

(No Model.)

E. A. C. PETERSEN.

FIRE ESCAPE.

No. 294,908.

Patented Mar. 11, 1884.

Fig. 1.

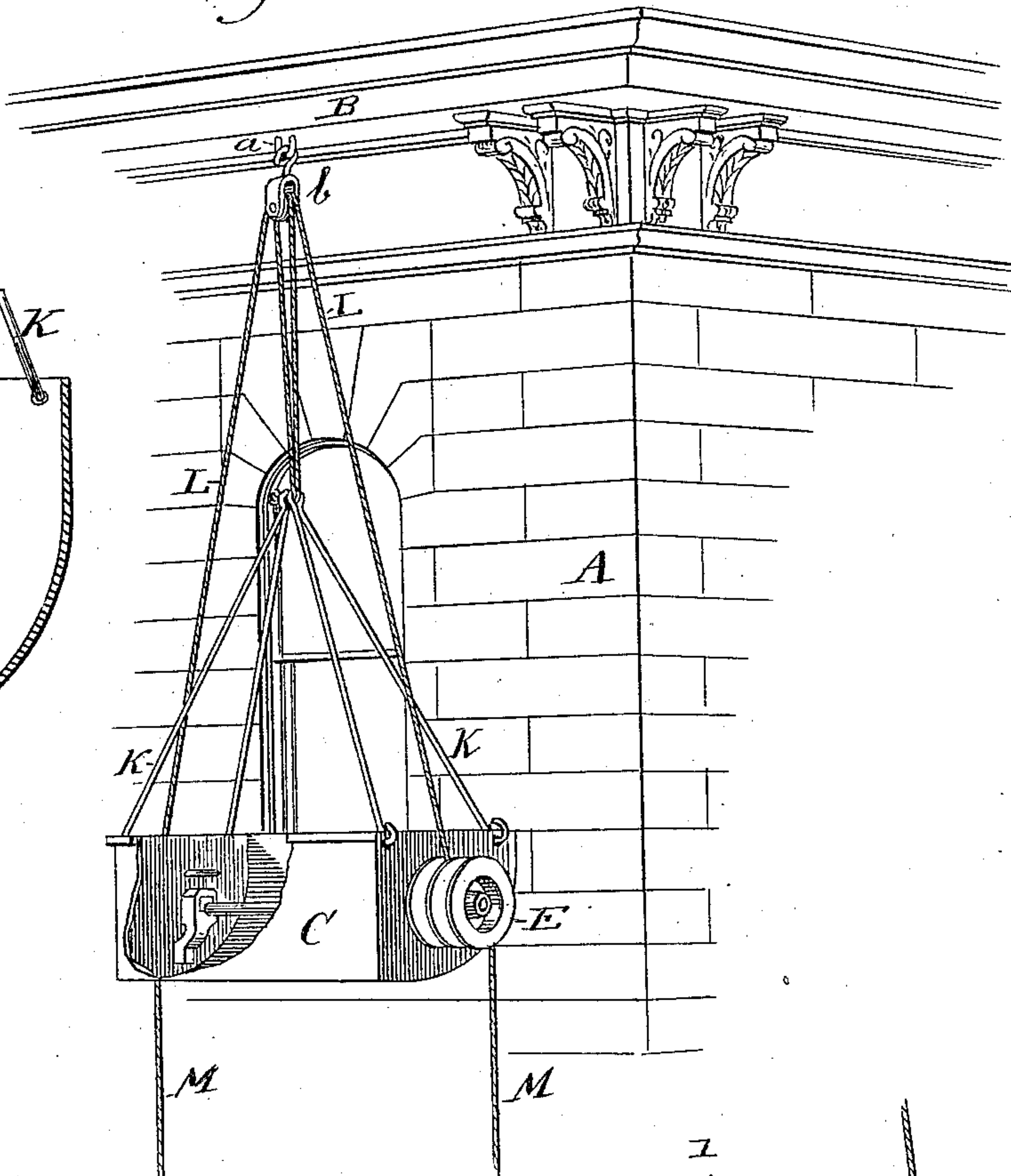


Fig. 3.

