

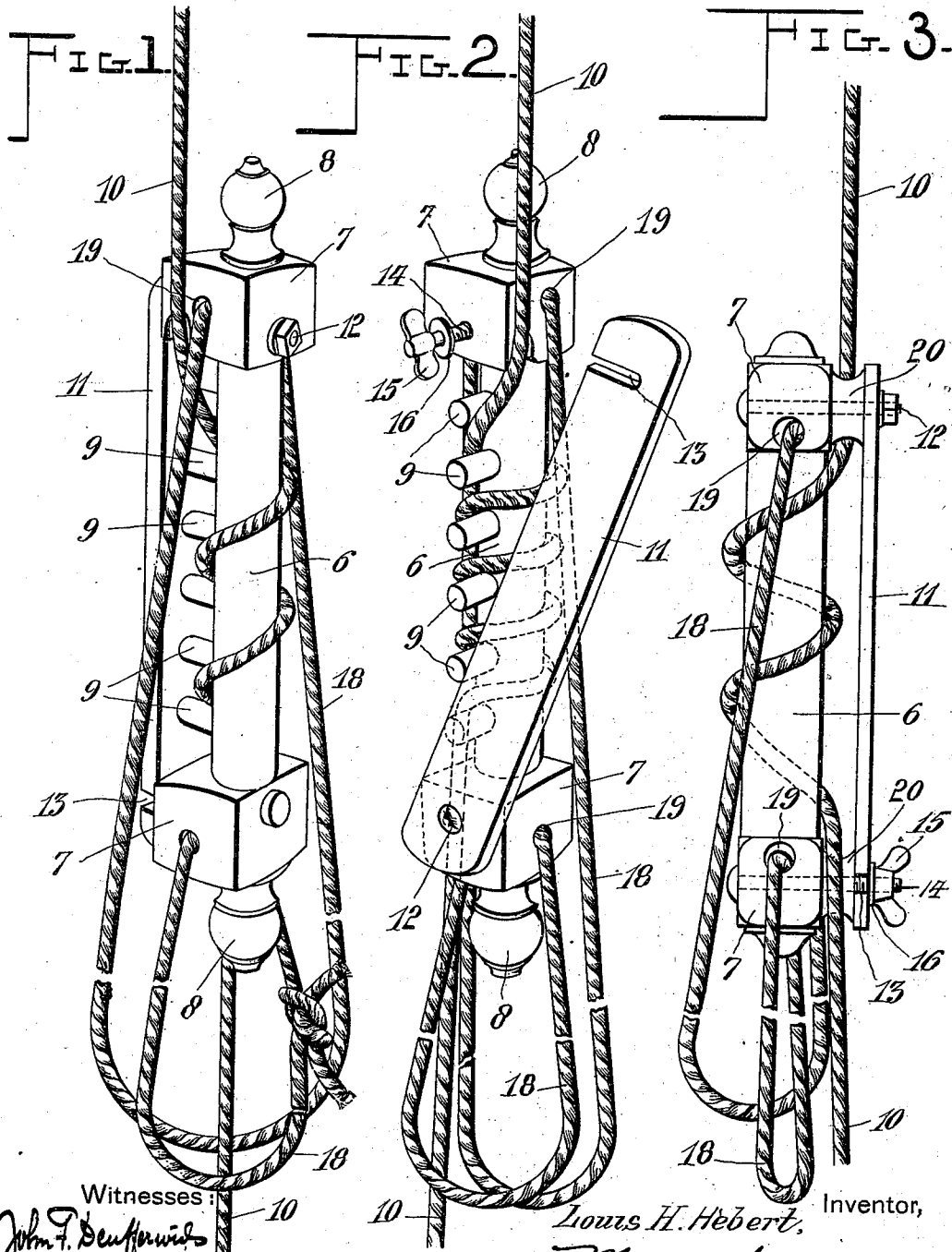
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L. H. HEBERT.
FIRE ESCAPE.

APPLICATION FILED MAY 8, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

LOUIS HENRI HÉBERT, OF CHAMBLY BASIN, CANADA, ASSIGNOR OF TWO-THIRDS TO NARCISSE LORD, OF ST. JOHNS, CANADA, AND JOSEPH E. HEBERT, OF ST. HENRY, MONTREAL, CANADA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 723,868, dated March 31, 1903.

