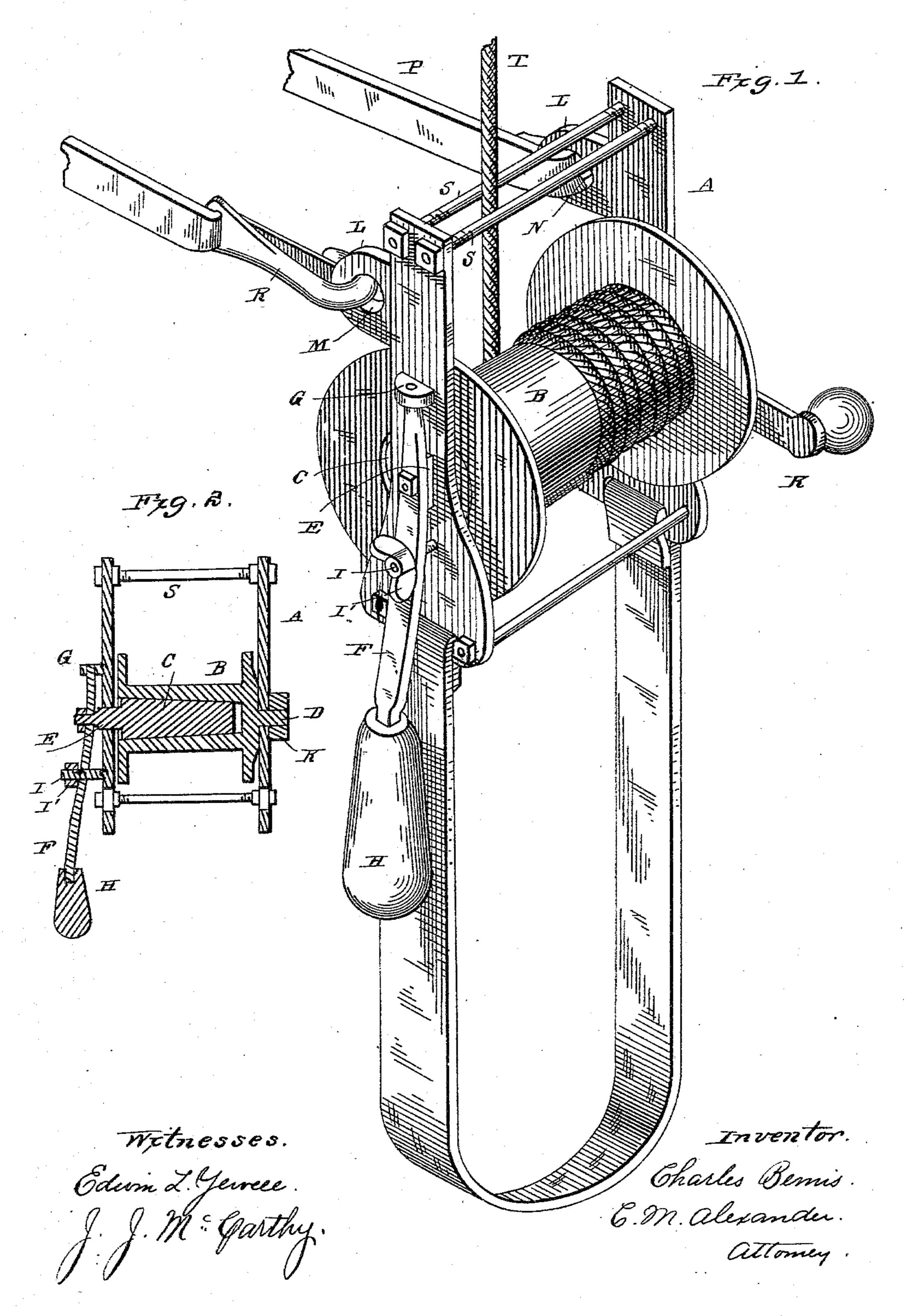
C. BEMIS. FIRE ESCAPE.

No. 286,523.

Patented Oct. 9, 1883.



United States Patent Office.

CHARLES BEMIS, OF LUDINGTON, MICHIGAN, ASSIGNOR OF ONE-HALF TO WILLIAM H. WILLIAMS AND ANTONIO E. CARTIER, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 286,523, dated October 9, 1883.

Application filed April 7, 1883 (No model.)

To all whom it may concern:

Be it known that I, Charles Bemis, a citizen of the United States, residing at Ludington, in the county of Mason and State of Michigan, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide an improved fire-escape which may be conveniently carried by travelers and others, and which can be expeditiously put into use when required, and can be safely employed to lower a person from elevated rooms in a building.

These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved apparatus, and Fig. 2 a vertical

sectional view thereof.

The letter A indicates a metallic frame having suitable bearings for the journals of a transverse reel or drum, B. The said reel or drum is formed with a tapering longitudinal opening, in which fits a tapering shaft, C, the 25 reel being provided with a journal, D, at one end, and the tapering shaft with a similar journal, E. The journal E projects outside beyond its bearing, and has connected to it loosely a lever, F, fulcrumed to a stud, G, se-30 cured to one side of the frame. The lower end of said lever is provided with a handle, H, which may be operated to force the tapering shaft into frictional contact with the interior conical opening in the drum or barrel and re-35 tard the rotation of the same, the journal of the conical shaft being rectangular in cross-section and set in a rectangular bearing in the frame of the apparatus. In order to insure the utmost frictional contact between the shaft and 40 the reel, the frame is provided with a threaded stud or pin, I, passing through an aperture in the lever, and provided with a thumb-screw, I', by which the lever may be positively clamped, so as to bind the shaft to its seat in 45 the reel. The journal of the reel projects at one side of the frame, and is provided with a

crank, K, by means of which it may be turned, and the frame, near its upper ends, is provided with extensions or projections L, having apertures M N, to one of which projections is secured one end of a flexible band, P, which carries at its other end a snap-hook, R, which may be secured to the other projection when the apparatus is required for use. The upper ends of the frame are braced by the transverse 55 bolts S, so as to hold the whole compactly together. The reel has wound upon it a rope, T, the free end of which is provided with a hook or suitable grappling device, by which it may be secured to the furniture or portions of 60 a room in a building.

In using my improved apparatus the free end of the rope is secured by means of its hook or grappling device in the room or upper portion of the building or structure from 65 which the person desires to escape. The person takes a seat in the lower portion of the hanging strap, and fastens the flexible band about the shoulders. Then by manipulating the crank of the apparatus, which is under 70 perfect control by reason of the frictional bearings of the reel and its shaft, the person may lower himself safely and conveniently to the

ground.

Having thus described my invention, what I 75 claim, and desire to secure by Letters Patent,

is—

The combination, in a fire-escape, of the metallic frame, the reel having a tapering aperture, and a journal at one end bearing in 80 the frame, the conical shaft located in said aperture and having a bearing in the said frame, and the lever by means of which said shaft may be brought into frictional contact with the reel, substantially as and for the pur-85 poses specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES BEMIS.

Witnesses:

D. V. SAMUELS,

E. D. EDWARDS.