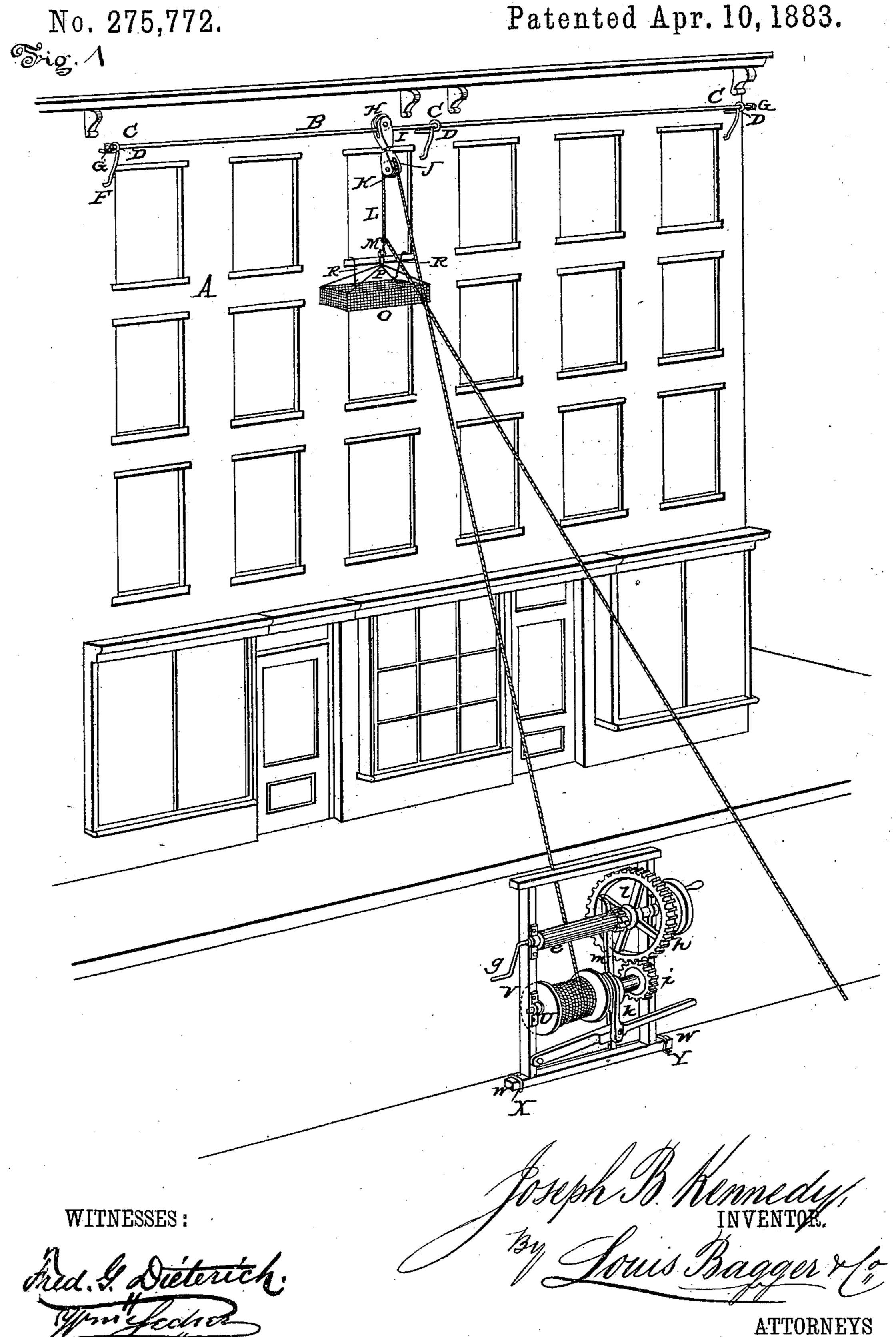
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FIRE ESCAPE.

Patented Apr. 10, 1883.

