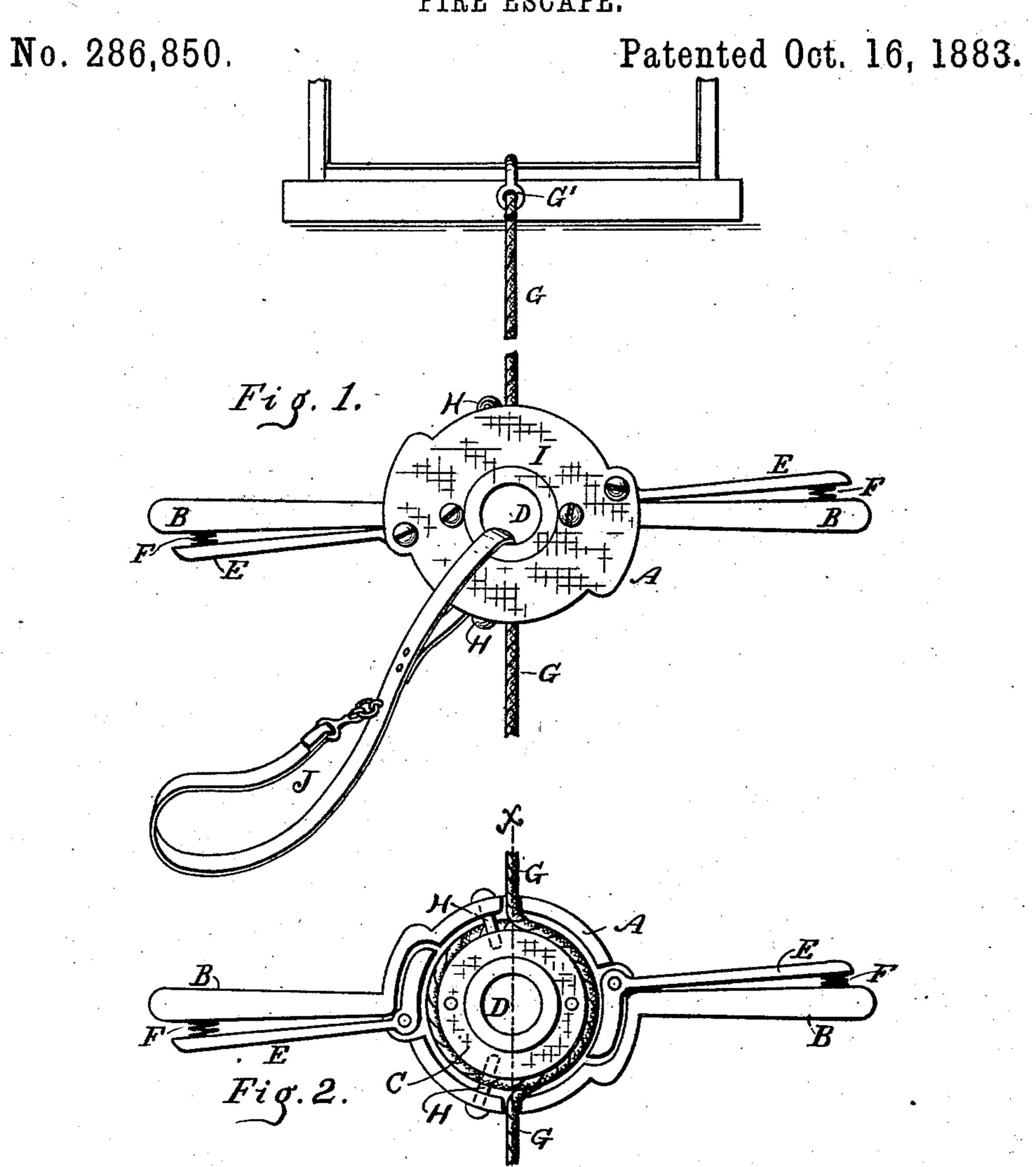
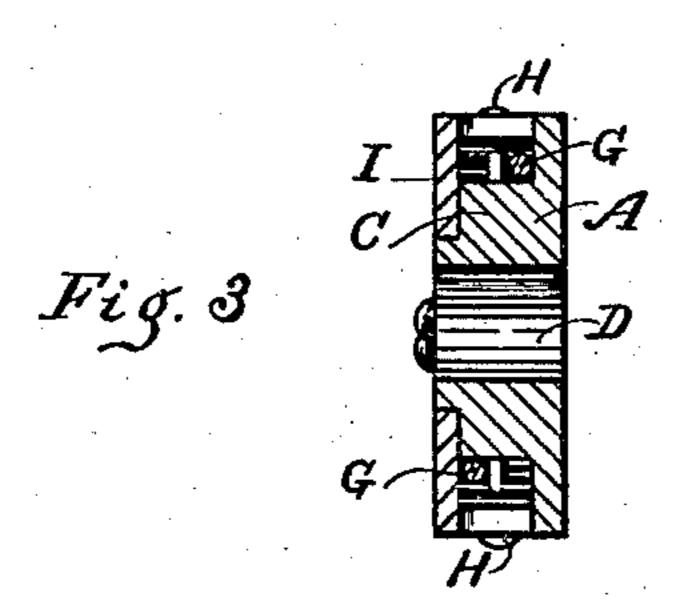
A. N. SANDE.

