(No Model.)

A. L. MURPHY.

COMBINED FIRE EXTINGUISHER AND FIRE ESCAPE.

No. 262,972. Patented Aug. 22, 1882.

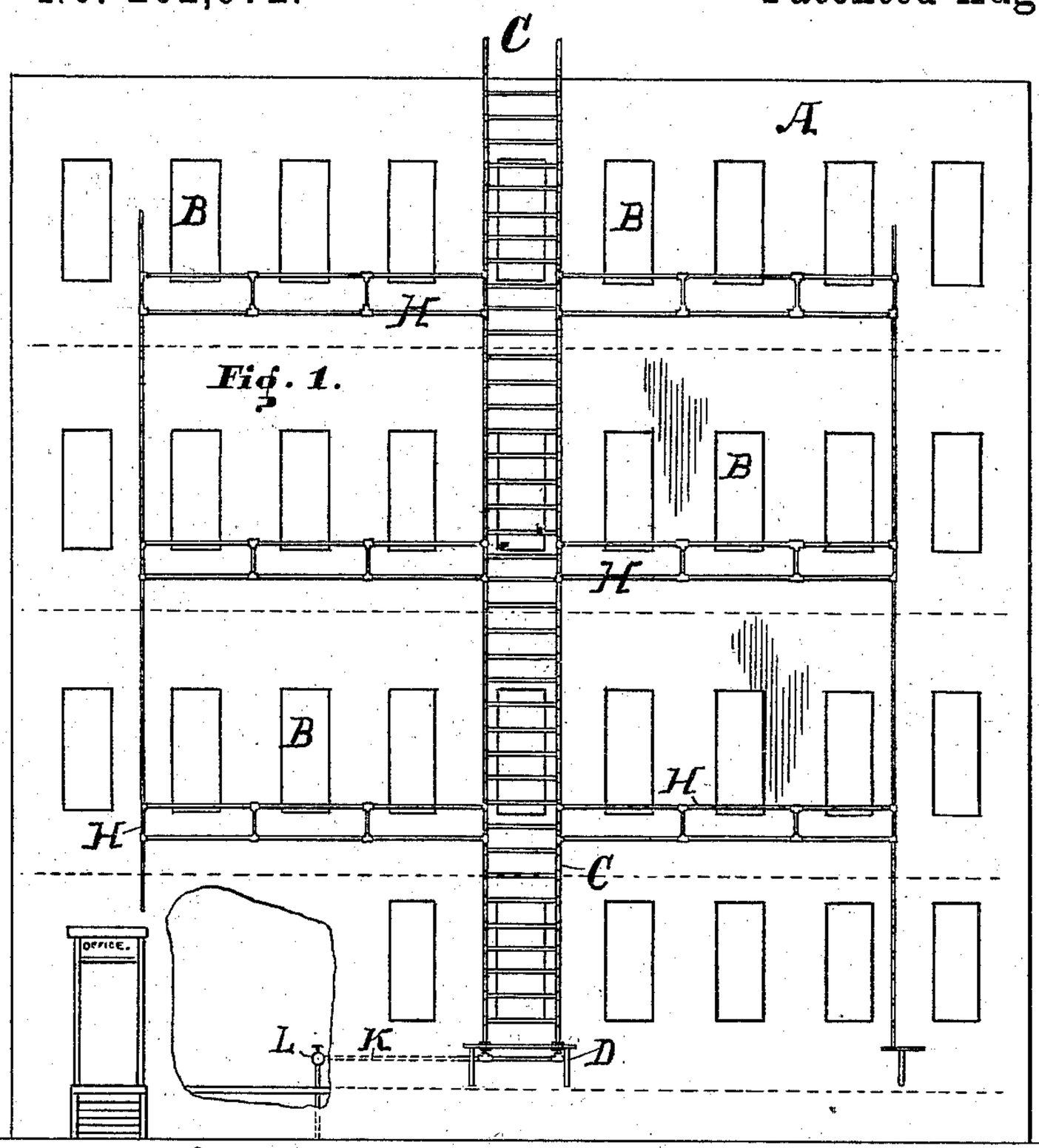

Fig. 1.

