

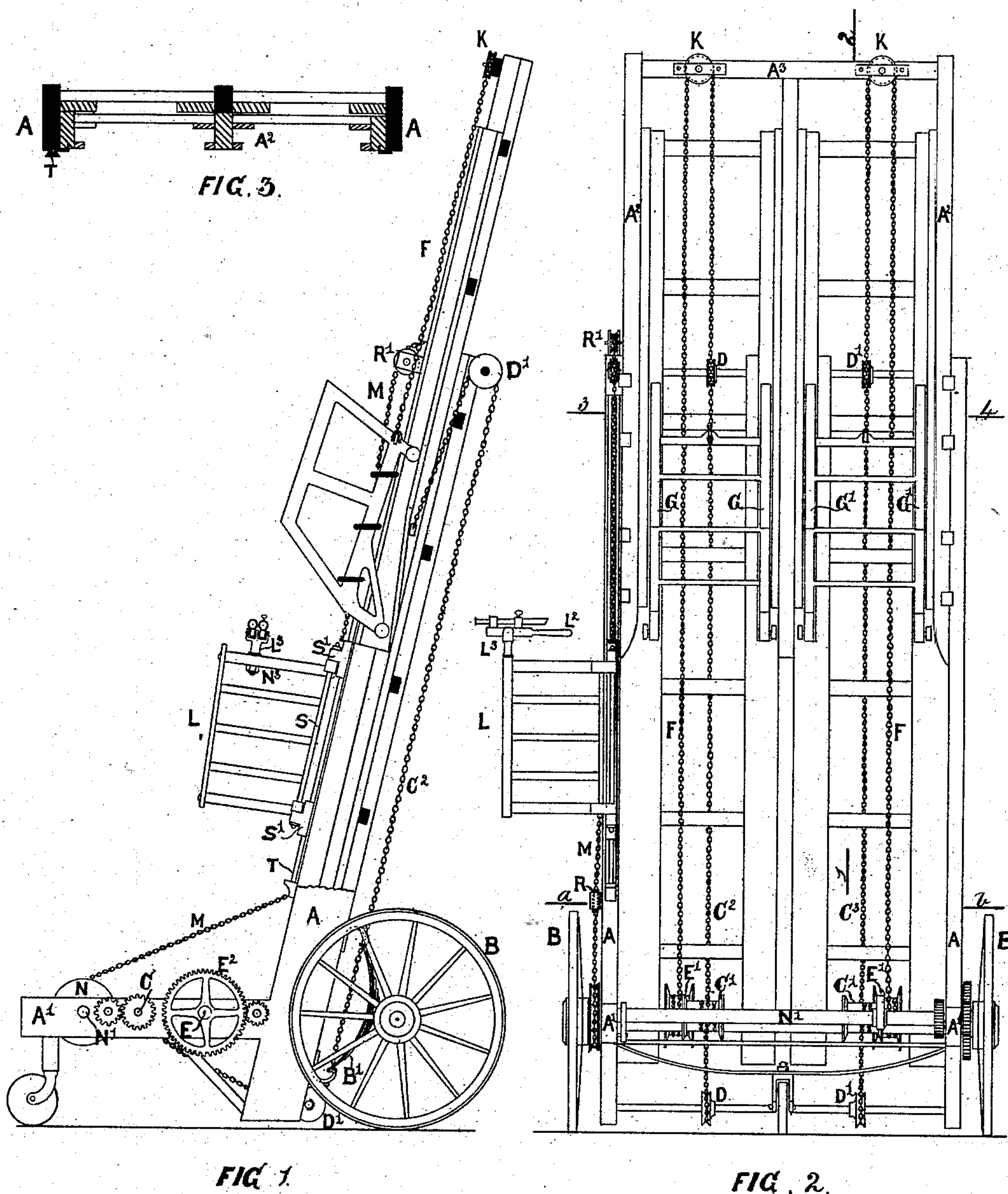
(No Model.)

2 Sheets—Sheet 1.

J. KENNEDY,
FIRE ESCAPE.

No. 288,448.

Patented Nov. 13, 1883.



Witnesses
James F. Tobin
Harry L. Ashenfelter

Inventor
J. Kennedy
by his Attorneys
Brown & Sons

(No Model.)

2 Sheets—Sheet 2.

J. KENNEDY.

FIRE ESCAPE.

No. 288,448.

