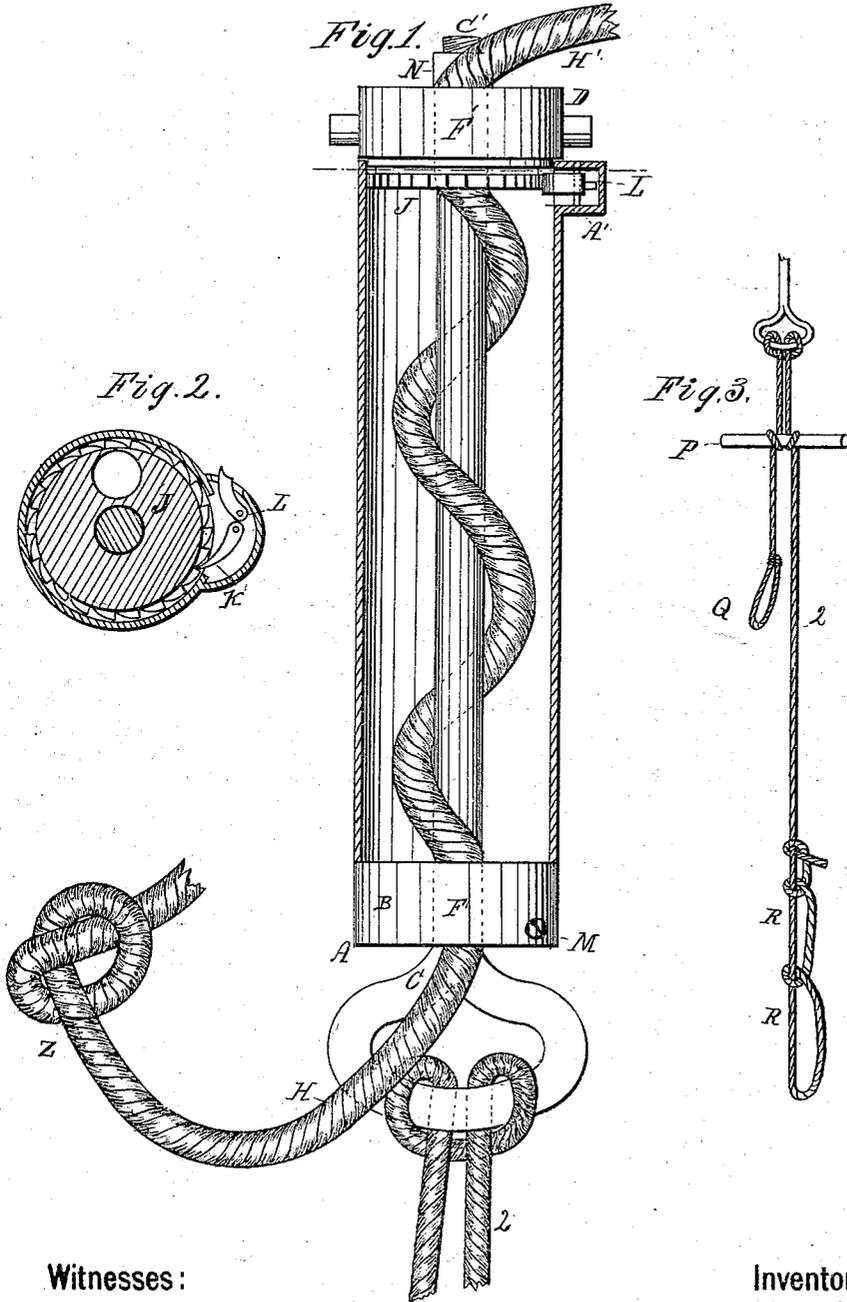


G. B. De BOUCHERVILLE.  
Fire-Escapes.

No. 147,828.

Patented Feb. 24, 1874.



Witnesses:

*Antoine Labelle*  
*J. G. Brant*

Inventor:

*George Boucherd Boucherville*

# UNITED STATES PATENT OFFICE.

GEORGE BOUCHER DE BOUCHERVILLE, OF QUEBEC, CANADA.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **147,828**, dated February 24, 1874; application filed January 5, 1874.

*To all whom it may concern:*

Be it known that I, GEORGE BOUCHER DE BOUCHERVILLE, of the city of Quebec, and Province of Quebec, Canada, have invented a new and useful Improvement in 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 accompanying drawing, forming a part of this specification.

Figure 1 is a longitudinal sectional elevation.

A A' is a hollow cylinder, of sufficient length and diameter to allow a strong cord to wind five or six turns on the spindle C C', which cylinder is closed tight at A by a block, B, and stopped at A' by the block D fitting in the cylinder, and made to revolve on the journal of the spindle C C'. C C' is a metal spindle passing through the blocks B and D, the lower part of which, C, forms a ring or handle, to which may be attached a strap or anything convenient to take hold of by the person who wishes to escape, such as the rope 2, Fig. 3, P representing a round stick of wood passed through and stopped by a knot of the cord; Q, a slip-knot, which may be fastened round the wrist; R R', knots to form stirrups of different lengths. N is a nut screwed on the spindle at C'. F F' are two holes in the blocks B D, to pass the cord H H'. J is a ratchet-wheel, fixed, Figs. 1, 2, on the block D within the cylinder; K, a spring-pawl, properly fixed on the cylinder, and acting on the ratchet-wheel J; L, a catch or spring to raise the pawl. M is a screw to hold fast and prevent the spindle from revolving.

Having sufficiently wound the cord H H' around the spindle inside the cylinder by turning the block D, I attach the end H' of

the cord to some convenient article, and let the other end hang outside the window. Then, passing the slip-knot Q around my wrist, and grasping the handle P, and having put one foot in the stirrups R or R', I let myself go down with a velocity regulated by the more or less winding of the cord on the spindle C C', which the pawl prevents from uncoiling during the descent. If, during the descent, I find that the velocity is too great, I have only to pull a little on the rope H H', within my reach, to tighten the coils around the spindle, and so check the descent, the control of the amount of friction of the coils remaining thus constantly under my immediate command.

Any person standing below may pull on the cord, if the person descending is unable to do it himself.

By making a knot, Z, on the rope larger than the hole F, at some convenient distance from the landing-place, the sudden shooting down (if any accident should happen, as if the person had forgotten to wind the cord or to put down the pawl) of the fire life-preserver would stop at the knot, and so break the fall without injury to the person.

Having thus described my invention, and the mode of using it, what I claim as new, and desire to secure by Letters Patent, is—

In connection with a strong cord, H H', the cylinder A A', the blocks B D, the spindle C C', the holes F F', the ratchet-wheel J, and its pawl K, with its catch L, or its equivalent, the nut N, all combined as and for the purpose described.

GEORGE BOUCHER DE BOUCHERVILLE.

Witnesses:

ANTOINE N. LA BELLE,  
F. H. BRAULT.