Application filed May 8, 1902. Serial No. 106,414. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HENRI HÉBERT, a subject of the King of Great Britain, residing at Chambly Basin, county of Chambly, Province of Quebec, Canada, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a portable fire-escape of that type wherein the friction of a rope wrapped about a wooden or metal stock is sufficient to regulate the speed of descent of a person from the upper story of a building by means of said rope.

The object of my invention is to so improve this type of apparatus as to enable the same to be readily applied and used by any person without special skill being required in regulating the speed of descent.

Another object had in view in the present invention is to provide means for reversing the apparatus, whereby when the apparatus has reached the ground by sliding on the rope the rope may be quickly drawn up and reversed in position and the apparatus used equally well by the next person to descend upon the apparatus, which is thus made reversible or double-ended for this purpose.

Another object of my invention is to provide means for quickly and readily adjusting the apparatus to the rope, whereby to regulate the friction thereof to the weight of the person to be carried, so as to avoid the necessity of the person himself or herself regulating the speed of descent by tension upon the lower end of the rope, and, moreover, to provide means for quickly setting the rope in place without the necessity of threading the same through apertures and drawing it therethrough, which consumes valuable time and in emergency may cause loss of life.

To these ends my invention consists in a block or stock, preferably of wood, around which the rope is wound, and the same is provided with a loop of cord at both ends, whereby to render the two ends interchange-

able and to enable the apparatus to work either way equally well whichever end happens to be uppermost.

My invention further consists in a series of transverse laterally-extending short posts projecting from the side of the stock around which the rope is wound and adapted to confine the same and to regulate the friction thereof and keep the several coils or turns of the rope in their proper positions and prevent them from interfering with one another.

My invention further consists in arranging a pair of laterally-projecting posts on the two ends of the stock, which are connected by a slotted latch-piece pivoted to one of them and adapted to be clamped to the other, so as to completely inclose the rope and prevent the same from becoming displaced, while at the same time enabling the rope to be readily removed and readjusted by simply unclamping and turning the latch about its pivot.

My invention further consists in the peculiar construction and combination of parts hereinafter described, and more specifically set forth in the claims.

I have shown in the accompanying drawings the preferred form of my invention, as well as several modifications thereof which may be used by me, and therein—

Figure 1 is a perspective view of the said preferred form. Fig. 2 is a perspective view of the same in a slightly-different position, showing the latch-piece opened and the operating-rope having a different number of turns around the stock. Fig. 3 is a side elevation of a modified form of my invention.

The same numerals of reference denote like parts in each of the figures of the drawings.

As will be seen from Fig. 1, the apparatus consists, substantially, of a cylindrical stock or post 6, which may be made either of wood or metal, as preferred, and this stock has on each end a rectangular or cubical head 7, which may be surmounted by an ornamental tip 8. Projecting laterally from the stock 6 and along one side thereof are a series of short wooden posts 9, which extend just sufficient distance to provide for the passage of the operating-rope 10 between them. On one side

of one of the two heads 7 (shown as the lower head in Figs. 1 and 2) is pivoted a latch-piece 11 upon a pivot-bolt 12, said latch-piece being herein shown as a flat strip or bar having a transverse slot 13 in its opposite end, which is adapted to embrace the shank of a bolt 14, having on its end a wing-nut 15 and washer 16, adapted to clamp the latch-bar in position, as shown in Fig. 1. Each of the heads 7 may also be provided at one side adjacent to the stock 6 with a small taper groove adapted to receive the rope and prevent it from chafing upon the edge of the head. This form of the apparatus is completed by a pair of flexible loops 18, which are passed through transverse apertures 19 in each of the heads 7.