Patented Nov. 13, 1883.

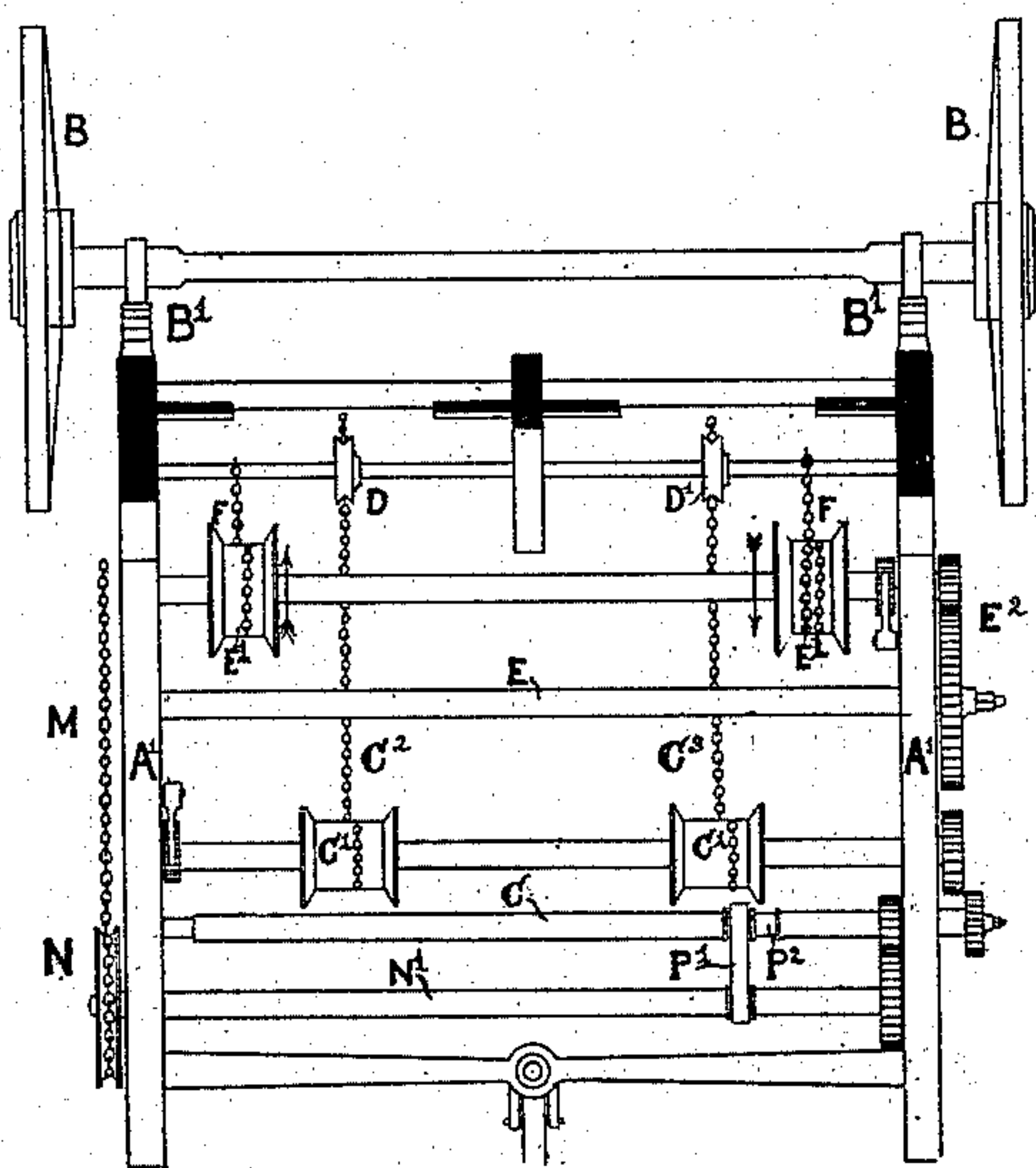


FIG. 4.

