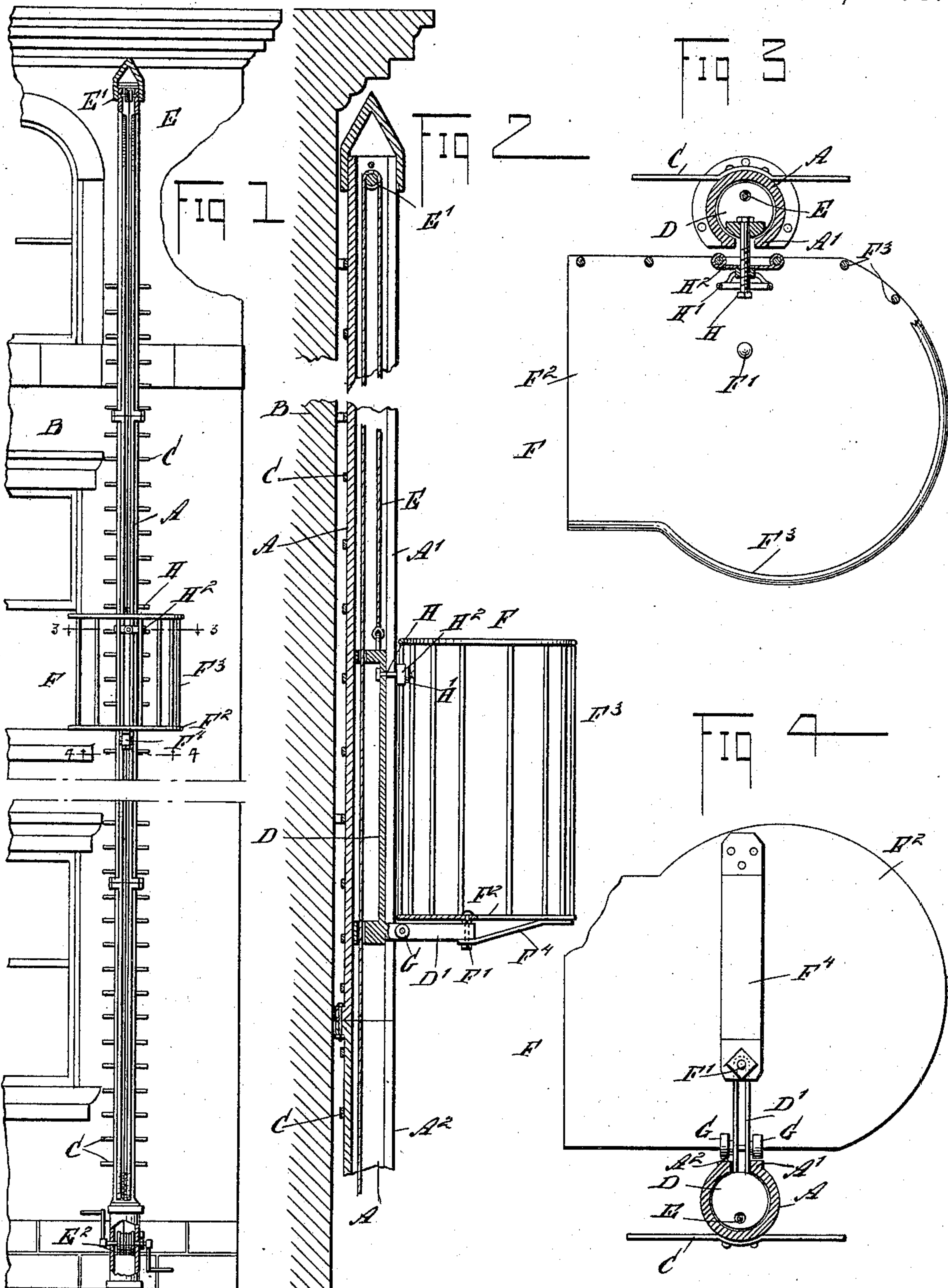


(No Model.)

J. HÄGEL.
FIRE ESCAPE.

No. 598,370.

Patented Feb. 1, 1898.



WITNESSES:

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JOSEPH HAGEL, OF MOUNT STERLING, ILLINOIS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 598,370, dated February 1, 1898.

