

(No Model.)

C. F. SPENCER.

FIRE ESCAPE.

No. 272,389.

Patented Feb. 13, 1883.

Fig. 2.

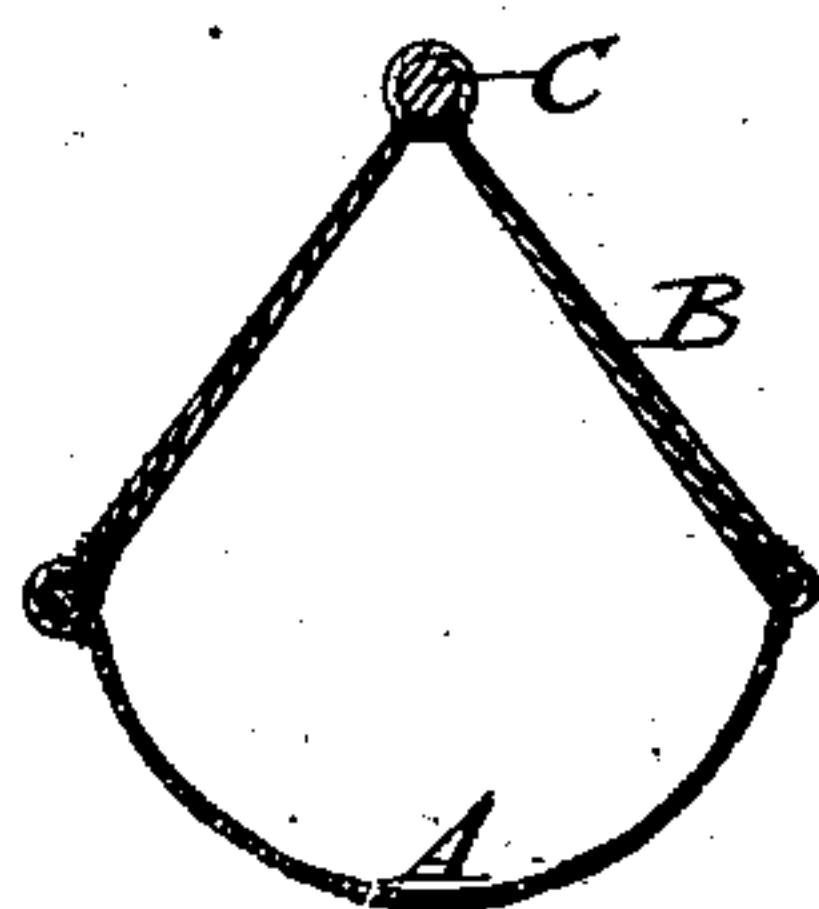
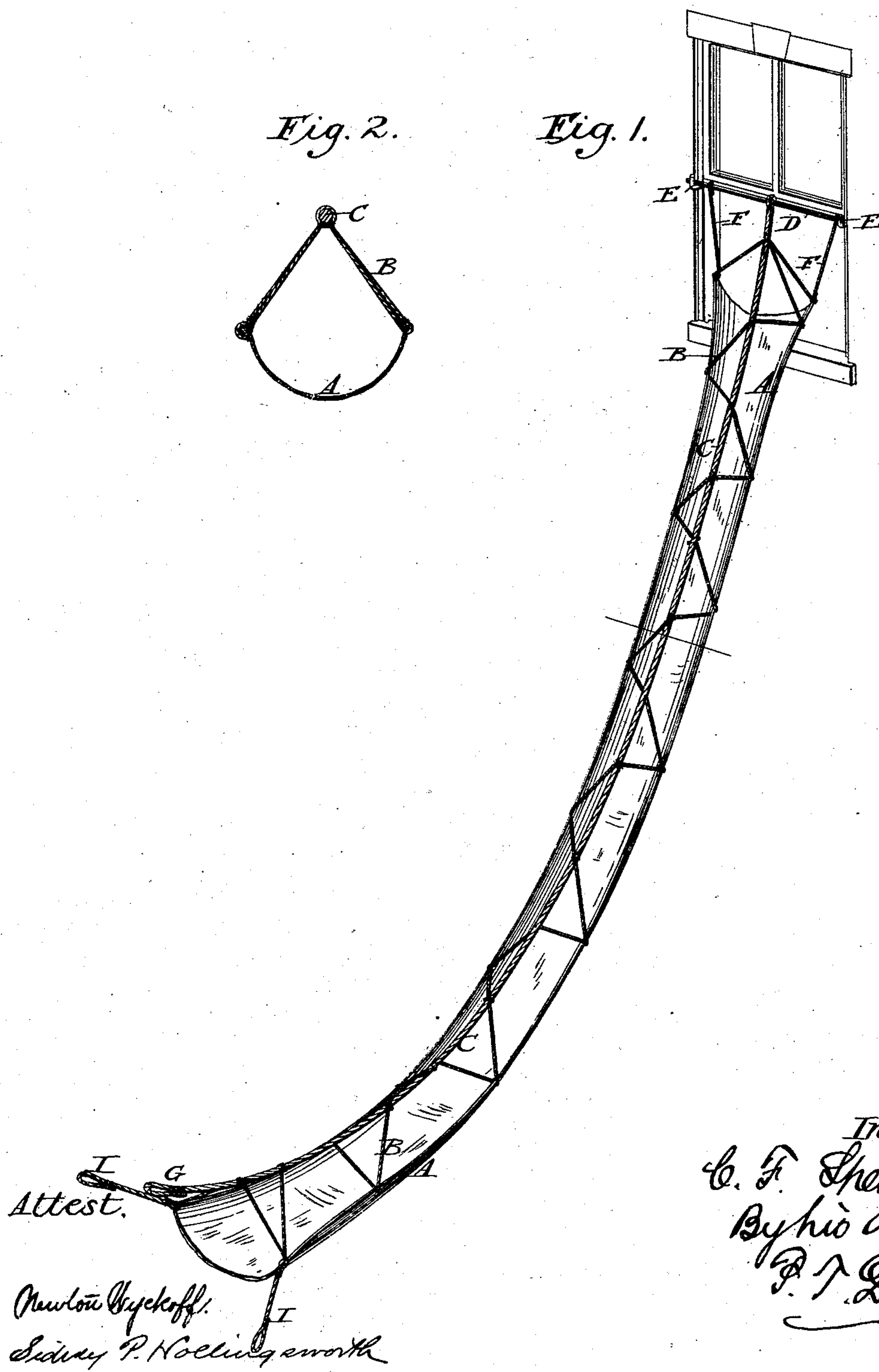