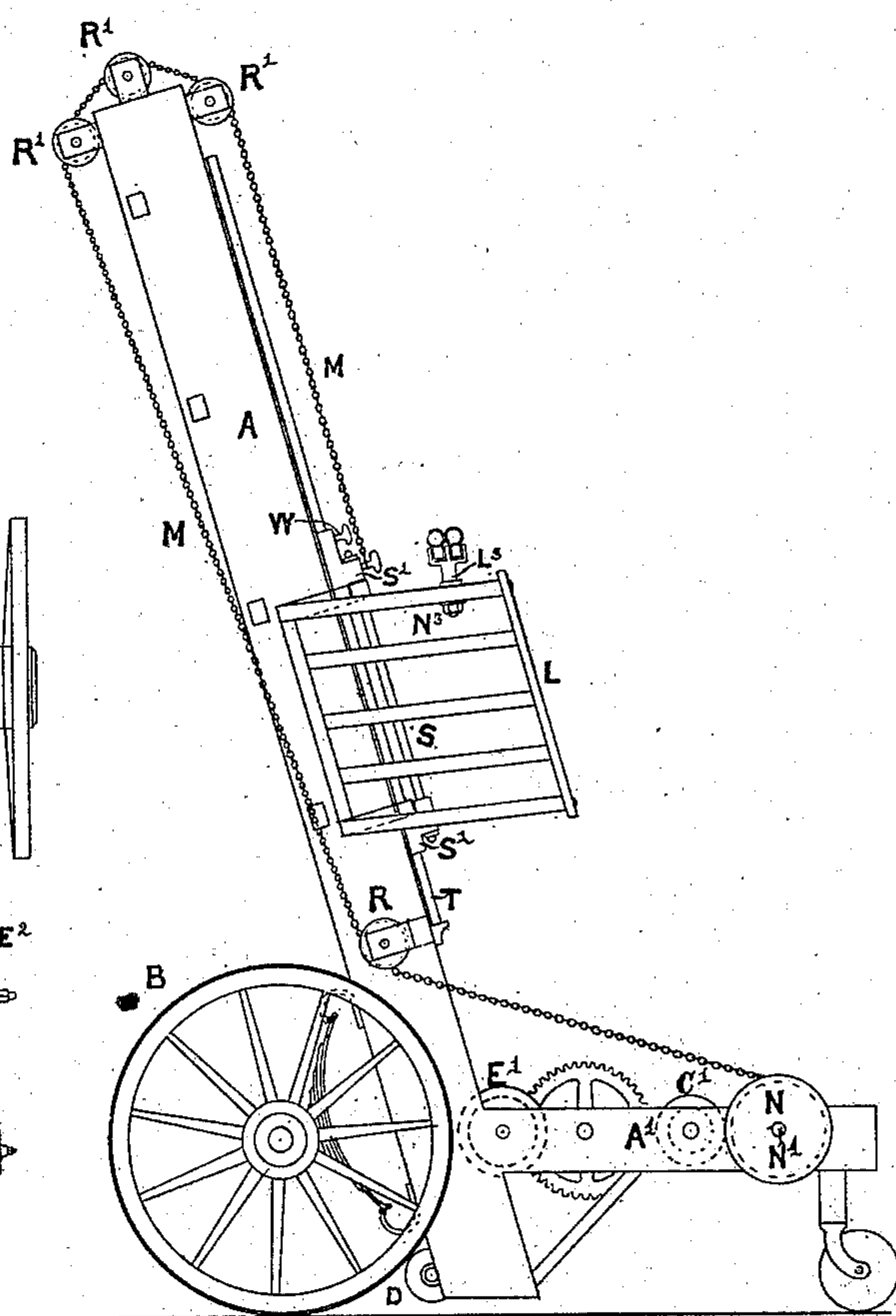


FIG. 5.

Witnesses
James F. Jobin
Harry L. Ashenfelter

Inventor
James Kennedy
by his Attorneys
Howson & Co.

UNITED STATES PATENT OFFICE.

JAMES KENNEDY, OF STRABANE, COUNTY OF TYRONE, IRELAND.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 288,448, dated November 13, 1883.

Application filed May 17, 1883. (No model.) Patented in England August 16, 1882, No. 3,915.

To all whom it may concern:

Be it known that I, JAMES KENNEDY, a subject of the Queen of Great Britain and Ireland, and residing at Strabane, in the county of Tyrone, Ireland, have invented certain Improvements in Fire-Escapes and Apparatus for Extinguishing Fires, (for which I have obtained a patent in Great Britain, dated the 16th day of August, 1882, No. 3,915,) of which the following is a specification.

