No. 720,519. PATENTED FEB. 10, 1903.

J. HASWELL.

LIFE SAVING APPARATUS FOR USE IN CONNECTION WITH FIRE ESCAPES.

APPLICATION FILED JUNE 23, 1902.

NO MODEL.

Fig. 1.

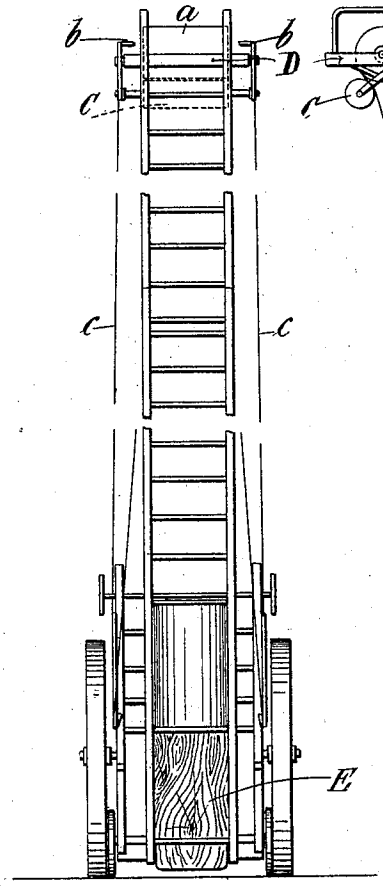


Fig. 2.

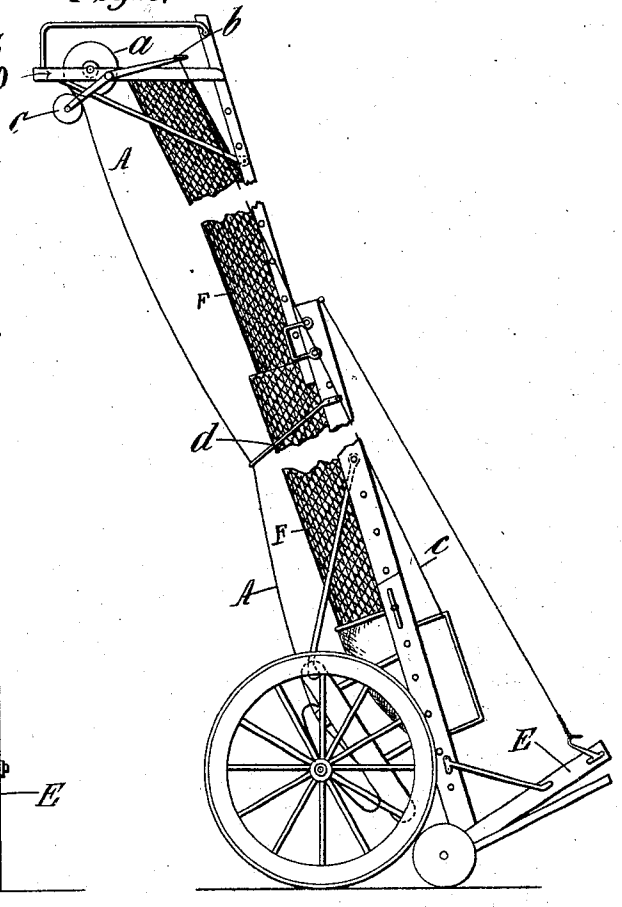


Fig. 5.

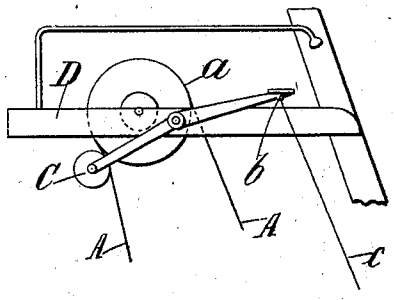


Fig. 4.

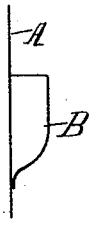
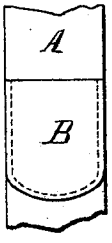


Fig. 3.



