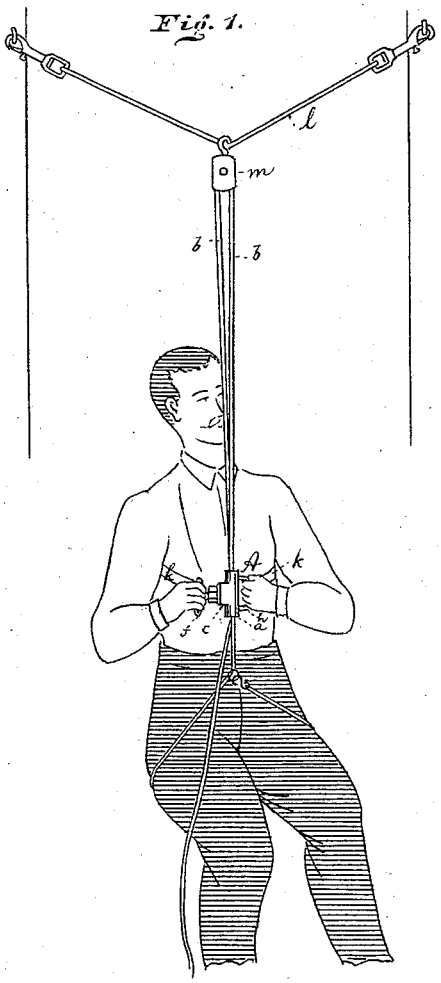
(No Model.)

K. HUBNER.

FIRE ESCAPE.

No. 306,078. Patented Oct. 7, 1884.

Fig. 1.



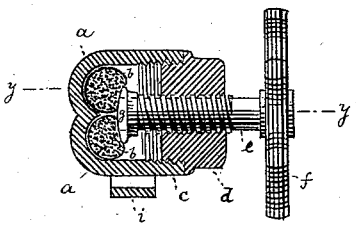


Fig. 3.

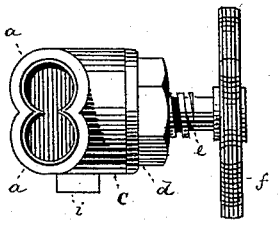


Fig. 2.

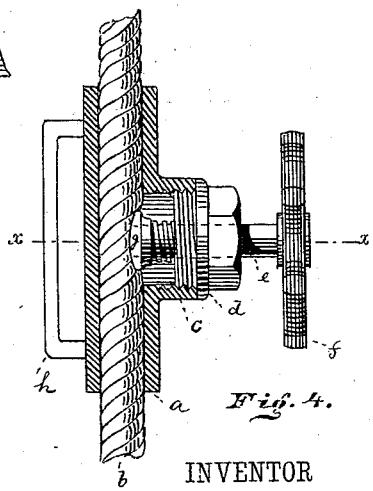


Fig. 4.

WITNESSES:

R. Huber

Robt H. Roy

INVENTOR

Karl Hubner

BY

Frank P. Briesen

ATTORNEY

UNITED STATES PATENT OFFICE.

KARL HUBNER, OF PATERSON, NEW JERSEY.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 306,078, dated October 7, 1884.

Application filed July 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, KARL HUBNER, of Paterson, county of Passaic, and State of New Jersey, have invented a new and Improved Fire-Escape, of which the following specification is a full, clear, and exact description.

This invention relates to a fire-escape by means of which a person may quickly and safely lower himself from a window of a burning building to the street.

The invention consists of the details of improvement hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a diagram showing the apparatus in use. Fig. 2 is an end view of the apparatus; Fig. 3, a central transverse section of the same on the line *x x*, Fig. 4; and Fig. 4, a longitudinal section on the line *y y*, Fig. 3.

The letter A represents the fire-escape, made of metal or other suitable material. It is composed, essentially, of a double tubular portion, *a a*, open on top and bottom to receive rope *b*. The bore in this tubular portion is somewhat of the form of the figure 8—that is to say, the tubes are open and communicate with one another at the center (Fig. 2) from top to bottom.

c is an internally-screw-threaded sleeve projecting from tubes *a*, and adapted to receive a nut, *d*, that has a wrench-head formed thereon. Into the nut *d* fits a screw, *e*, having a hand-wheel, *f*, at its outer end and a loose collar, *g*, at its inner end. The position of the screw is such that the collar *g* is opposite both bores of the tubes *a*, so as to bear against the rope in each of said tubes when the screw is turned in.

h is a handle attached to the device on the opposite side from sleeve *c*, and *i* is an eye, through which a breast-strap, *k*, is passed.

In operation two eyes are screwed into opposite sides of a window-frame, and a short rope, *l*, is connected to them by means of snap-hooks. From the rope *l* is suspended a pulley, *m*, over which the line *b* is passed. The two ends of this line are respectively passed through the tubes *a*, and one end is allowed to dangle to the ground, while the other is provided with a hook that may be fastened to an eye a little farther up on the rope, to form a seat, as shown in Fig. 1. The person descending passes the strap *k* under his arms and grasps with his right hand the hand-wheel *f*, and with his left hand the handle *h*. The parts are now in the position shown in Fig. 3—that is to say, the rope *b* is compressed and the apparatus is firmly clamped in position. By turning the hand-wheel *f* the pressure on rope *b* is released, and the apparatus will slowly descend. A slight turn on the wheel will with great nicety regulate the speed.

I prefer to employ two escapes on the same rope—one at its top, while the other descends—so that a person in the building may regulate by the upper escape the speed of the descent of the lower escape. In this way children and ladies may be let down with safety, even if not themselves capable of properly turning the hand-wheel.

By the use of the double tubular bore communicating at the center, the two lengths of rope *b* are properly separated, and at the same time are compressed by the same collar.

I claim as my invention—

1. In a fire-escape, the combination of tubes *a*, sleeve *c*, nut *d*, screw *e*, and hand-wheel *f*, substantially as herein shown and described.

2. The combination of tubes *a*, that communicate at the center, with sleeve *c*, nut *d*, screw *e*, hand-wheel *f*, and collar *g*, all so arranged that the collar is opposite the bores of both tubes *a*, substantially as specified.

3. The combination, in a fire-escape, of following elements: tubes *a*, communicating with each other, sleeve *c*, nut *d*, screw *e*, hand-wheel *f*, collar *g*, handle *h*, eye *i*, and strap *k*, substantially as specified.

KARL HUBNER.

Witnesses:
F. V. BRIESEN,
ROBT. H. ROY.