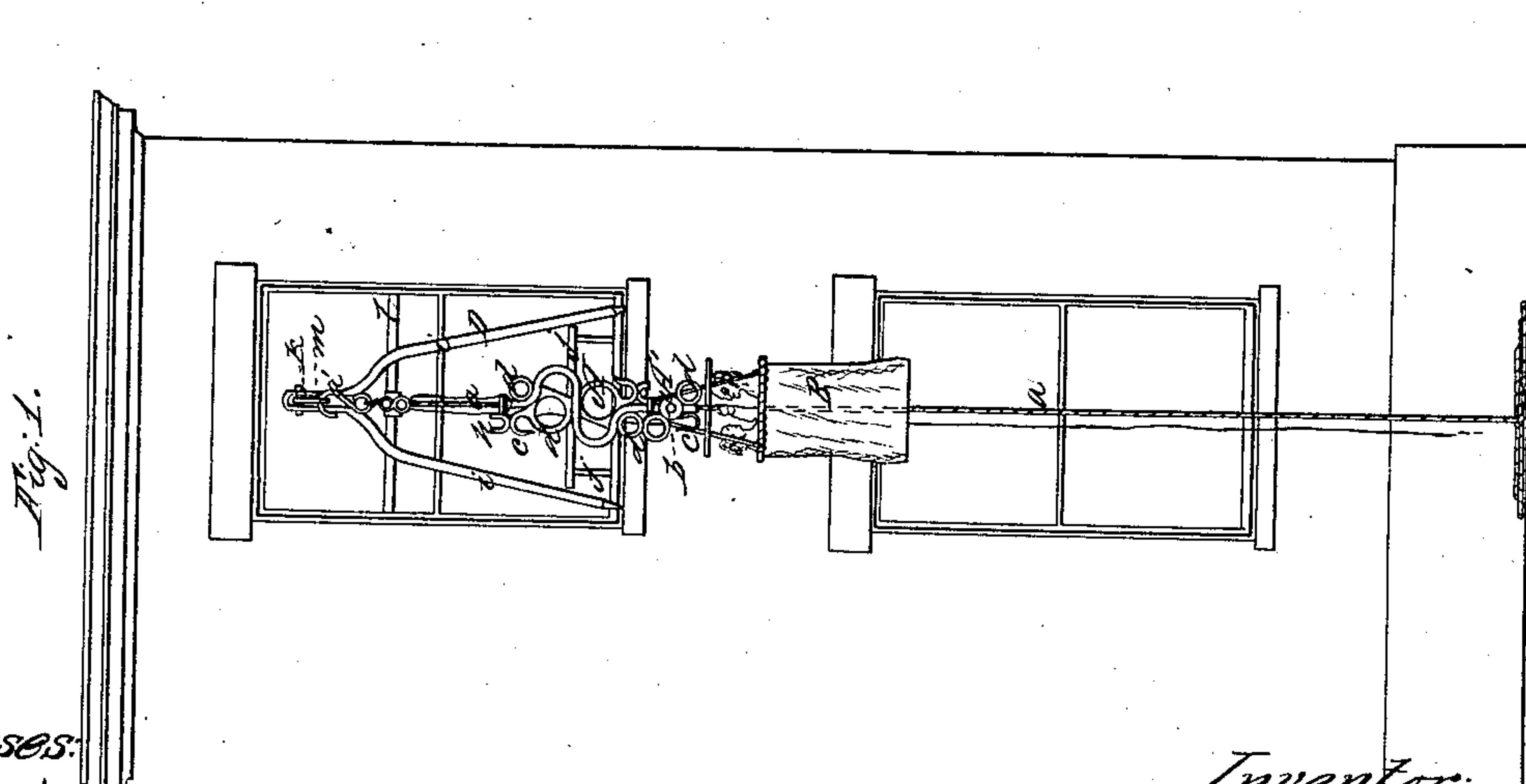
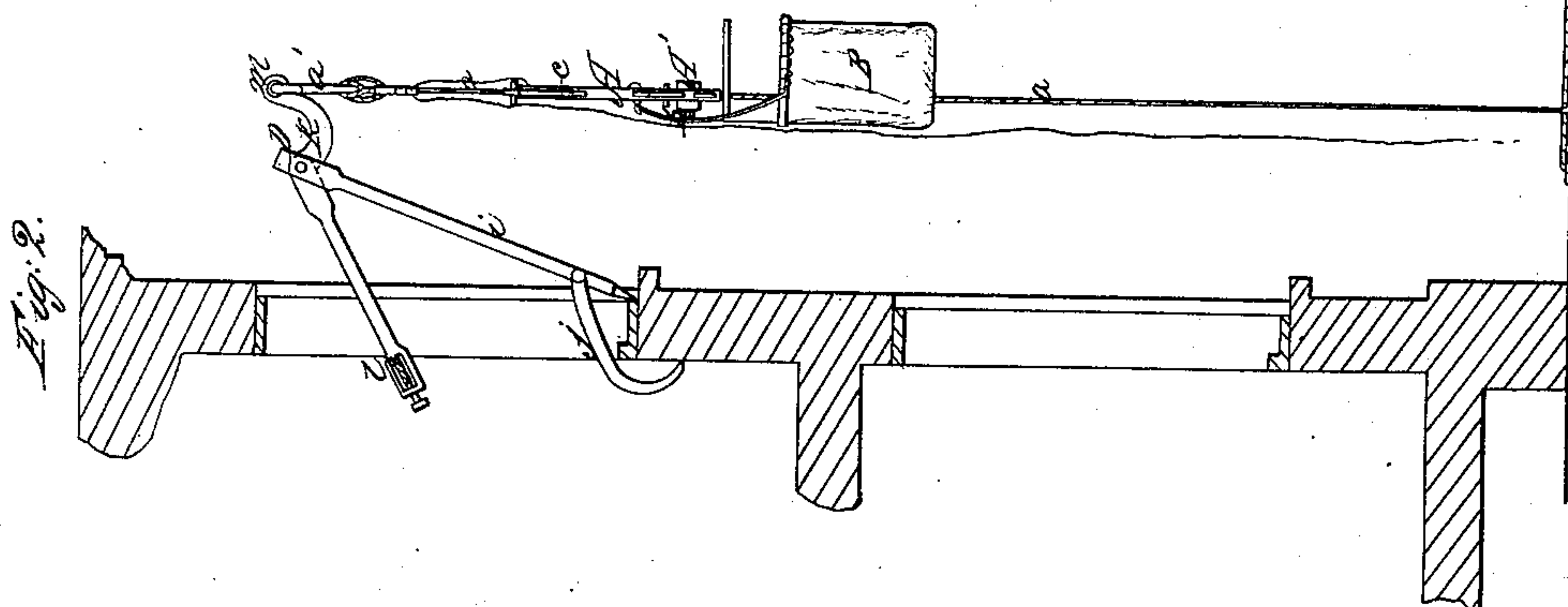