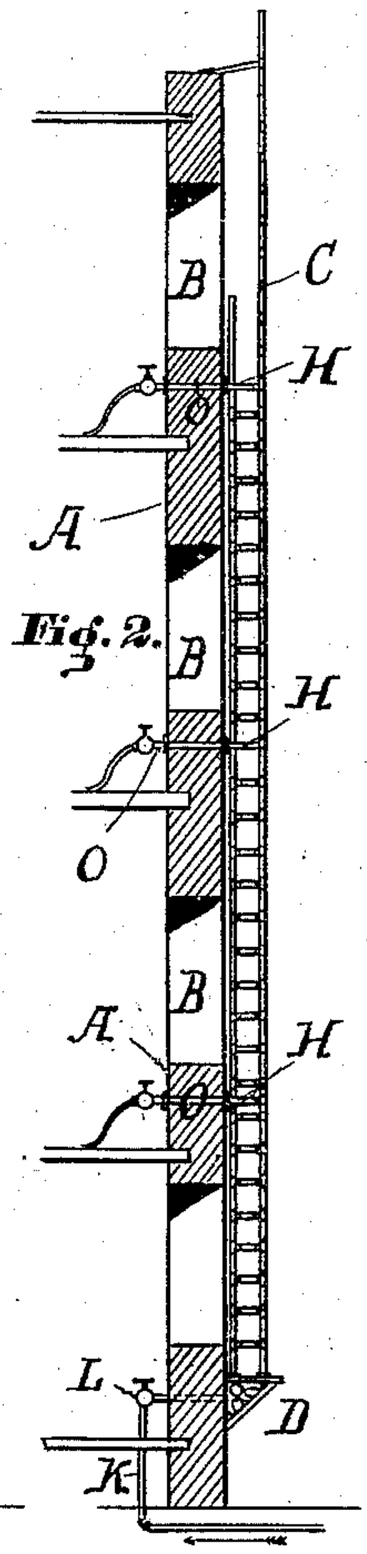

Fig. 2.

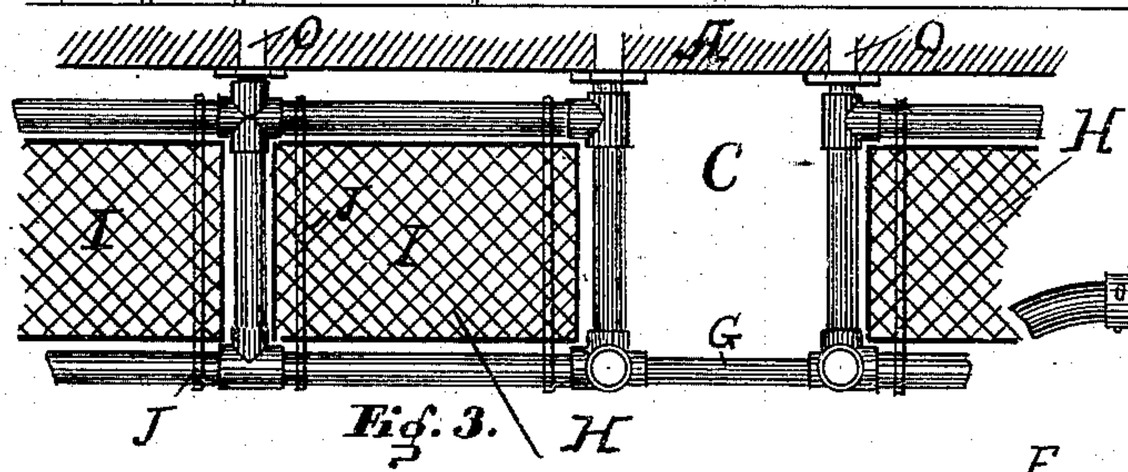

Fig. 3.

