J. R. SCHWARZ.

FIRE ESCAPE.

APPLICATION FILED JUNE 29, 1911.

1,006,689.

Patented Oct. 24, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

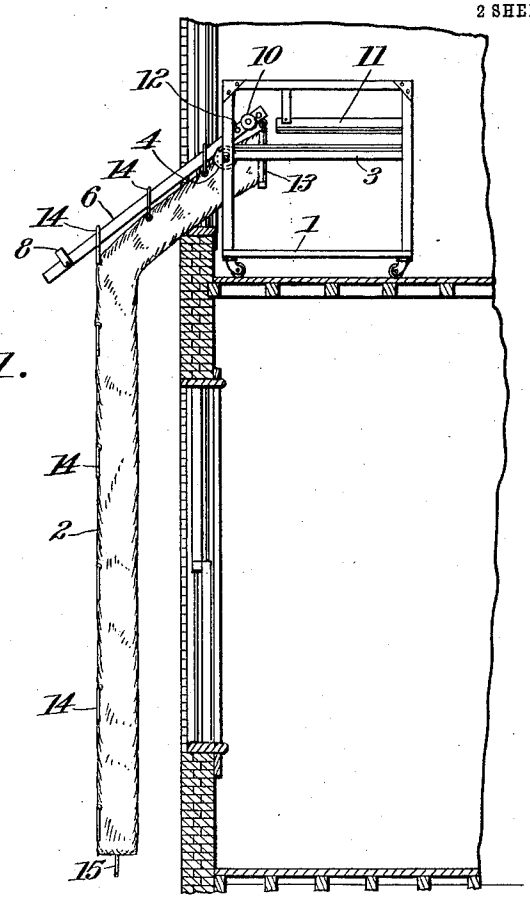
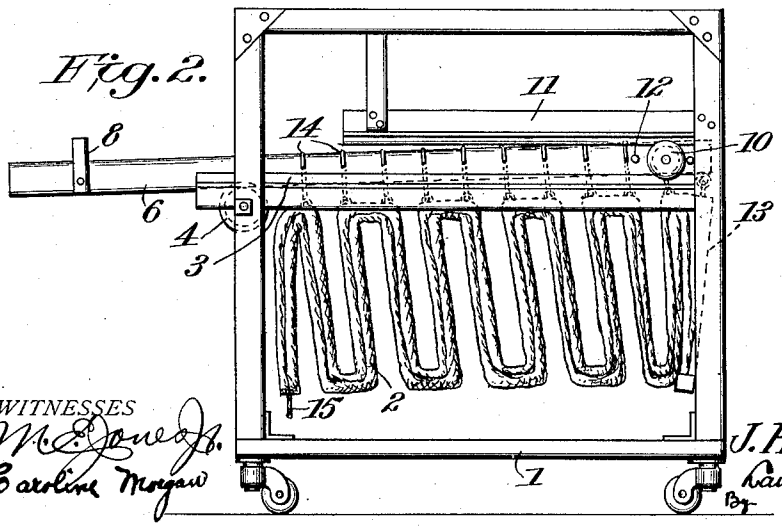