My invention relates to certain improvements in fire-escapes and apparatus for extinguishing fires, and has for its object the arrangement of escape-ladders in such a manner that carriages may be mounted thereon for lowering persons or material from an elevation, and for the application to the ladders of adjustable apparatus to which one or more hose-pipes can be attached, so that the pipes are supported and the direction of the jets of water under better control.

In order that my invention may be better understood, I will, by the aid of the accompanying drawings, proceed to more fully describe the means employed by me in carrying the same into effect.

Figure 1 represents a sectional side elevation through line 1 2 of my improved apparatus. Fig. 2 is a front elevation. Fig. 3 is a section of the ladders through line 3 4. Fig. 4 is a sectional plan through line *a b*. The platform for covering the shafts in this as in the other figures is removed; and Fig. 5 is a side elevation of one side of the bottom portion of the ladder, showing the adjustable platform to which the apparatus for supporting the hose-pipe is attached.

The sides A of the bottom part of the ladder are attached to the wheels B by springs B' in the ordinary manner, and from the ladder-sides project the arms A', to which is mounted a number of winch-shafts, for the purpose hereinafter described. Between the two sides A is fitted the upper or sliding portion of the ladder A². This part is raised or lowered by turning with an ordinary winch-handle the shaft C and winch-barrels C', to the latter of which the ropes or chains C² and C³ are attached, which pass around the grooved pulleys D and D', mounted on shafts secured to

the sides of the ladder A and finally connected to the sliding ladder A², thereby raising or lowering the same according to the direction in which the shaft and barrels C' are turned.

The carriages or cages G and G' travel in slides formed between the ladder-sides, and are raised and lowered by turning with an ordinary winch-handle the shaft E, which, by means of the spur-wheels E², the shaft on which the barrels E' are secured, rotates. The ropes or chains F are wrapped around the barrels E'—one in one direction and the other in the other, as indicated by the arrows—and, after leaving the said barrels, pass, respectively, over the grooved pulleys K, mounted to the top cross-brace, A³, and the ends finally secured to the respective carriages G and G'. By arranging the ropes or chains in the manner described, on causing the barrels to revolve, one of the carriages is ascending while the other is descending, in whatever way the barrels are turned, thereby saving the time and labor of having to raise the empty carriages or cages from the bottom to the top each time any person is lowered.

One side of the ladder A is shown fitted with a sliding platform, L, which is elevated or lowered by means of rope or chain M, in connection with the grooved pulley N, secured on shaft N'. This shaft and pulley are turned by the shaft C, which is made to slide in its bearings. In the drawings it is in gear with the shaft N'. Thus, on turning the shaft C with an ordinary winch-handle, the pulley N will revolve. The rope or chain M, after leaving the grooved pulley N, passes around the grooved pulleys R and R', the end being secured to the frame-work of platform L. This platform is hinged to the bar S, the latter being secured to two blocks, S', made to slide freely on the grooved bar T. When the shaft N' is turned, the rope or chain M elevates or lowers the platform L, and when the platform is adjusted to the height required it is secured by tightening a screw, W, which passes through the top sliding block, the end being in contact with the grooved bar T. When the platform is thus secured, the shaft C is then free to be put into gear with the shaft on which the barrels C' are fixed. By raising the pawl P' out

of the groove and dropping it into groove P², the top ladders, A², can be actuated.

To the top rail of the platform frame-work one or more sets of levers, L², may be mounted, 5 fitted with suitable levers for the reception of the hose jet-pipes. These levers are jointed to uprights L³. The center-pins of the latter are round, pass through the top rail of platform frame-work, and retained by means of a 10 nut, N³, on the under side. The levers being jointed to the uprights and the latter turning on the center-pin, the attendant on the platform can direct the jets of water in whatever direction he desires, the levers and platform 15 sustaining the weight of pipes and columns of water.

What I claim as my invention is—

1. The combination of the bottom part of a

ladder, and an upper extensible portion, with a traveling cage, sets of hoisting-chains, and 20 barrels for both the cage and the extensible portion of the ladder, operating-shaft, and devices, substantially as described, for throwing said shaft into gear with either set of hoisting devices. 25

2. The combination of a fire-escape ladder, with a platform, L, mounted thereon, and levers on the said platform, for holding hose jet-pipes, all substantially as set forth.

In testimony whereof I have signed my name 30 to this specification in the presence of two subscribing witnesses.

JAMES KENNEDY.

Witnesses:

ANDREW M. CAFFERTY,
JOHN M. CONNERS.