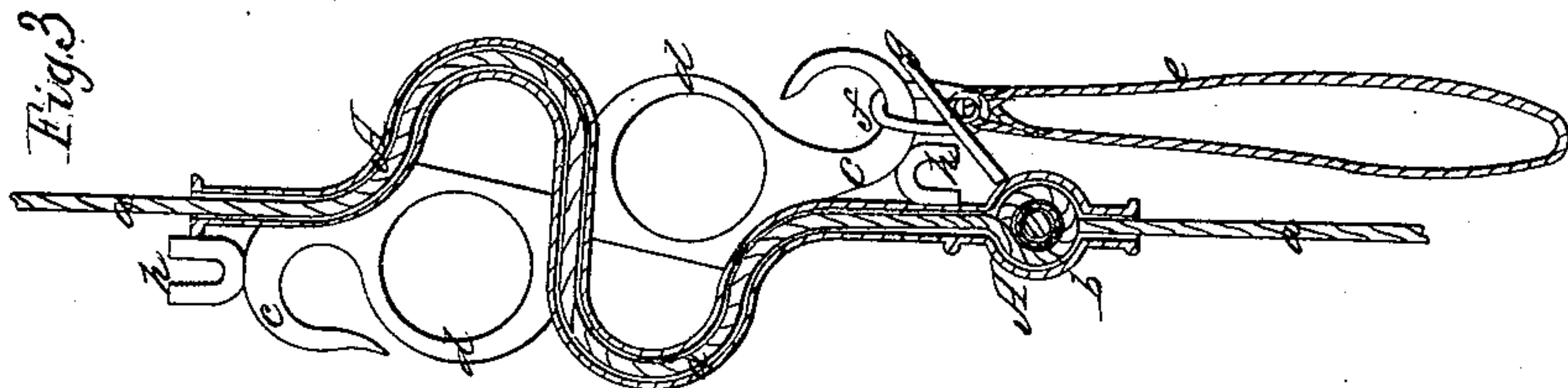