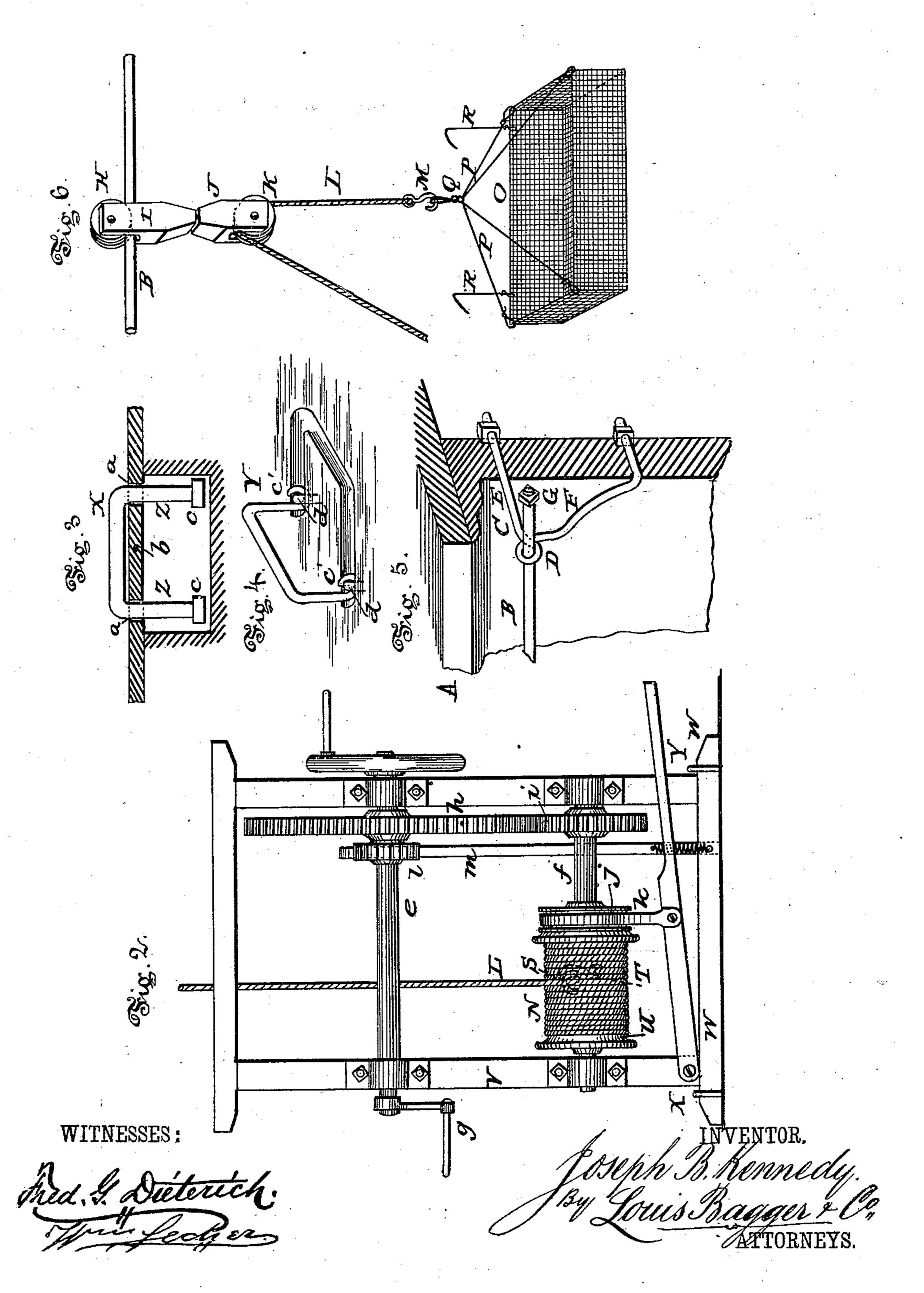


J. B. KENNEDY.

FIRE ESCAPE.

No. 275,772.

Patented Apr. 10, 1883.



United States Patent Office.

JOSEPH B. KENNEDY, OF PRINCETON, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN MARTIN ALMON, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 275,772, dated April 10, 1883. Application filed February 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, Joseph B. Kennedy, of Princeton, in the county of Gibson and State of Indiana, have invented certain new and use-5 ful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, refer-10 ence being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a building provided with my improved fire-escape. Fig. 15 2 is a side view of the windlass operating the same. Figs. 3 and 4 are detail views of the bails fastening the windlass upon the sidewalk. Fig. 5 is a detail view of one of the brackets, and Fig. 6 is a perspective view of 20 the basket and the pulley and roller.

