for lowering people who are not able to climb down the ladder. It is therefore a hoist as well as a ladder.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a fire-escape, a hood adapted to be supported on the roof of a building, one end section of said hood being closed and the other end section being open at the bottom, a motor in the closed end section of the hood, and having a shaft formed with an axial extension projecting beyond the roof of the building into the open end section of the hood, a drum mounted on the said shaft extension, and a ladder arranged to be wound on said drum and to pass through the bottom of the open end section, as set forth.

ALFRED HOLDEN.

Witnesses:

WILLIAM F. KELLY,
JOHN N. OSTRANDER.