Application filed June 8, 1897. Serial No. 639,862. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HAGEL, of Mount Sterling, in the county of Brown and State of Illinois, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fire-escape which is simple and durable in construction, completely fireproof, arranged to form a permanent fixture on a building, so as to be always ready for use in an emergency, and at the same time allow a fireman to be readily moved up to a desired height in the cage, which can then be locked in position to permit the fireman to readily combat the flames.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in the figures.

Figure 1 is a front elevation of the improvement as applied and with parts broken out and in section. Fig. 2 is an enlarged vertical transverse section of the same, partly broken out. Fig. 3 is an enlarged sectional plan view of the improvement on the line 3 3 of Fig. 1, and Fig. 4 is an enlarged inverted sectional plan view of the same on the line 4 4 of Fig. 1.

The improved fire-escape is provided with a tube or pipe A, secured to the front of a building B, and preferably made in sections A', bolted or otherwise fastened together, said tube or pipe extending from the sidewalk to the roof of the building, as plainly indicated in Fig. 1. On the tube or pipe A are secured rungs C for forming a ladder to permit persons to escape down the ladder and allow firemen to climb up the ladder, if necessary.

Within the tube or pipe A is fitted to slide a block or bar D, connected at its upper end with one end of a rope or cable E, extending upwardly over a pulley E', journaled in the upper end of the pipe or tube A, the rope then extending downwardly to connect with a hoisting device E², located in the lower end of the said tube and of any approved construction. By this arrangement the block D may be raised or lowered within the tube A by a person stand-

ing on the ground and manipulating the hoisting device E² accordingly.

From the lower end of the block D extends outwardly through a vertical slot A², formed in the tube throughout its length, a fixed support D', engaged at its outer end by a pin or bolt F', connected with the bottom F² of a cage F, provided with a suitable railing F³, extending from the platform or bottom F² and leaving one side open, so that convenient access may be had to the cage from the adjacent windows of the building B. A brace F⁴ connects the lower end of the bolt F' with the outer end of the platform, so as to strengthen the support and cage. (See Figs. 2 and 4.)

On the sides of the support D' are journaled friction-rollers G, bearing on the front of the tube or pipe A, so that the friction of the cage and block D in moving up or down on the tube A is reduced to a minimum. From the upper end of the block or bar D extends outwardly a screw-rod H, on the outer end of which screws a wheel-nut H', adapted to abut against a plate H², secured to the railing F³ of the cage, as plainly indicated in Fig. 3.

Now it will be seen that by the arrangement described a fireman or other person standing on the platform of the cage and being hoisted to a desired height can readily lock the cage in place by screwing the wheel-nut H' inwardly on the rod H, so as to bind the block D in the tube A, thereby locking the cage in position with the block D on the tube A. By screwing the wheel-nut H' outwardly the block D is released and the block and cage F can be readily raised or lowered by a person manipulating the windlass or other hoisting device A², as above explained.

It will be seen that the device forms a permanent fixture on a building, is always ready for use to allow persons to escape from the building, and to permit firemen to conveniently carry hose to any desired floor and manipulate the hose from the cage after the latter is fastened in place, as above explained.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A fire-escape, comprising a tube adapted to be secured to a building and formed with a longitudinal slot extending throughout its length, a bar slidable within said tube and

provided at its lower end with a support extending through said slot, a cage resting upon said support, means for raising and lowering said bar, a screw-rod extending from the upper end of said bar through said slot, a bearing-plate on said cage and through which said screw-rod extends, and a clamping-nut working against said plate and by which the cage and bar are brought to closely bear against the sides of said tube to hold said cage at any height, as shown and described.

2. A fire-escape, comprising a tube adapted to be secured to a building and provided with a longitudinal slot, a block or bar slidable in said tube and having a hoisting device connected therewith, a support run out from the

lower end of said bar and carrying friction-rollers bearing against the sides of the tube, a cage attached to said support, a railing for said cage, a plate carried by said railing opposite the slot in the tube, a screw-rod attached to said bar above said support and extending through said slot and plate, and a wheel-nut working on the end of said screw-rod and by which said bar is brought to bear against said tube to hold said cage at any height, as shown and described.

JOSEPH HAGEL.

Witnesses:

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