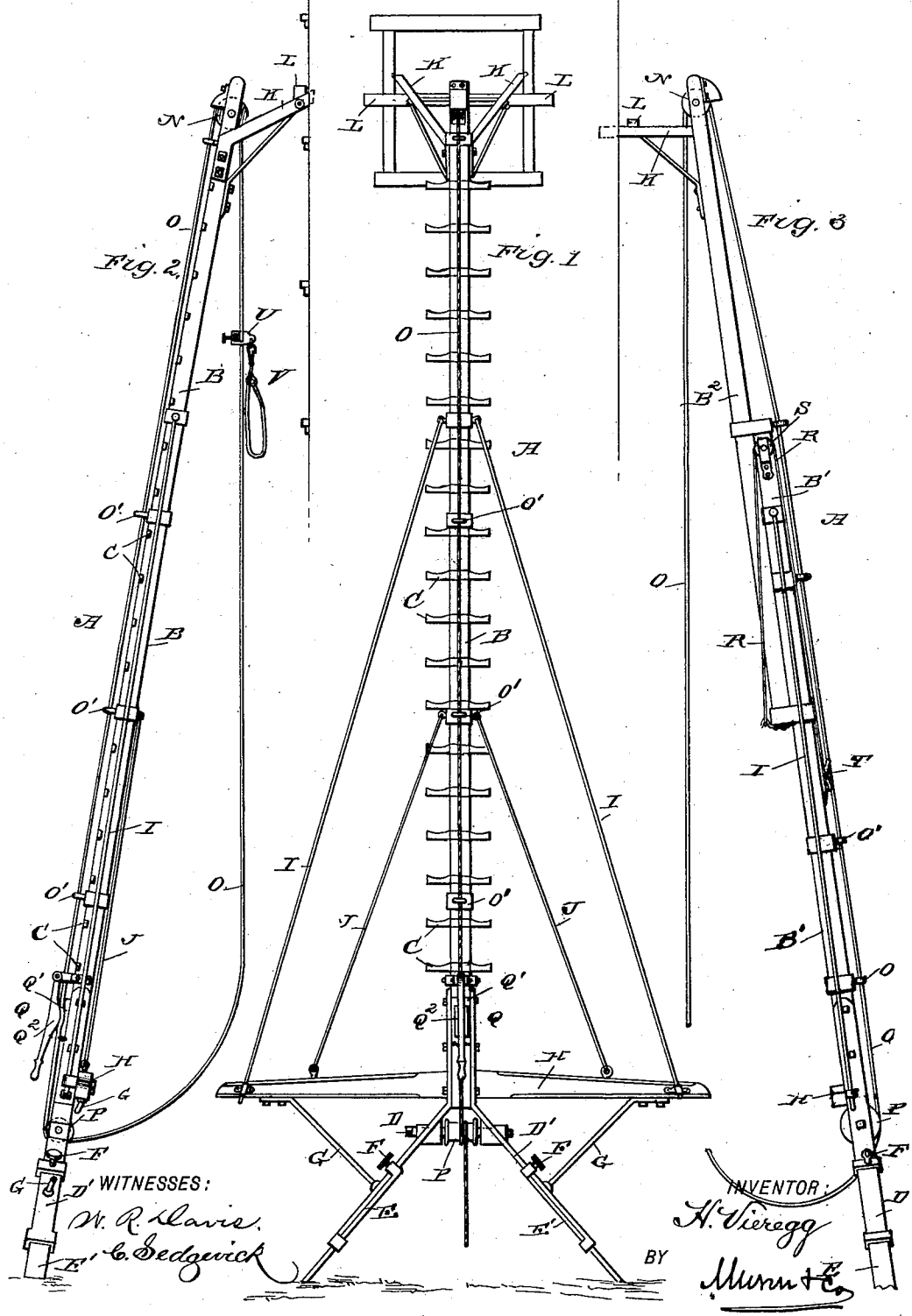
(No Model.)

H. VIEREGG.

FIRE ESCAPE.

No. 435,266. Patented Aug. 26, 1890.



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UNITED STATES PATENT OFFICE.

HENRY VIEREGG, OF GRAND ISLAND, NEBRASKA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 435,266, dated August 26, 1890.

Application filed May 2, 1890. Serial No. 350,359. (No model.)

To all whom it may concern:

Be it known that I, HENRY VIEREGG, of Grand Island, in the county of Hall and State of Nebraska, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fire-escape which is simple and durable in construction and can be readily set up on the ground and extended to a window in the upper floor of the building to form a convenient exit therefrom.

The invention consists of certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of the improvement. Fig. 2 is a side elevation of the same, and Fig. 3 is a like view of a modified form of the same.

The improved fire-escape A is provided with a post or beam B, having rungs C, and provided on its lower end with sidewise-extending brackets D and D′, on which are fitted to slide extension-legs E and E′, respectively, secured in place on the said brackets by set-screws F.