*A. Warrick.*

*Fire Escape.*

*No 28,525.*

*Patented May 29, 1860.*



*Witnesses:*  
*Wm. Thompson*

*Inventor:*

*Alvin Warrick*

# UNITED STATES PATENT OFFICE.

ALBIN WARTH, OF NEW YORK, N. Y.

## FIRE-ESCAPE.

Specification of Letters Patent No. 28,525, dated May 29, 1860.

*To all whom it may concern:*

Be it known that I, ALBIN WARTH, of the city, county, and State of New York, have invented a new and Improved Fire-Escape; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a front elevation of a building with my apparatus. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a longitudinal central section of my apparatus in an enlarged scale.

Similar letters of reference in the three views indicate corresponding parts.

This invention consists, 1st, in arranging a tube, or a tube combined with a pin passing through the same or through some portion of the same, in combination with a rope in such a manner that by straining the rope its friction in the inside of the tube is increased and that weights attached to said tube can be let down from any height with a moderate speed; 2nd, in the arrangement of a number of loops and hooks attached to a curved tube, or to a tube furnished with a pin and working in combination with a rope, as above stated, so that said tube affords the facility to attach to the same a number of persons, or articles, to be saved at the same time; 3rd, in combining with said tube and rope, a derrick of peculiar construction, as will be hereinafter more fully explained, so that the apparatus can be suspended readily and without loss of time, from any window from which it may be desirable to let down persons, or articles to be saved.

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation, with reference to the drawing.

A, A' represent two tubes, fastened to each other with their ends, so as to give an idea of the different ways in which my invention can be carried out. The tube A, is curved in the shape of the letter S, and a rope *a*, passes through it, as clearly shown in Fig. 3. If the upper end of this rope is hooked to some part of a building and a strain is exerted on the lower end of the same, its friction in the inside of the tube

increases in proportion to the strain exerted on it, and persons, or article attached to said tube can thus be let down with any desired speed.

Instead of using the tube A, the tube or casing A', may be used. It will be noticed that this tube is provided with a pin *b*, around which the rope *a*, winds once or oftener as may be desired, and a strain exerted on the rope has now the same effect as above described and persons, or articles attached to the tube A', can be lowered with any desired velocity.

To facilitate the operation of attaching persons, or articles to the tubes A, A', they are furnished with a number of hooks *c*, or loops *d*, and slings *e*, (see Fig. 3) are provided, the ends of which are furnished, one with a ring *f*, and the other with a locking bar *g*. This string is intended to go around the waist of a person to be saved, and the ring *f*, may now be hooked over one of the hooks *c*, on the tube A, or A', or the locking bar *g*, may be passed through one of the loops *d*, on said tubes, and the person to be lowered has both hands free.

If a person desires to let himself and others down, he can do so by fastening the sling around his waist and to the tubes A, A', as above described, or by pulling the rope *a*, over the hook *h*, at the upper end of the tube A, allowing it to slip slowly, the tube together with the person or persons attached to it slides down with a velocity that can be regulated by the person managing the rope *a*.

In order to provide the means of escape for more persons at a time, and for aged or infirm persons, and for children a canvas bag or a basket B, may be attached to the tubes A, A', as shown in Figs. 1 and 2, and if the rope *a*, is made to pass through said basket, the persons occupying the same are enabled to regulate the speed with which their descent is made. The rope *a*, is provided with a hook *a'*, at its upper end, so that it can conveniently be attached to any place of a building where the hook will find a hold, and a person provided with a rope and tube, such as described, is enabled to descend from any height, and to make his or her escape from a burning building. But in case more persons and articles are to be



saved and where the apparatus is in the hands of an organized company, I have provided a derrick D, which consists of two standards *i*, pointed at the lower end, and  
5 provided with hooks *j*, to catch over a window sill as clearly shown in Fig. 2. The upper ends of the standards *i*, form the fulcrum for a lever *l*, the inner end of which is retained by a cross-bar *l*, stretched across  
10 the inner side of the window. The outer end of this lever is provided with a loop or eye *m*, to receive the hook *a'*, at the end of the rope *a*. By these means my apparatus can be attached to any window whatever, in a  
15 few seconds and the occupants of every part of a burning building can thus be saved.

The lightness of this apparatus and the facility with which it can be operated recommend the same to private persons as well  
20 as to fire companies, and to the public in general.

What I claim as new, and desire to secure by Letters Patent, is:—

1. The arrangement of a tube A or A' substantially as described, in combination with  
25 a rope *a*, in such a manner that by straining the rope its friction on the inside of the tube is increased, and that weights attached to said tubes can be let down with any desirable speed.

2. Arranging the tubes A, A', with a number of hooks *c*, and loops *d*, substantially in the manner and for the purpose specified.

3. The combination with the rope *a*, and tubes A, A', of a derrick D, constructed of  
35 standards *i*, hooks *j*, lever *l*, and cross-bar *l*, substantially as and for the purpose set forth.

ALBIN WARTH.

Witnesses:

WM. THOMPSON,  
M. M. LIVINGSTON.