FIRE ESCAPE.





Witnesses: J.B. Halpenny. Inventor: Albert N. Sande per T. T. Marnerhie Attorney.

United States Patent Office.

ALBERT N. SANDE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO OLAF HANSON, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 286,850, dated October 16, 1883.

Application filed June 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, Albert N. Sande, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fire-Escapes, of which the following, in connection with the accompanying drawings, is a specification.

The object of my invention is to provide a portable and easily-arranged fire-escape adapt10 ed for descending on a strong cord or small rope. The means employed will herein be fully described.

In the drawings, Figure 1 is a side view of my invention, showing it attached to a wintow-sill. Fig. 2 is a side view of the carrier with its side plate removed, thus showing the interior; and Fig. 3 is a section of the carrier, taken on the plane of the line x x.

Like letters of reference indicate like parts.

A represents the body or case of the carrier, from the opposite sides of which project the fixed arms or extensions B B.

C is an annular concentric flange or ring in the case A, and D is a central opening in the 25 case.

EE are bent levers or clutches pivoted to the case A.

F F are springs arranged between the arms or extensions B B and the long arms of the 30 levers E E.

G is a cord or rope, provided at one end with a hook, G', passing into one side of the case about midway between the arms BB, and passing thence one or more times around the rib or ring C, and then out through the opposite side of the case, as shown.

H H are pins or separators passing between the coils of the cord or rope G.

I is a cap or cover removably secured to the

J is a body loop or band attached to the body of the escape, in the example shown, by passing through the central eye, D.

To use this fire-escape for the purpose for which it is intended, I proceed as follows: I hook the hook G' into or upon some suitable fixed part, the cord or rope G being first arranged in the carrier in the manner described. I then pass the loop or supporting-band J

about the body or arms, or in some other suit- 50 able way, by means of which the body of the person escaping will be securely supported while the descent is being made. I then throw the loose end of the rope or cord out through the window or building, leaving the carrier 55. near the upper end of the rope. The person about to descend then climbs out of the window, clinging to the rope or cord until he is in a position to seize either one or both of the handles formed by the parts B and E. While 60 grasping the handles E E he can, by forcing the long arm of the lever E toward the part B, regulate the rapidity of his descent, or even stop at any time. The ability to regulate the rapidity of the descent follows from the fact 65 that the short arms of the levers E E are forced in or against the cord or rope and press it with greater or less force, as may be desired, and the friction upon the rope thus produced retards the downward movement of the car- 70 rier.

It will be perceived that this escape may be constructed with facility, that it is portable and compact, and that it may be easily controlled by the person using it. The springs F F and 75 pins H H are not absolutely essential; neither is it absolutely essential that two levers E E should be employed; but I prefer to use the pins H H to prevent the tendency of one coil or part of the rope from slipping underneath 80 or catching the other coil or part, thus allowing the rope to work freely, excepting as controlled by the lever or levers.

Having thus described my invention, what I claim as new, and desire to secure by Letters 85 Patent, is—

1. The combination, in a fire-escape, of the flange or ring C, the rope or cord G, and a bent pivoted lever having its inner arm adapted for contact with the coil of the said cord, and 90 its outer end arranged, substantially as specified, in relation to the handle or extension B, substantially as and for the purposes set forth.

2. The combination of the body A, having therein the ring or flange C, and also having 95 the arms or extensions B B, the levers E E, the rope G, passing through the said body and around the said ring, the cap or cover I, and

the body loop or support J, substantially as | and for the purposes specified.

3. The combination of the body A, having therein ring or flange C, and also having the 5 arms or extensions B B, the yielding levers E E, the rope G, passing through the said body and around the said ring, the cap or cover I, the body loop or support J, the pins H H,

and springs arranged between the said levers and extensions, substantially as and for the 10 purposes set forth.

ALBERT N. SANDE.

Witnesses: F. F. Warner, J. B. HALPENNY.