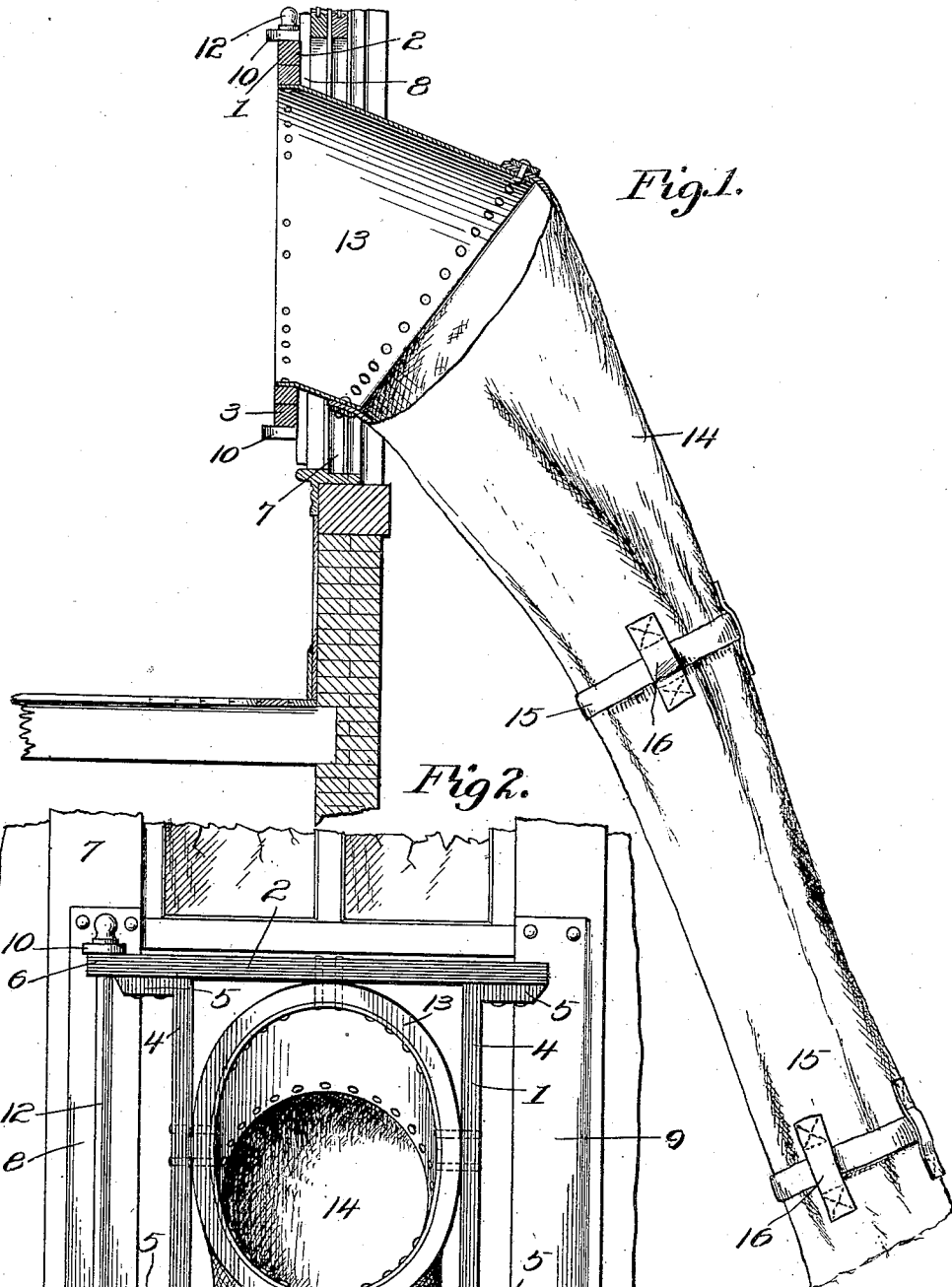


M. S. WOODS.
FIRE ESCAPE,
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935,447.

Patented Sept. 28, 1909.



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FIRE-ESCAPE.

935,447.

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To all whom it may concern:

Be it known that I, MURRAY S. WOODS, a citizen of the United States, residing at Lufkin, in the county of Angelina and State of Texas, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to fire escapes, its main object being to provide an escape embodying a flexible chute carried by a frame hinged or pivoted to the window frame so that it may be folded and turned out of the way when not in use and quickly arranged for use to permit of the rapid escape of the occupants of a burning building.