On the brackets D and D′ extend upward and outward braces G, supporting a transversely-extending beam H, fastened to the rear of the post B in its lower end, as is plainly shown in the drawings. From the transverse beam H extend upward sets of braces or guy ropes I and J, connected with the post B, so as to form a strong and rigid frame.

On the upper end of the post B are secured rearwardly and outwardly extending brackets K, adapted to pass at their upper ends onto or between the sash-frame of a window, as illustrated in Fig. 1, the said brackets also supporting a transversely-extending bar L of sufficient length to pass onto the outside of the window-frame, so as to form an abutment for the upper end of the post. When the latter is set up, as shown in Figs. 1 and 2, and the bar L rests against the side of the house, then the upper end of the post extends a suitable distance from the latter, so as to form a convenient opening between the upper end of the post and the brackets K.

On the upper end of the post B is mounted to turn a pulley N, over which passes an endless rope or chain O, extending downward on the front and rear of the beam, the front part of the rope or chain being guided in suitable eyes O′, fastened in any suitable manner to the front of the post B. Near its lower end the rope or chain O is wound around a drum P, journaled in suitable bearings secured to the brackets D and D′, the said drum being provided with a suitable shaft having square outer ends for applying a wrench or other suitable tool for conveniently turning the said drum. The rear part of the rope or chain is adapted to be taken hold of by a person desiring to escape from the window on which the post is set up, as illustrated in the drawings. The weight of the person on the rope or chain O causes the latter to travel, so that the party descends to the ground. In order to check a too rapid movement, a brake device Q is provided, consisting of a fixed plate Q′, secured on the front of the post B, and over which passes the front part of the rope. A lever Q^2 is fulcrumed on the post B and is adapted to press the rope against the fixed plate Q′, so as to brake the rope.

As shown in Figs. 1 and 2, the post or beam B is made of a single piece; but it may be made in two parts B′ and B^2, as illustrated in Fig. 3, the said parts being adapted to slide one on the other, suitable bearings being provided for this purpose. By making the beam in two parts it may be readily extended for use on high buildings, on which a single post would not reach to the upper stories.

In order to conveniently extend the two parts B′ and B^2, a rope R is provided, which is secured to the lower end of the upper part B^2 and passes over a pulley S, journaled in the upper end of the lower part B′. The free end of the rope is adapted to be secured to a cleat T, arranged on the front of the part B′. In order to extend the two parts B′ and B^2, the operator pulls on the free end of the rope R, so as to cause the upper part B^2 to slide outward on the part B′ until the brackets K

are in the proper position near the window of the building. The rope R is then fastened on the cleat T, previously mentioned.

It is understood that when the beam B is made in two parts the brackets K, the bar L, and the pulley N are arranged on the upper end of the outer part B^2. The legs E and E′ are held to slide on the brackets D and D′, respectively, so as to adjust the legs on uneven ground.

It will be seen that parties can readily ascend the fire-escape on the rungs C, so as to render assistance to those in the burning building, or to drag up a hose to a window or other part of the building against which the fire-escape is placed.

A clamp U of any approved construction may be secured to the rope O to support a loop V, which can conveniently be taken hold of by a person desiring to escape from the window.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a fire-escape, the combination, with a post having a pulley at its upper end and the series of rungs, of two brackets projecting at an angle from the said upper end, and adapted at their outer ends to enter between the sides of a window-frame, and a transverse bar extending across the said brackets near their outer ends, with its ends projecting beyond the sides of the brackets to rest against the building at the sides of the windows, and the lowering-rope passing over said pulley and down through said space between the two brackets and bar.

2. In a fire-escape, the combination of a post or beam with brackets extending downward and outward from the lower end of the said post, and extension-legs held adjustably on the said brackets, substantially as shown and described.

3. In a fire-escape, the combination, with a post or beam, of brackets extending downward and outward from the lower end of the said post, extension-legs held adjustably on the said brackets, a second set of brackets secured to the upper end of the said post, and a transverse bar fastened to the said upper brackets and adapted to rest against the side of the building, substantially as shown and described.

4. In a fire-escape, the combination, with a post or beam, of brackets extending downward and outward from the lower end of the said post, extension-legs held adjustably on the said brackets, a second set of brackets secured to the upper end of the said post, a transverse bar fastened to the said upper brackets and adapted to rest against the side of the building, and suitable guy-ropes and braces to strengthen the said beam, substantially as shown and described.

5. In a fire-escape, the combination, with a post, of a pulley journaled in the said post, a rope or chain passing over the said pulley and extending downward in the front and rear of the said post, and a brake mechanism held on the said post, and consisting in the lever Q^2 and a fixed plate Q′, between which the rope passes, substantially as shown and described.

6. In a fire-escape, the combination, with a post, of a pulley journaled in the said post, a rope or chain passing over the said pulley and extending downward in the front and rear of the said post, a brake mechanism held on the said post, and consisting in the lever Q^2 and a fixed plate Q′, between which the rope passes, and a drum journaled in the lower end of the said post, and over and around which passes the said rope, substantially as shown and described.

HENRY VIEREGG.

Witnesses:
I. ROSS THOMPSON,
WILLIAM H. THOMPSON.