

(No Model.)

2 Sheets—Sheet 1.

A. L. PITNEY.

FIRE ESCAPE.

No. 277,340.

Patented May 8, 1883.

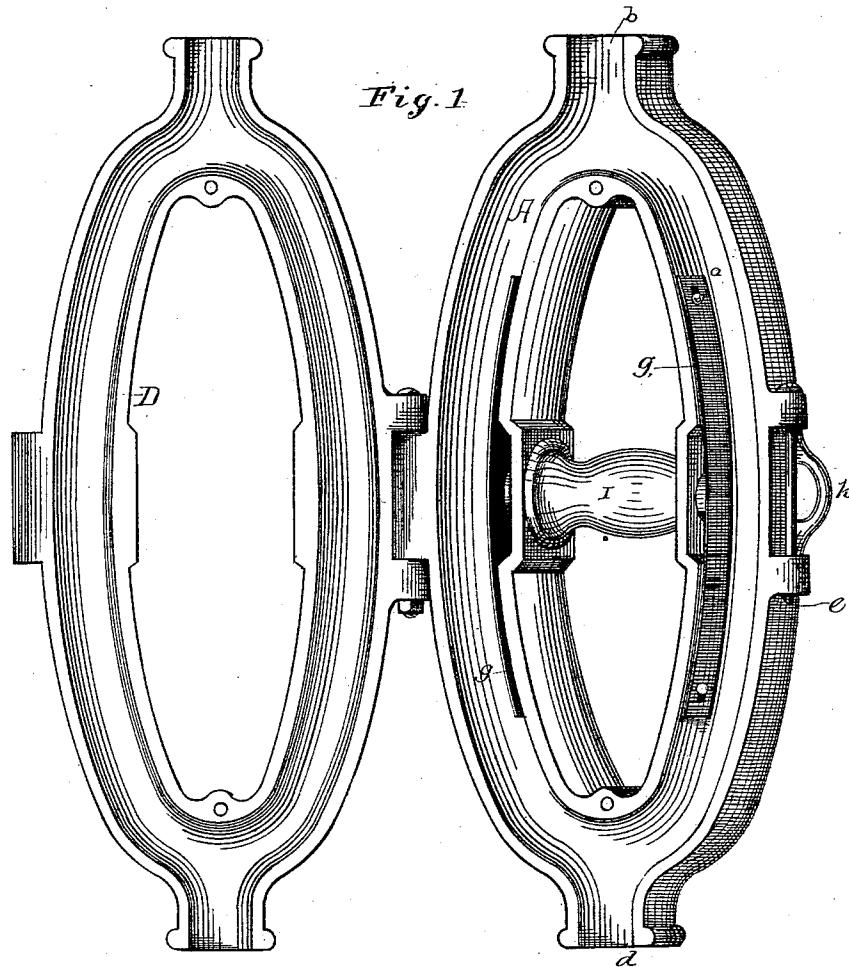
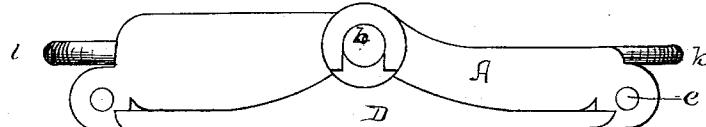


Fig. 2



Witnesses:

Jug S. Jordan
J. H. Turner

Inventor

Albert L. Pitney
By R. D. Smith
Atty.

(No Model.)

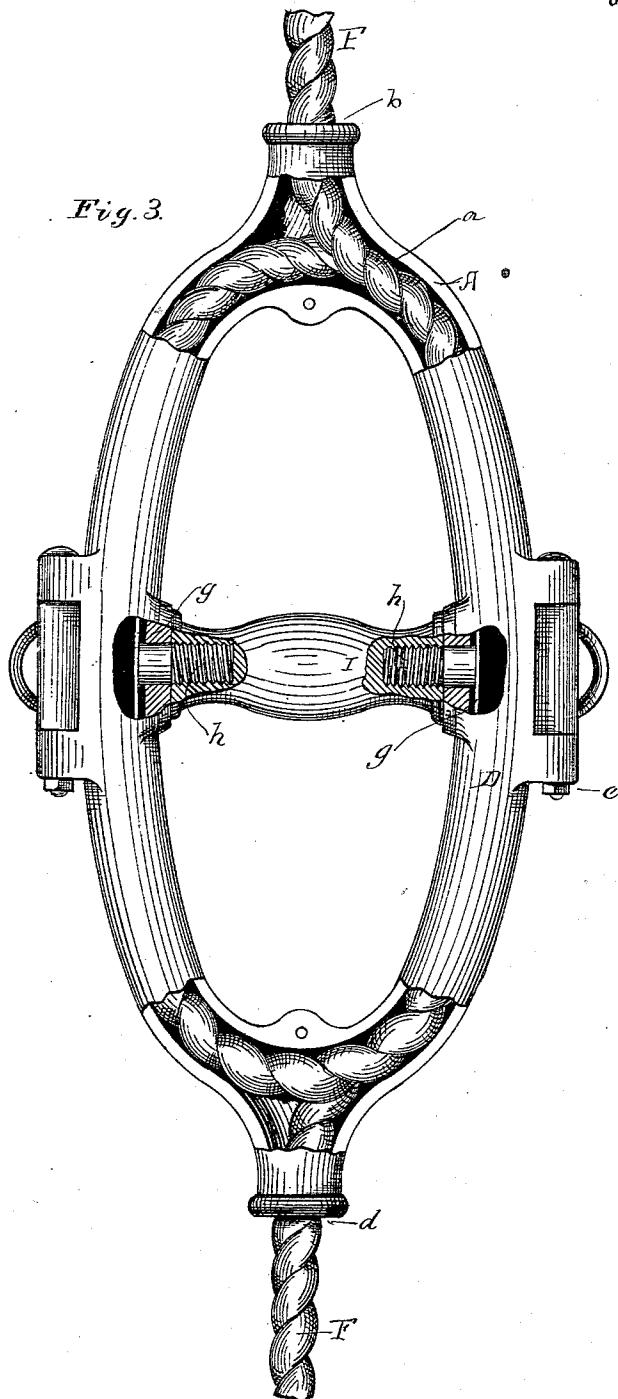
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UNITED STATES PATENT OFFICE.