Witnesses:-

Percy Woodward

Alexander Cook

Inventor:
James Haswell
by Thos. J. Ling
his Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES HASWELL, OF LONDON, ENGLAND.

LIFE-SAVING APPARATUS FOR USE IN CONNECTION WITH FIRE-ESCAPES.

SPECIFICATION forming part of Letters Patent No. 720,519, dated February 10, 1903.

Application filed June 23, 1902. Serial No. 112,880. (No model.)

To all whom it may concern:

Be it known that I, JAMES HASWELL, poor-law official, a subject of the King of Great Britain and Ireland, and a resident of The Workhouse, High street, Poplar, London, England, have invented certain new and useful Improved Life-Saving Apparatus to be Used in Connection with Fire-Escapes, (for which I have applied for a patent in Great Britain, No. 23,625, bearing date November 21, 1901, which has been filed but not yet sealed,) of which the following is a specification.

The object of my invention is to produce an improved life-saving apparatus to be used in connection with fire-escapes which will be found most efficient and simple in action and inexpensive, it being so constructed and arranged that it can with little trouble or cost be adapted to fire-escapes already in use.

In the annexed explanatory drawings, Figure 1 is a front elevation of a fire-escape constructed according to my invention and to which my improvements have been adapted. Fig. 2 is a side elevation of same. Fig. 3 is a front view, shown somewhat enlarged and detached, of a pocket or receptacle I employ, hereinafter referred to. Fig. 4 is a side elevation of same. Fig. 5 is a side view of a regulating-brake for controlling my improved life-saving apparatus.

Referring to the drawings, A is an endless band of suitable material running around a drum *a* to be fixed at the top of the highest extending ladder. On the band A at convenient intervals are fixed pockets or receptacles B, into which persons can be placed and safely lowered to the ground. The band A is controlled by a powerful brake C, fixed so as to be applied either by a foot-lever *b* or hand-lever from the top of the fire-escape or through a cord *c* from the bottom of the escape. An upper platform D is arranged at the top of the escape, which rests against the window-sill or building on which the firemen stand to place the persons in the pockets B of the band A. These firemen can also regulate the speed of the band A, which travels by the weight of the downwardly-descending person or persons, or the band could be caused to travel by mechanical means. The lower platform E is provided, on which the persons alight and on which the firemen can stand to assist them in so doing and to regulate the travel of the band A, which may be used either with or without the net F, and be of fireproof material, the slack being taken up by an arm *d* or the like, (or friction-roller.)

The net F, which is of fireproof material, is formed in telescoping sections, each section being connected along its edges to the sides of one of the members of the extension-ladder G, so that when said ladder is extended partially or completely the sections of the net, together with the members of the ladder thereabove, form a continuous closed chute down which the band A travels. The area of cross-section of the chute thus formed is such that a body contained in one of the pockets B of the band cannot fall out of said pocket and past the same, because the pockets when opened stand across the chute such a distance that there is not sufficient space between them and the ladder for the passage of the body. The closing of the chute by the ladder, besides completing the tubular formation of the chute to prevent a body falling, further enables the passenger to assist the firemen in regulating the speed of descent by said passenger grasping the rounds of the ladder as they pass.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a device of the character described, an extension-ladder, net-sections connected with the sides of each member of the extension-ladder and together forming a chute on the under side of said extension-ladder, a horizontal platform at the upper end of the extension-ladder, a drum journaled on the platform, an endless band passing over the drum and down through the chute between the net-sections and the extension-ladder to the lower end of the extension-ladder, then passing beneath the chute up to the drum, pockets formed on the endless band adapted to prevent the passage of a body between themselves and the ladder, a brake mechanism on the platform for controlling the movements of the drum, a lower platform at the base of the extension-ladder, and means whereby the brake mechanism may be operated from the lower platform.

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

JAMES HASWELL.

Witnesses:

WM. O. BROWN,

FRED. C. SMITH.