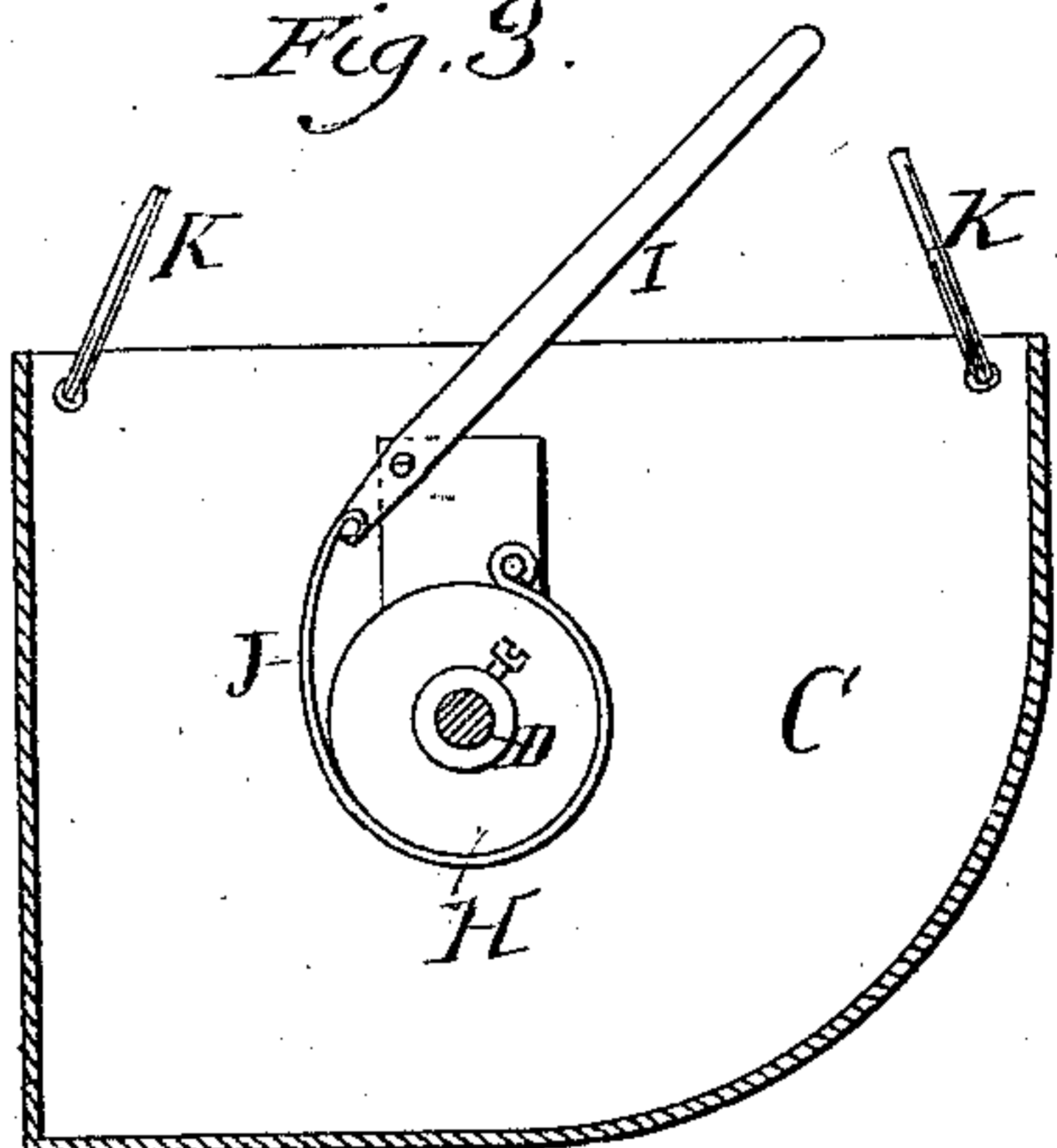