ALBERT L. PITNEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 277,840, dated May 8, 1883.

Application filed February 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT L. PITNEY, of Washington, in the District of Columbia, have invented a new and useful Improvement 5 in Fire-Escapes; and I do hereby declare that the following is a full and accurate description of the same.

My invention relates to that class known as "friction fire-escapes." The characteristic 10 feature is a device provided with a tortuous channel, in which a rope is placed, and when in use one of said ropes is secured to the building which is afire, at or above the location of the person to be rescued, who attaches himself 15 to said device and slides down said rope to the ground, the tortuous channel serving to cause so much friction that the descent will not be dangerously rapid.

This improvement may be constructed in 20 a great many forms and its parts may be arranged in a great variety of ways without involving any difference in principle—to wit, the construction in two parts, which may be separated to permit the insertion of the rope 25 into the tortuous channel. Some of the several forms which have suggested themselves to me have, however, their own special advantages, and my purpose is to ask separate 30 patents for them, limited to the special structure shown, and subordinate to this patent. For convenience, therefore, I will describe herein the structure which I prefer, and regard the same as typical of all. Therefore, that others may more fully understand my invention, I will particularly describe said structure, having reference to the accompanying 35 drawings, wherein—

Figure 1 is a perspective view of my device open. Fig. 2 is a top view of the same. Fig. 40 3 is a perspective view, partly in section, showing the same in operative condition.

A is a shell, preferably made of cast metal, containing within it the tortuous channel *a*. In this instance the shell A is elliptical in 45 form, and the entrance *b* is at one extremity of the ellipse and its exit *d* at the other extremity, the channel *a* passing once and a half around the ellipse. The cover D is hinged or otherwise movably secured to the shell A 50 at one side, and at the opposite side it is pro-

vided with a slip-bolt, *e*, or other proper fastening, so that the channel *a* may be opened or closed at will for the application or removal of the rope F.

It is necessary to provide means whereby 55 the friction on the rope may be varied to accommodate it to the different weights of different persons. I therefore insert friction-plates *g* in the channel *a*, and provide a screw, *h*, or other pressure device, to compress the 60 rope between said plate or plates and the side of the channel *a* with more or less pressure.

In the device constructed as shown in the drawings hereto attached, the plates *g* are on opposite sides of the ellipse, and the screws *h* 65 are made right and left and in corresponding nuts set in the revolving handle I, so that by turning said handle said plates are simultaneously moved to increase or reduce friction upon the rope. I think the use of two friction-plates preferable to a single plate, as it distributes the desired friction over a greater surface than would be the case with one plate of similar size.

Loops *k l*, attached to shell A, may be provided for attachment of the necessary slings for the proper and safe suspension of the person who wishes to descend the rope F.

Having described my invention, what I claim as new is—

1. The shell A, provided with an open tortuous channel, *a*, combined with the cover D, hinged at one side to said shell and secured at the other side by a slip-bolt or other proper fastening, as set forth. 85

2. The shell A, provided with a tortuous channel, *a*, and a hinged cover, D, combined with the friction-plates *g* and screw or screws *h*, operated by a handle, I, substantially as set forth. 90

3. The shell A, provided with the channel *a*, substantially elliptical in shape, as shown, combined with one or more friction-plates, *g*, and screw *h*, whereby the frictional pressure may be varied at pleasure. 95

4. The shell A, substantially elliptical in shape, provided with the channel *a* and cover D, combined with the elastic friction-plates *g* and screw *h*, operated by the handle I, whereby both of said plates are caused to press 100

or release the rope by the same movement of the handle I.

5. The shell A, substantially elliptical in form, provided with the covered channel a, passing once and one-half time around said shell, combined with friction-plates g g, placed within said channel and on opposite sides of said shell, and the operative screws h h, one

of which is right-handed and the other left-handed threads, and the handle I, having nuts to matching said screws, substantially as set forth.

ALBERT L. PITNEY.

Witnesses:

R. D. O. SMITH,
J. C. TURNER.