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

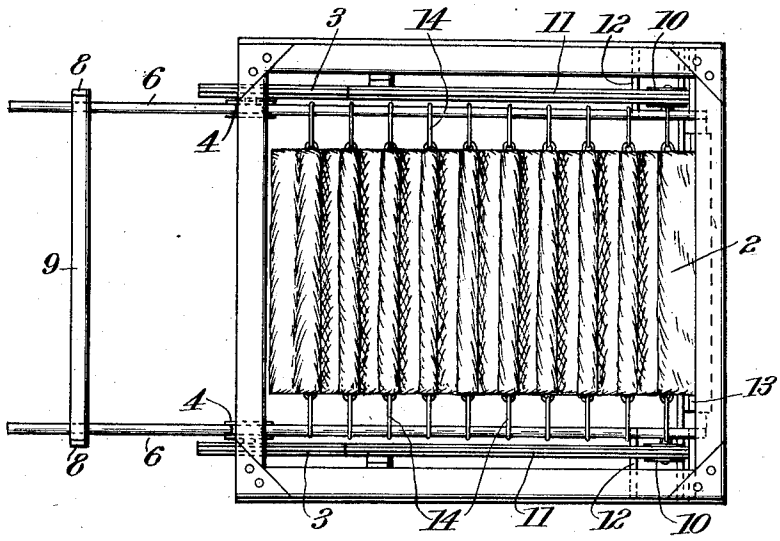
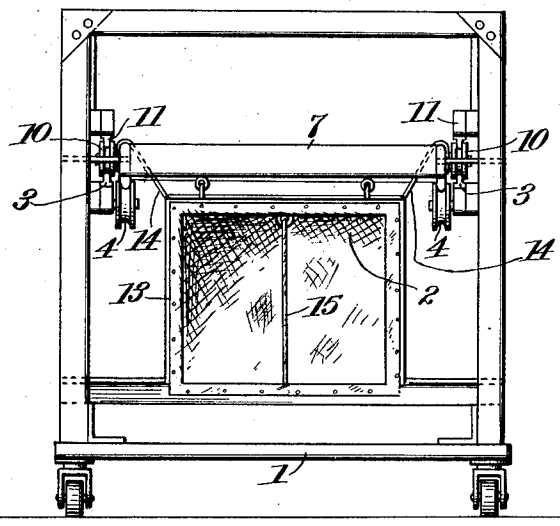


Fig. 4.



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FIRE-ESCAPE.

1,006,689. Specification of Letters Patent. Patented Oct. 24, 1911.

Application filed June 29, 1911. Serial No. 635,987.

To all whom it may concern:

Be it known that I, JOHN R. SCHWARZ, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to improvements in fire escapes, and more particularly to fire escapes of the chute type.

It is the object of this invention to provide a chute preferably of asbestos, canvas or other flexible material and to mount the same upon a truck in such a manner that when not in use, the chute may be compactly stowed and when needed may be readily transported to the window from which escape may be made to the best advantage.

It is a further object of this invention to support the upper portion of the chute in operative position in such a manner that the upper portion of the chute will lie clear of the window-sill and the outside of the building which will greatly facilitate the escape of the person confined in a burning building.

While the preferred form of this invention is illustrated upon the accompanying sheets of drawing, yet it is to be understood that minor detail changes may be made without departing from the scope thereof.

Figure 1 is a view in side elevation of this device in operative position, showing the building wall and floors in section. Fig. 2 is a view in side elevation of this device when not in use. Fig. 3 is a top plan view of Fig. 2. Fig. 4 is a view in rear end elevation of Fig. 3.

The truck 1 to which the chute 2 is attached comprises a rectangular framework mounted upon pivoted wheels or casters, so that it may be readily moved in any direction.

The chute 2 comprises a tube preferably of asbestos, fire proofed canvas or other flexible, non-combustible material of sufficient size to allow a person to descend therethrough and is attached to the truck in the following manner. A horizontal track 3 is secured on each side to the inner portion of the upright posts on opposite sides of the truck forming the corner posts of the rectangular frame. The forward ends of this track preferably extend a short distance beyond the frame work and upon the inner side of each track 3 mounted upon a shaft passing through the track and secured to the forward corner post is a vertical guide wheel 4 adapted to engage and support the side members of a chute supporting frame. The chute supporting frame comprises two side members 6 secured together at their inner end by a cross piece 7 and at their outer end by brackets 8 on the outer side thereof extending upward and securing between them a cross piece 9 above the side members 6 allowing the upper portion of the side members 6 to be unobstructed. The supporting frame is of less width than the distance between the tracks 3 and is provided at the inner end with wheels 10 adapted to engage and travel over the upper edge of the supporting tracks 3, while the lower edge of the side members pass over the guide wheels 4 mounted upon the front end of the tracks 3. Secured to the upper portion of the truck frame on each side over the guide wheels 10 upon the inner end of the side members of the chute supporting frame are guiding tracks 11 adapted to engage with the upper guide of the guide wheels 10 upon the frame to prevent the same from tilting. The tracks 11 terminate short of the forward end of the truck frame, so that when the chute supporting frame is in its extended position, the guide wheels 10 upon the frame are clear of the upper supporting tracks and the frame may be pivoted about the guide wheels 4 mounted upon the horizontal tracks 3. The side members 6 of the supporting frame are provided with stops 12 on the forward side of the guide wheels 10 adapted in the extended position of the frame to engage the forward side posts of the truck, and prevent the frame from becoming detached from the truck in its extended position.