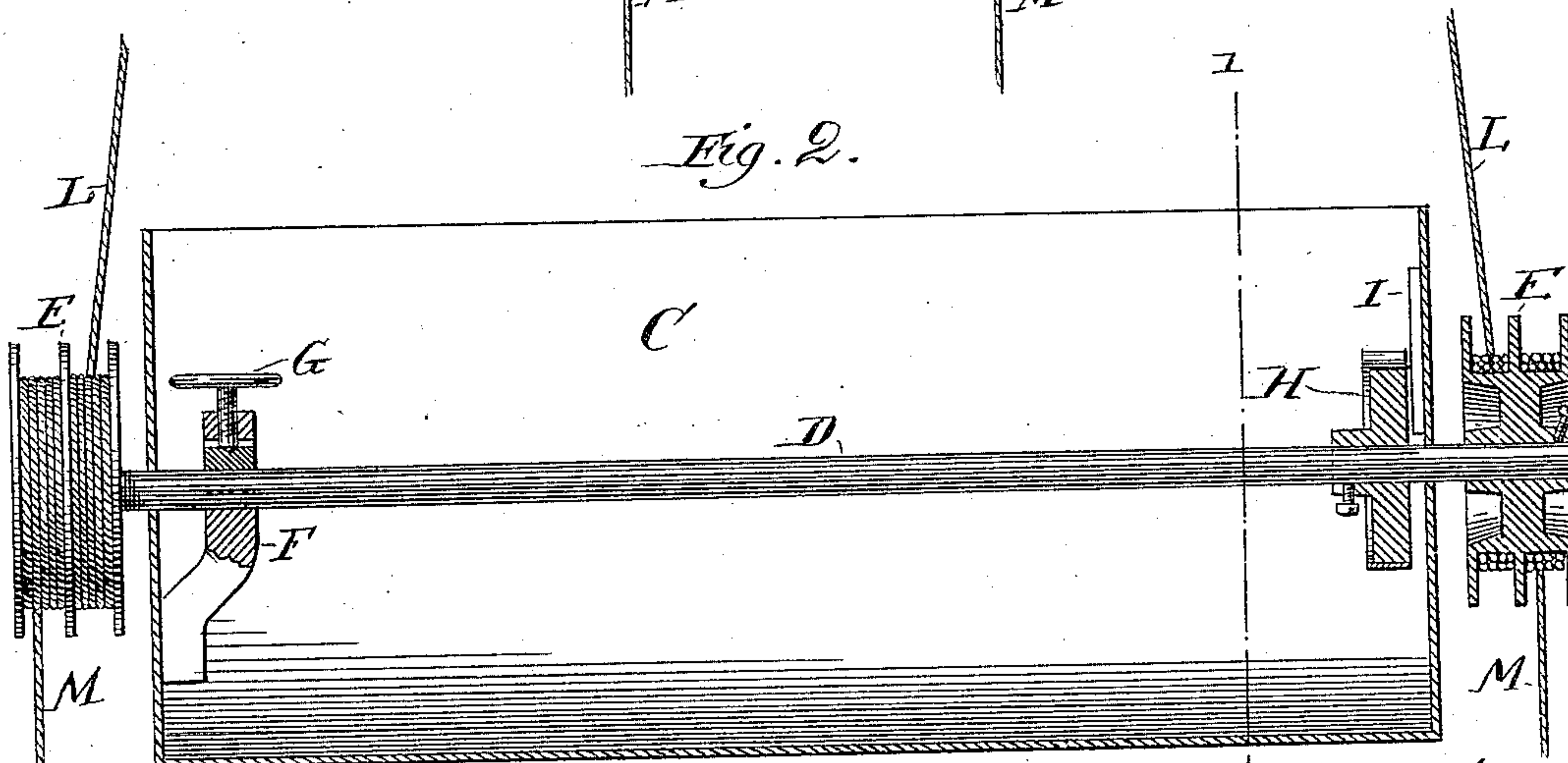