Fig. 1.



Attest.

Newton Wyckoff.

Sidney P. Hollingsworth

Inventor  
C. F. Spencer  
By his atty  
P. T. Dodge

# UNITED STATES PATENT OFFICE.

CHARLES F. SPENCER, OF ROCHESTER, NEW YORK.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 272,389, dated February 13, 1883.

Application filed January 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. SPENCER, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to that class of fire-escapes which consist of a flexible chute or trough designed to be extended in an inclined position from a window or other elevated opening to the ground below, to admit of the occupants descending therein.

The particular aim of the invention is to reduce the cost of construction, facilitate the adjustment of the device in position for use, and render the same less bulky than those constructed in the ordinary manner, to the end that it may be stored conveniently and compactly within the building.

The invention consists, essentially, in combining with a sheet of canvas or equivalent flexible material a single suspension rope or cable and suspension-cords connecting opposite edges of the sheet with said cable; also, in various minor features of construction hereinafter described.

Referring to the accompanying drawings, Figure 1 represents a perspective view of my improved escape in position for use. Fig. 2 is a cross-section of the same.

A represents the sheet of canvas or equivalent pliable material, of such length as circumstances may require, and of a width sufficient to sustain and carry those who may wish to descend therein. This sheet is sustained at its edges by means of cords or ropes B, attached to its edges, and extending thence upward to a central elevated rope or cable, C. The suspension cords or guys B may be made separate and independent of each other, and connected to the central rope and to the edges of the sheet in any suitable manner. It is preferred, however, as the most simple and convenient method of construction, to use a continuous cord or rope, B, and to pass the same to and fro over the suspension-cable from one side of the sheet to the other. The sheet will be provided with holes or grommets through which to pass the cord, which will be tied firmly thereto, and also secured in any suitable manner to the suspension-rope to prevent them

from shifting out of position. This construction is shown in Fig. 1. If preferred, however, the edges of the sheet may be secured to or around small ropes or binding-cords *a*, in which case the rope may be passed beneath and around said binding-cords to establish a secure connection between the parts. At its upper end the cable B is attached to the middle of a supporting-bar, D, which may be secured in position across the middle or upper portion of a window in any suitable manner. A convenient arrangement for this purpose is to provide the window-frame on the outer side with permanent hooks or staples E, upon which the bar may be placed at will.

For the purpose of keeping the mouth of the sack in an extended condition in order to facilitate the admission of bodies thereto, guys or cords *f* are extended from its upper corners outward to the ends of the supporting-bar, as shown. The admission of bodies to the chute is further facilitated, when required, by making the suspension-ropes B at the upper end of greater length than the remainder, as shown, thus allowing the mouth at the upper end to expand to an increased width. At its lower end the cable is provided with a loop or handle, G, adapted to be held by hand or to be attached to any suitable support to keep the apparatus in position.

For the purpose of controlling the position of the mouth to regulate the escape of bodies therefrom ropes or handles I are attached to its lower corners, as shown. The arrangement of the suspension-cord B in the zigzag or serpentine form, as described, is also advantageous, in that it prevents the points of suspension of the sheet from coming opposite each other, the consequence of which is, that there is less tendency of the chute to close or bind upon the descending bodies than when it is suspended by points directly opposite each other.

The present invention is restricted to those matters and things which are hereinafter claimed, and as to all matters and things which may be described or shown, but which are not claimed, the right is reserved to make the same the subject of a separate patent.

Having thus described my invention, what I claim is—



1. In a fire-escape, the combination of a flexible sheet or chute, a single suspension-cable, and guys or suspension-cords extended from said cable to opposite edges of the sheet.
- 5 2. In combination with the pliable sheet, the central suspension-cable and cords extending from opposite edges of the sheet to the cable, the supporting-bar, and the connection between said bar, the cable, and the upper corners of the sheet.
- 10 3. In a fire-escape, a pliable sheet having its edges suspended from a single overhead cable.
4. In combination with pliable sheet or chute, the central suspension-cable and the continuous suspension-cord B, passed to and fro across 15 the cable from one edge of the sheet to the other.

CHARLES F. SPENCER.

Witnesses:

JOHN T. ARMS,  
GEO. I. HILL.