The form shown in Fig. 3 is similar to that shown in Figs. 1 and 2 as regards the stock 6 and the head 7; but in this form, which is simpler, the posts 9 are omitted, and instead of forming the squared heads 7 to project beyond the periphery of the stock 6 they are provided with two sheave-like blocks 20, on one of which is pivoted the latch-bar 11 by means of the bolt 12 and clamped in position by the wing-nut 15 on the bolt 14, as in the first case. The round concave sheaves 20 provide means for smoothly receiving the end turns of the rope where it passes in and out of the apparatus. In Fig. 3 the provision of the pivoted latch-bar 11 enables the rope to be retained adjustably in its place, having any number of turns around the stock 6, according to the weight of the person descending. Naturally a person of, say, seventy-five pounds weight will require but half the number of turns of the rope that are needed for a person of one hundred and fifty pounds, so that it is extremely desirable in an apparatus of this sort to provide for the ready adjustment of the rope to the weight of the person using it. In the original form, Figs. 1 and 2 of the drawings, this provision is still further amplified by means of the posts 9, it being intended to have some six or seven of these posts, and I have found by experience that every turn or coil of the rope through one of the posts represents about thirty pounds weight upon the fire-escape, so that the device as adjusted in Fig. 1 would be ready for the descent of a person weighing about ninety pounds and when adjusted as in Fig. 2 for a person of one hundred and fifty pounds weight. The mode of regulation or weight represented by each coil of the rope through a post 9 may appropriately be represented by a label pasted on the apparatus.

It will be seen by the above description that my improved fire-escape presents great advantages over anything heretofore in use and that it not simply provides for a much more rapid service and less danger of accident in using the apparatus, but also provides for a precise regulation at an instant's notice and avoids any necessity of the person having to regulate the speed of descent either himself or of having others do it for him by additional

friction or tension upon the rope or by any other means.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structure set forth.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A portable fire-escape comprising a cylindrical stock about which a rope is adapted to be wound, and a series of laterally-projecting posts set in holes along one side of said stock and adapted to separate the turns or coils of said rope.

2. A portable fire-escape comprising a cylindrical stock about which a rope is adapted to be wound, and a series of laterally-projecting posts set in holes along one side of said stock and adapted to separate the turns or coils of said rope, said posts being separated from one another at their free end, whereby to permit coils of rope to be laid between said posts.

3. A portable fire-escape comprising a stock about which a rope is adapted to be wound, and a series of laterally-projecting posts adapted to separate the turns or coils of said rope, said posts being separated from one another at their free end, whereby to permit coils of rope to be laid between said posts, in combination with a latch piece or bar adapted to be removably clamped over the ends of said posts to hold the rope in position.

4. A portable fire-escape comprising a stock about which a rope is adapted to be wound, and a series of laterally-projecting posts adapted to separate the turns or coils of said rope, said posts being separated from one another at their free ends, whereby to permit coils of rope to be laid between said posts, in combination with a latch piece or bar adapted to be removably clamped over the ends of said posts to hold the rope in position, and means attached to each end of the stock for sustaining a person.

5. The combination of a cylindrical stock about which a rope is adapted to be wound, a pair of heads attached to the respective ends of said stock and projecting laterally therefrom, a latch-bar pivoted on one of said heads and having a transverse slot at its opposite end, and clamping means on the other head coacting with said slotted end of the latch-bar to clamp the same in closed position.

6. The combination of a cylindrical stock about which a rope is adapted to be wound, a pair of heads attached to the respective ends of said stock and projecting laterally therefrom, a latch-bar pivoted on one of said heads

and having a transverse slot at its opposite
end, clamping means on the other head co-
acting with said slotted end of the latch-bar
to clamp the same in closed position, and a
series of posts disposed at equal intervals
along one side of said stock and projecting
laterally therefrom a sufficient distance to per-
mit the insertion of coils of rope therebetween,
substantially as described.

7. The combination of a cylindrical stock
about which a rope is adapted to be wound, a
pair of heads attached to the respective ends
of said stock and projecting laterally there-
from, a latch-bar pivoted on one of said heads
and having a transverse slot at its opposite
end, clamping means on the other head co-

acting with said slotted end of the latch-bar
to clamp the same in closed position, and a
series of posts disposed at equal intervals
along one side of said stock and projecting
laterally therefrom a sufficient distance to per-
mit the insertion of coils of rope therebetween,
in combination with a pair of flexible loops
adapted to sustain a person and passed
through transverse apertures in the respec-
tive heads, substantially as described.

In witness whereof I have hereunto set my
hand in the presence of two witnesses.

LOUIS HENRI HÉBERT.

Witnesses:

J. A. MARION,
T. MYNARD.