Fig. 2.



Witnesses:

Frank S. Blanchard.
Wm. B. Clagett

Inventor:

Eduard A. C. Petersen.

By Wm. B. Lotz
Attorney.

UNITED STATES PATENT OFFICE.

EDUARD A. C. PETERSEN, OF CHICAGO, ILLINOIS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 294,908, dated March 11, 1884.

Application filed November 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDUARD A. C. PETERSEN, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State of Illinois, 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.

My invention relates to an improved fire-escape; and it consists of the novel devices and combination of devices, as will be described and claimed.

In the drawings, Figure 1 represents a building with my escape applied; Fig. 2, a sectional view of the car, and Fig. 3 a section on line 1 1 of Fig. 2.

Like letters refer to like parts in each view.

A represents a building, and B the cornice of the same. By a hook, *a*, or by other suitable means, a pulley-block, *b*, is suspended from said cornice, said block containing two pulleys, as shown.

C represents a car, in which those wishing to escape or to assist others to escape are carried. This car, which is made of any suitable material and of any desired size, is preferably slightly curved on its rear face, as shown, in order that it may pass any obstruction—such as window-sills, ornamentations, &c.—met in its descent. A shaft, D, extends the entire length of this car, has bearings in the ends thereof, and protrudes a short distance beyond each end. Upon each of the protruding ends of this shaft is keyed a double drum, E, the object of which will be set forth. Shaft D also has bearing in a bracket, F, situated upon the interior of the car, and in which is situated a screw, G, by means of which the rapidity of the revolution of said shaft is regulated. At the opposite end of the car there is keyed to shaft D a wheel, H. A lever, I, is pivoted in the car, and to the short end of said lever one end of a flat spring, J, is attached, said spring encircling the wheel H, and secured at its remaining end upon a pin provided for that purpose. This spring is of such a length that when the lever I is not acted upon the wheel H is free to revolve, but upon pressing said lever the spring tightens around said wheel

and retards the revolution of the shaft to which the wheel is keyed. This brake may be used to stop the car entirely or to regulate the rapidity of its descent. To each end of the car are pivotally secured the arms of bent rods K, which at their centers are formed each with an eye, as shown in Fig. 1, said bent rods being of such a length that when in a certain position they will be brought together, as shown in Fig. 1. Through the eyes formed in these rods, as above described, the ends of ropes L are passed and knotted to prevent their escape therefrom. Each of these ropes is passed over one of the pulleys in block *b*, and then passed down and secured to one of the drums E of shaft D. The length of these ropes is such as to permit of the car descending to the ground from the highest story of the building. To the outer portion of each of the drums E is secured a rope, M, each of which hangs from said drum to the ground.

The operation is as follows: If the car is already lowered, the ropes M will be wound on their drums, and by pulling on said ropes the car will be raised and the ropes L wound on their drums. The person to escape having entered the car, it will descend by its own gravity, the brakes described being brought into use to regulate the rapidity of the descent, and the ropes M at the same time winding on their drums to prepare the device for being raised again.

What I claim is—

1. The combination of car C, shaft D, mounted therein, double drums E, keyed to said shaft, ropes M M L, pulleys *b*, and arms K, hinged to car C, the parts arranged as and for the purpose set forth.

2. The combination of car C, shaft D, mounted therein, wheel H, spring J, lever I, double drums E, keyed to shaft D, ropes M M L, pulleys *b*, and arms K, hinged to car C, the parts arranged as and for the purpose set forth.

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

EDUARD A. C. PETERSEN.

Witnesses:

M. J. CLAGETT,
JNO. C. SCHROEDER.