The inner end of the chute 2 is preferably secured to a square frame 13 pivotally connected with the inner cross bar 7 of the chute supporting frame. The lower edge of said square frame is preferably extended on each side thereof so as to engage the corner posts of the truck frame in both the extended and retracted position. The chute is preferably constructed of four separate pieces of material joined together so as to form a square corresponding with the square frame 13 upon the inner end thereof. At equal distances apart on each side of the upper edges of the chute are secured a plurality of runners 14 adapted to engage and slide over the side members 6 of the chute supporting frame.

When not in use the chute supporting frame is in the retracted position and the runners are in engagement with the upper side of the side members thereof, so that the chute will lie in a folded position, as shown clearly in Fig. 2. When it is desired to use this fire escape, the truck is moved to the window from which escape may be made most advantageously and the chute supporting frame extended through the window opening to its full extent. The weight of the chute will depress the outer end, so that the runners will readily slide over the end of the side members and drop in a vertical direction, as shown in Fig. 1. The runners upon the inner end of the chute will still engage the side members of the supporting frame, which in turn will be held in the inclined position, as shown in Fig. 1. The stops on the side members of the chute supporting frame will engage the forward side posts of the truck frame preventing the frame from leaving the truck and will co-act with the wheels upon the track to hold the frame in the inclined position. A rope 15 is attached to the chute frame and a person using the escape will enter the chute through the frame, grasp the rope and slide down to the ground. By supporting the chute in this manner and constructing it preferably of fire proof material, the main portion of the chute will be held at a distance from the wall of the building and the chute will protect users from flames and smoke issuing from any window below the one to which the fire escape is applied.

What I claim is:—

1. In a fire escape, a movable frame, a chute, a sliding chute supporting frame, a track upon the main frame therefor, means upon the chute engaging the chute supporting frame, and means to hold the said frame in an inclined position when in use.

2. In a fire escape, a truck supporting a rectangular frame, a track upon said frame, a chute, a chute supporting frame mounted to slide upon said track, means upon the main frame adapted to retain the chute supporting frame in a horizontal position from which the chute supporting frame becomes disengaged in the outermost position, and means for holding the chute supporting frame in an inclined position when fully extended, equally spaced runners secured to the chute throughout its entire length slidably engaging the chute supporting frame and adapted to become detached therefrom when in the extended position.

3. In a fire escape, a truck supporting a rectangular frame, tracks upon said frame, wheels mounted upon the inner side of said track at the forward end thereof, a chute supporting frame adapted to slide over said wheels and provided with wheels upon the outer side of the inner end adapted to travel over said track, shorter guiding tracks secured to the frame adapted to engage with the upper side of the wheels upon the chute supporting frame, said tracks terminating short of the forward end of the rectangular frame, stops upon the sides of the chute supporting frame adapted to engage the forward posts of the rectangular frame, means upon the chute slidably engaging the chute supporting frame adapted to support the entire chute therefrom in folds within the rectangular frame when not in use and adapted to slide from the chute supporting frame when in use with a portion of the uppermost means in engagement with the frame supporting the upper end of the chute at a distance from the building.

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