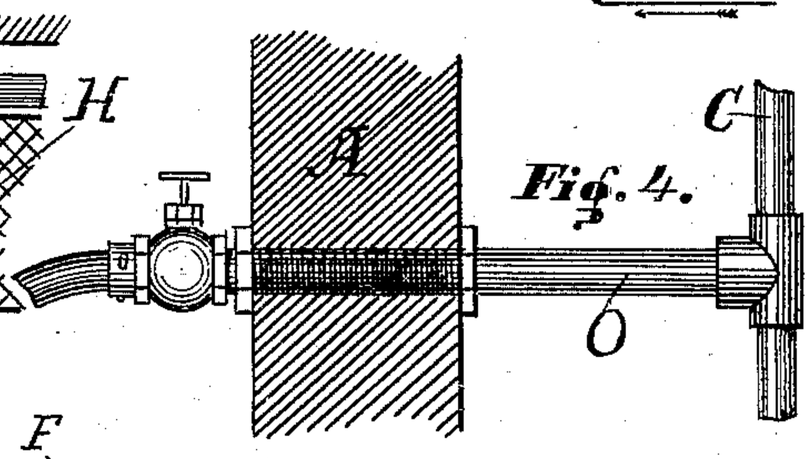

Fig. 4.

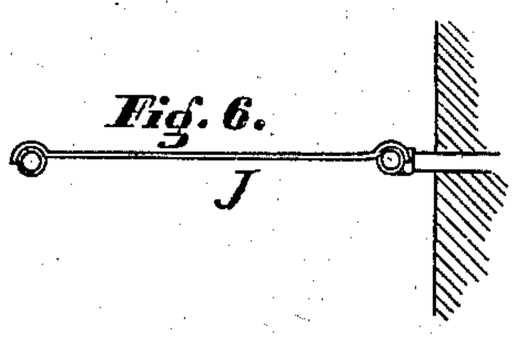

Fig. 6.

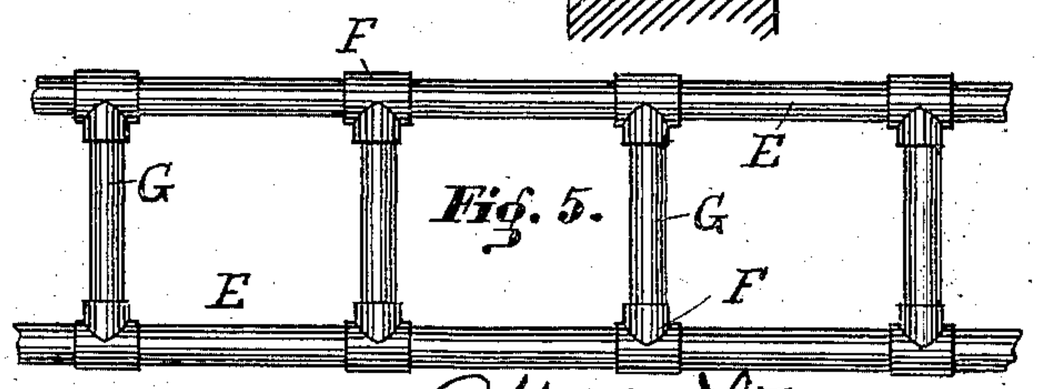

Fig. 5.

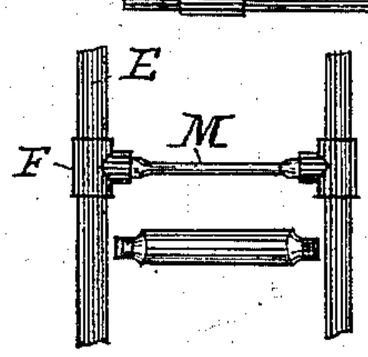

Fig. 7.

Attests.

John Dalley Jr.

Samuel S. Murphy

Albert L. Murphy,
Inventor.
By his Attorneys,
A. C. Strawbridge
J. Bonsall Taylor.

UNITED STATES PATENT OFFICE.

ALBERT L. MURPHY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO STEPHEN P. M. TASKER, OF SAME PLACE.

COMBINED FIRE-EXTINGUISHER AND FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 262,972, dated August 22, 1882.

Application filed November 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT L. MURPHY, of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in a Combined Fire-Escape and Fire-Extinguisher, of which the following is a specification.

My invention, as its title implies, relates to devices whereby, in the first place, egress may be had from a burning building, and whereby, in the second place, a water-supply can be quickly brought to bear for the extinguishment of the conflagration.