Similar letters of reference indicate corre-

sponding parts in all the figures.

fire-escapes having a basket operated by a 25 windlass and rope which is carried over a pulley swiveled to a roller running upon a rod supported by brackets along the top of the building; and it consists in the detailed construction and combination of parts of the 30 same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a building, along the top of which is fastened a rod, B, in brackets C. These brack-35 ets consist of wrought-iron rods, the ends of which are inserted through and embedded in the wall of the building, and secured upon the inside of the wall by means of nuts or anchors fastened upon them, while their central por-40 tion is bent around or wrapped around the rod B, forming an eye, D, supported by the horizontal portion E and inclined brace portion F of the rod. The ends of the rod are provided with nuts G, which prevent it from slipping 45 out of the brackets, and a grooved wheel or roller, H, pivoted in a clevis or frame, I, rolls upon this rod with the clevis depending. To the lower end of this clevis is swiveled a block, J, having a pulley, K, over which passes a 50 rope, L, preferably made of wire, to the middle of which is fastened a strong snap-hook,

M, while one end of it is fastened to the drum of a windlass, N, and its other end depends loose. A wire basket, O, is adapted to be hooked upon the snap-hook M, having rods P 55 extending from its upper corners, which are connected over the middle of the basket by an eye, Q. The basket is preferably square, and may be provided with hooks or anchors R, adapted to catch over the window-sills when 60 it is suspended outside a window. The free end of the rope serves to guide the basket, drawing it from one end of the rod to another, and to draw it down, while the other end is provided with a snap-hook, S, adapted to engage 65 a bail, T, upon the drum U of the windlass. This windlass consists of a frame, V, in which the drum and operating crank-shaft are journaled, and the ends W of the lower sill project out beyond the side supports, and are held 70 down upon the pavement of the sidewalk by bails X and Y. The downward-bent ends Z of the one X of these bails slide in holes α in My invention has relation to that class of a metallic plate, b, which is placed in the sidewalk flush with the pavement, and are secured 75 from sliding out of the holes by nuts or knobs c upon their lower ends, so that when not in use clamping the end of the sill of the windlass they may be let down flush with the pavement. The other bail, Y, is hinged at c upon 80. short-eyed rods d, fastened in the pavement, so that it may be folded down flush with the surface, and it will be seen that by drawing the one bail X up and passing one end of the sill into it, and drawing the hinged bail Y over 85. the other end, the sill and windlass will be held rigidly in place upon the sidewalk.

The frame V is square, and between its sides are journaled two shafts, e and f, one above the other. The upper shaft, e, is provided at 90 its outer ends with cranks g, by which it is operated, and has inside its bearings a large cogwheel, h, which meshes with a pinion, i, upon shaft f. The latter shaft is also provided with the drum U, around which the rope L passes 95 and is fastened, and with a smaller drum, j, upon which the brake k operates, the latter consisting of a strap, fastened at one end to the frame and at the other end to a lever pivoted upon the frame, passing over drum j. A 100 ratchet-wheel, l, is fastened upon shaft e', and is engaged by a pawl, m, pivoted upon the

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frame in such a manner that when the basket is descending it may be thrown off from engaging the ratchet-wheel, and when the basket is hoisted it may be thrown in, engaging the ratchet, and serve to hold the basket at any place, and prevent it from dropping down by

its own weight.

It will be seen that the apparatus may be placed in position for operation in a moment of time, the ropes being kept coiled in a box outside the house, and the basket and wind-lass being kept at a convenient place, and that by placing the windlass upon the opposite side of the street, which I prefer, the heat and smoke from the fire will affect the persons operating the apparatus less than by being immediately near the house.

It will also be seen that by having the cogwheel upon the crank-shaft larger than the one 20 upon the drum-shaft the basket will be hoisted

with very great speed.

I am aware that fire-escapes have been made having vertical rods supported by brackets at the top of the house, upon which pulleys may be slid from one end of the house to the other, and having a basket for the reception of the persons in the house, and a windlass for operating it, and I do not claim that, broadly; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In a fire-escape of the described class, the brackets C, fastened at both ends in the wall of the house, and bent or twisted to form an eye, D, for the reception of the rod B, as and 35 for the purpose shown and set forth.

2. In a fire-escape of the described class, the fastening for the lower sill of the windlass operating it, consisting of the bail X, sliding vertically with its bent ends in a perforated plate, 40 b, and the bail Y, hinged to the pavement at c, as and for the purpose shown and set forth.

3. In a fire-escape of the described class, the combination of the windlass N, having lower sidewise-projecting sill ends, W, with the ver- 45 tically-sliding bail X and the hinged bail Y, as and for the purpose shown and set forth.

4. As an improvement in fire-escapes, the combination and arrangement, as described, of the brackets C, horizontal bar B, rolling 50 swiveled block H I J, rope L, basket O, windlass N, and bails X and Y, all constructed to operate in the manner and for the purpose shown and set forth.

In testimony that I claim the foregoing as my 55 own I have hereunto affixed my signature in presence of two witnesses.

JOSEPH BOAZ KENNEDY.

Witnesses:

Byron Mills, Theodore Boswell.