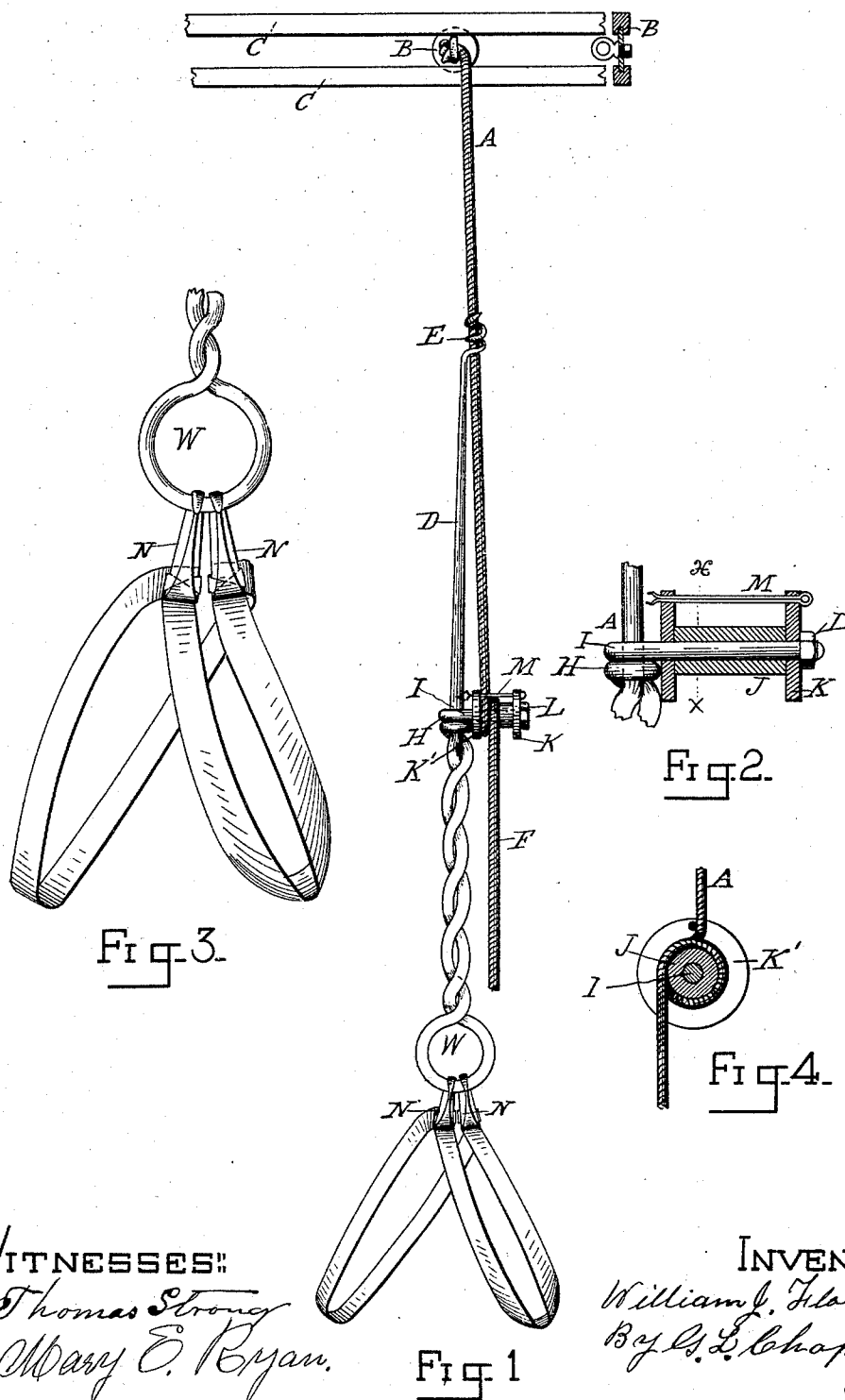


(No Model.)

W. J. FLOWERS.  
FIRE ESCAPE.

No. 488,966.

Patented Dec. 27, 1892.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

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## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 488,966, dated December 27, 1892.

Application filed August 8, 1892. Serial No. 442,432. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. FLOWERS, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had to the annexed drawings, illustrating the invention, in which—

10 Figure 1. is an elevation of a fire escape in which is embodied my invention. Fig. 2. a longitudinal sectional elevation of the rope-escape. Fig. 3. an elevation of the lower portion of the device enlarged. Fig. 4. a cross section of Fig. 2 on line X.

The nature and construction of my improved fire escape will be fully comprehended by the following detail specification.

A represents a rope of suitable length to reach the desired landing place below, from the place, the escape is to be made. This rope in the drawing is represented as attached to a pulley, or roller B which runs in and is supported by suitable ways C. These ways I place on the sides of a building above the upper windows or openings from which escape may be made. Any desired number of ropes may be suspended from one set of ways. I also attach the upper end of the rope to the inside of a room, or compartment and employ it in conjunction with devices described as follows.

A sliding escape is formed of a single piece of metal, steel wire being preferred. The straight portion D is preferably tapered at its upper portion and terminates in a coil E of one or more convolutions which pass around the rope A and slide downward on it when a person is lowering himself down. The rod D at F is double and twisted on itself and terminates below in a ring W, and above in a short coil H and an arm I. On the arm is placed to bear against the coil H a disk K' and on the arm is placed a cylindrical metal portion J and an outer disk K; all of which are held rigid in place by a nut L to form what I term a rope escape. The rope passing through the coil E is wound a full coil round the cylinder J and between

the disks K', K; and to prevent the coil from leaving the rope-escape the disks are provided with a hole each and the ordinary split pin M is put through them. Any suitable, or desirable limb, or body attachment N N is made fast to the ring W to support the person descending. The one shown consists of two strong loops for the use of the male person. Attachments for ladies' use of common knowledge can be obtained in houses carrying that line of goods. Any of the various styles and forms can be secured to the ring or loop W. The purpose of enlarging the arm I by the cylinder J. is to attain proper friction the arms being too small for that purpose. It is especially desirable that the device be strong and very light; and to attain this end good spring steel rod, or wire is the most suitable. In practice the sliding metal attachment is removed from the rope, when not required on a rope outside of a building. To apply the metal attachment remove the pin M, turn the coil E around the rope A, wind the rope around the rope escape J replace the pin, hold fast to rope A below its coil, attach the supports N, N, and swing loose from the building, and pay out the rope from below the rope-escape. Accident can only occur by letting go a hold on the rope.

For individual use the whole apparatus will be stored in a room, and one end of the rope secured to some suitable fastener. When a person is to descend the lower portion of the rope will be lowered to a landing place, and the descent will be made as before stated. A useful feature is the simplicity and usefulness of the coil E which enables the device readily to be attached to a suspended rope at any opening in the building. The fact that the device is made of light rod or wire in a single piece except the escape for the rope makes the device both light and simple of construction; and very available in practice.

I claim as new and desire to secure by Letters Patent.

An improvement in fire escapes consisting of a main part which at its upper portion is

provided with one or more coils which are detachable from the rope, and at its lower portion is provided with a ring, and is doubled and twisted on itself, the arm of the re-  
5 turned portion at I being turned outward, and a rope-escape consisting of two disks and an intervening cylinder secured thereon, with

a key passing through the disks, in combination with a suspended rope, and body attachment as specified and shown.

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Witnesses:

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