In the accompanying drawings, Figure 1 is a front elevation of a four-story building to which is applied a combined extinguisher and escape embodying my invention. Fig. 2 is a side elevation, partly in section, of the device of Fig. 1, section being taken vertically through the escape-ladder. Fig. 3 is a top plan detail illustrative of the construction of one of the horizontal balconies. Fig 4 is a sectional side elevation of one of the inlets, which also act as braces for the ladder and balcony structure. Fig. 5 is a front elevation, in magnified detail, of the escape-ladder, placed for convenience of illustration in a horizontal position. Fig. 6 is a side sectional elevation through one of the stringers which support the webbed platforms of the balconies. Fig. 7 is a front elevational detailed illustration of the application of a flat rung to the ladder, and also showing the same rung in top plan view.

Similar letters of reference indicate corresponding parts.

My invention consists in the apparatus hereinafter described and claimed.

In the accompanying drawings, A represents the front face of a four-story building—such as a factory or hotel—and B represents windows therein.

C is a tubular ladder well placed when in a vertical position, and best supported upon a platform, D, bracketed from the building. Other means of attachment may of course be resorted to.

The ladder is preferably constructed of iron tubes, the longitudinal uprights being composed of small tubes E, connected together by fittings F, adapted to receive other tubes, G, as rungs.

The foregoing is the most simple and the least expensive structure. Other hollow tubular structures may, however, be resorted to in its stead.

H represents the balconies, one of which is shown applied to each story. These balconies are, similarly with the ladder, constructed of tubes, which latter are connected as to their hollow interiors with the tubes forming the ladder. The balconies are braced and supported from the building in any convenient manner, but preferably by such an attachment as is represented in detail in Figs. 3 and 4, in which transverse tubes pass through the wall of the building, and serve not only as bracket-braces to connect and support the balconies to the building, but as inlets O, through which the water can be introduced into the interior of the building. These inlets are to be supplied, at a point or points interior to the wall of the building against which my structure is erected, with valves, faucets, or kindred appliances, to which lines of hose may be permanently attached.

The balconies are to be floored by means of web-platforms I, suspended conveniently by means of stringers J upon the tubes forming the balconies, or connected in any other convenient way.

A pipe, K, from the water-main, controlled by a main valve, L, is connected conveniently with the base of the ladder, and serves as a means whereby water from the main is introduced within the hollow interior of the ladder, and thence within the hollow interiors of the balconies, in such manner that the entire interior of the system of pipes forming the escape is supplied with water under pressure of the main, which can be discharged at any point desired by opening the valve upon a given inlet.

In practice it may be found convenient to form the rungs of the ladder of flat cast-iron steps M, as illustrated in Fig. 7, which of course are to be made hollow in order to permit of the passage of water through them, both

for the cooling of the ladder and for the general distribution of the water throughout the tubular system.

While I have illustrated a given form of construction and a given method of attachment of the entire structure to a building, yet I desire to distinctly state that the principle of the invention is not confined to any given structure or arrangement, but that various modifications of structure may be resorted to without departing from the invention. For instance, the balconies may not extend across the whole width of the building, but may be applied simply at such points as are deemed advisable, while the ladder may be constructed in the form of a series of stairs, instead of in that of a ladder, in the ordinary acceptation of the term.

Having thus described my invention, I claim—

1. The combination, to form a combined fire-extinguisher and fire-escape, of a tubular or other hollow ladder connected as to its hollow interior with a source of water-supply, with one or a series of tubular or other hollow balconies connected as to their hollow interiors with the ladder, both ladder and balconies, or either, being connected with or formed into exit-pipes opening within the building to which the structure is applied, whereby water admitted within the hollow system of pipes forming such structure serves not only to keep the latter cool, but is adapted to be withdrawn from within the building at any desired point or points for the purpose of the extinguishment of fires, substantially as described.

2. In a fire-escape, the combination of side pipes, platform, steps, and hand-rails, all made hollow and connected as to their hollow interiors, substantially as and for the purposes set forth.

In testimony whereof I have hereunto signed my name this 3d day of November, A. D. 1881.

ALBERT L. MURPHY.

In presence of—

J. BONSALL TAYLOR,

JOHN JOLLEY, Jr.