Another object is to provide a fire escape which may be readily applied to any ordinary window frame for the extension of the chute out of the window to the ground or a veranda below, and which embodies means for checking and preventing too rapid descent of a person passing through the chute.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a vertical sectional view through a window frame and the upper portion of the fire escape, showing the latter arranged for use. Fig. 2 is an elevational view of the same looking toward the inner side of the window.

Referring to the drawing, my improved fire escape comprises an open rectangular supporting frame 1 formed of upper and lower horizontal bars 2 and 3 connected by vertical side bars 4. The side bars 4 are arranged some distance inside the ends of the bars 2 and 3, and have outwardly projecting right-angular end pieces 5, suitably fastened to said bars 2 and 3, the ends of which latter project at one side and are perforated to form ears 6. The frame 1 is of proper height to occupy the lower portion of the window left open when the lower sash is elevated and of a width corresponding to that of the window frame 7, on the inner side of which the said supporting frame 1 is arranged. Bracket plates 8 and 9 are secured to the inner faces of the jambs of the window frame, and one of these plates carries ears 10 and the other a supporting lug or catch 11. A rod or pin 12 passes through the ears 6 and 10 and pivotally connects the frame 1 with the frame 7. By this construc-

tion the frame 1 may be swung within the room or apartment against the wall in an out of the way position at one side of the window frame, so that the ordinary use of the window for light and ventilation will not be interfered with. In such position of the frame 1 the flexible chute, hereinafter described, may be rolled or folded up, so that the fire escape in entirety will be arranged in compact form to occupy a relatively small amount of space when not in use when the frame 1 is swung to the operative position shown in the drawings, the free end of the lower horizontal bar 3 will rest upon or engage the lug or catch 11 to support said frame against the weight of the chute and the persons descending there-through.

Secured at its inner end and within the frame is an oval-shaped entrance tube 13 inclining downwardly and outwardly so as to project through the window when the device is arranged for use, as shown. To the outer end of this tube is secured in any suitable manner the upper end of the flexible chute 14, which is made of canvas or other suitable material and of proper length to extend to the ground or desired landing below. The upper end of the chute flares to facilitate the entrance of a person thereto, but beyond this point the chute is preferably circular and of sufficient diameter for the free passage of persons of different sizes and weights. At intervals along the length of the chute the latter is held normally contracted by bracing bands 15 which are of elastic material to expand under pressure and are held in position by retaining loops 16. These bands, in addition, to strengthening the chute, serve as safety checks to contract the chute at points to prevent the too rapid descent of a person, so that the latter will not be discharged with sufficient force at the lower end of the chute to cause injury. The bands expand to accommodate themselves to persons of different sizes, as will be readily understood.

From the foregoing description, taken in connection with the drawing, the construction and mode of use of my improved fire escape will be readily understood, and it will be seen that it provides a fire escape of simple construction, which may be manufactured and installed at a low cost, and which, in addition to the other advantages hereinbefore stated, provides for the escape of per-

sons of all ages from a burning building without injury.

Having thus fully described the invention, what is claimed as new, is:—

- 5 1. In a fire escape, the combination, with a window frame, of an open supporting frame hinged or pivoted at one side of the window frame, an entrance tube secured within and projecting from said supporting
10 frame to extend through the window when the supporting frame is in parallel relation therewith, and a flexible chute secured at one end to said tube and adapted to depend therefrom.
- 15 2. In a fire escape, the combination, with a window frame, of an open supporting frame hinged or pivoted at one side of the window frame, means at the opposite side of the window frame for staying the free
20 end of the supporting frame in operative position, an entrance tube secured within and projecting from said supporting frame to extend through the window when the supporting frame is in parallel relation there-

with, and a flexible chute secured at one end 25 to said tube and adapted to depend therefrom.

3. In a fire escape, the combination, with a window frame, of brackets secured to the opposite sides of the frame, an open sup- 30 porting frame hinged or pivoted to one of said brackets to swing laterally beyond and in parallel relation to the window frame, a supporting member in the other bracket to sustain the free end of the supporting frame 35 when the latter is in operative position, an entrance tube secured within and projecting from said supporting frame to extend through the window when the supporting frame is in parallel relation therewith, and 40 a flexible chute secured at one end to said tube and adapted to depend therefrom.

In testimony whereof I affix my signature in presence of two witnesses.

MURRAY S. WOODS.

Witnesses:

W. G. BANKS,

BEN F. EDWARDS.