W. DURYEA.
Fire-Escape

No. 207,856. Patented Sept. 10, 1878.

Fig. 1

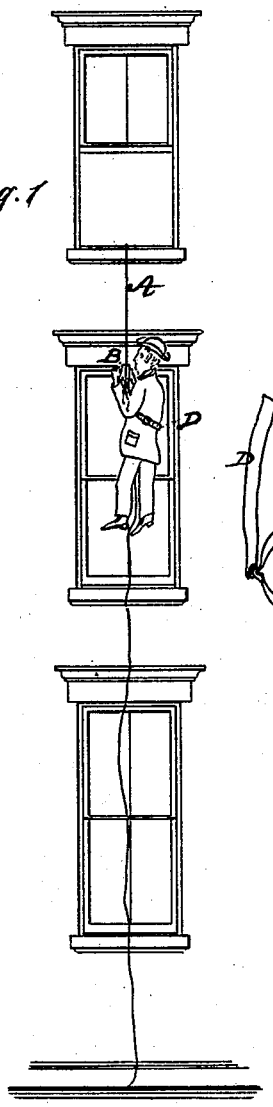


Fig. 4

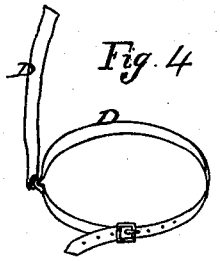


Fig. 2

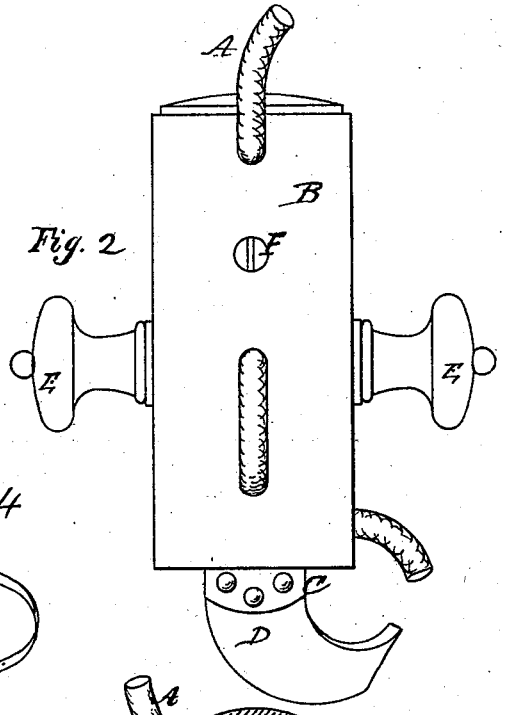
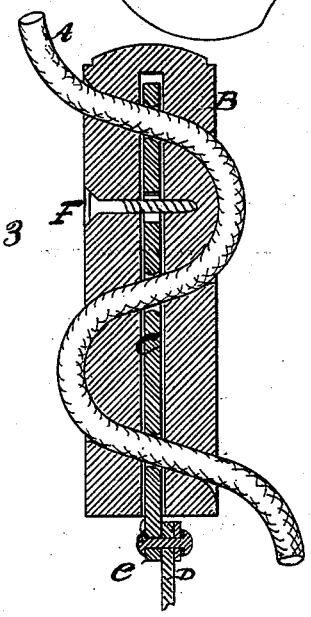


Fig. 3



Witnesses:
Anson P. Thayer
Chas Neilson

Inventor:
Wright Duryea

UNITED STATES PATENT OFFICE.

WRIGHT DURYEA, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **207,856**, dated September 10, 1878; application filed June 5, 1878.

To all whom it may concern:

Be it known that I, WRIGHT DURYEA, of Brooklyn and State of New York, have invented a new and useful Improvement in Fire-Escapes, of which the following is a specification:

The invention consists of the combination, with the cord and the block which runs thereon, of a tension-bar, from which the person is suspended by a strap or cord in such manner that the friction of the running block may be regulated at will, according as the person allows his weight to hang more or less by the strap, or by his hands and arms holding onto the block, all as hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a representation of a person descending from an upper window of a building by the improved fire-escape. Fig. 2 is a front elevation of the running block, with a piece of the cord and strap. Fig. 3 is a sectional elevation of Fig. 2. Fig. 4 is a detail of the strap for attaching the apparatus to the person.

A is the cord, to which the running block B is fixed by roving said cord through the block from front to back three or more times, as shown in Figs. 2 and 3, to produce friction for lessening the rapidity of descent. C is the plate, which I arrange within a socket or slot of the block, so that the cord passes through it also when it passes through the block, and to which I affix the strap or cord D, by which to attach the apparatus to the person. E represents handles to the block for holding onto it by the hands. The plate C is free to slide up and down a little in the block, so as to increase or relax the tension of the cord according as the holes of the plate coincide with the holes of the block or not. The person being suspended directly from the plate will, of course, draw it down hard on the cord, while the friction of the latter on the block will hold it back, and thus make such great friction as to greatly if not entirely obstruct the descent. To relax the friction thus established and increase the descent, the person will transfer more or less of his weight to the block by pulling at the handles, and thus partially (or, if necessary, wholly) relaxing the binding effect of the plate on the strap and allow the block to run more freely. If the person finds himself going too fast he will cease to pull on the handles, and, if need be, he may push upward on them, and thus add to the lifting or holding-back action of the cord on the block, and thereby greatly assist in effecting slow and safe descent.

The construction is so simple that it will be understood at once, and it will be seen that it may be modified to some extent as to the arrangement of the plate within the block, and the method of retaining it when the cord is not strung in the block, which, in this case, is done by the screw F, which passes through a slot of the plate, allowing the necessary movement of the plate relatively to the block.

The strap D may be fastened differently to the plate, and a cord may be substituted for the strap, and the strap or cord may be contrived in a sling, in which the person may sit astride or otherwise.

I claim—

1. The combination, with the block B and cord A, of the plate C, having the attaching-strap D or other device connected with it, and being movable in the block, with the cord rove through it and the block, substantially as described.

2. The cord A, block B, handles E, plate C, and strap D, combined substantially as described.

WRIGHT DURYEA.

Witnesses:
ANSON P. THAYER,
CHAS. NEILSON.