

(No Model.)

G. A. CLAPP.

FIRE ESCAPE.

No. 283,755.

Patented Aug. 28, 1883.

Fig. 1.

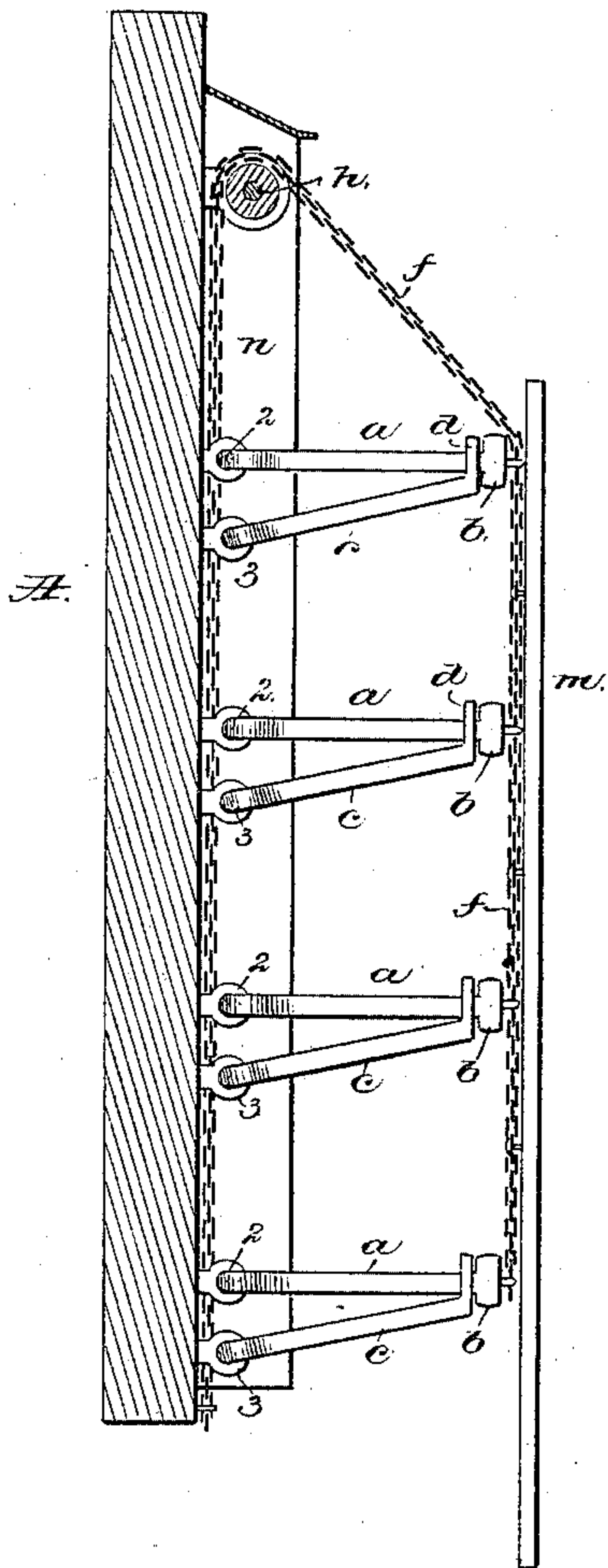


Fig. 2.

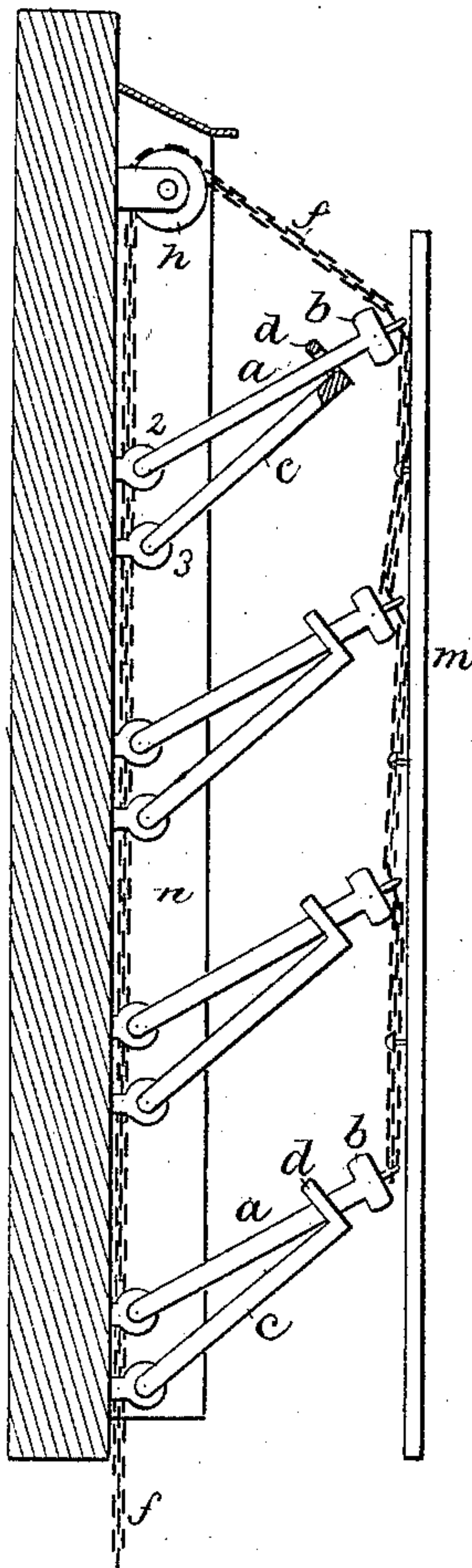


Fig. 3.



Witnesses,
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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 283,755, dated August 28, 1883.

Application filed May 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. CLAPP, of Quincy, county of Norfolk, State of Massachusetts, have invented an Improvement in Fire-
Escapes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to a fire-escape of that class in which a folding ladder is fixed upon the side of a building adjacent to the windows, the rungs of the said ladder being turned up parallel to the walls of the building, so as to occupy but small space when the apparatus is not in use.

The invention consists in the combination, with a series of rungs pivoted at one end upon the side of the building, or a suitable framework connected therewith, of a series of braces for the said rungs, also pivoted upon the building, and adapted to fold by the side of the said rungs when the apparatus is not in use, but to extend diagonally to the ends thereof remote from the buildings when the said rungs are in their horizontal position forming the ladder, the braces thus forming an independent support for each rung or foot-piece. A suitable rope or chain is provided by which the said ladder may be folded or drawn up to the position parallel to the walls of the building, and the said rungs are connected at their free ends with a shield by which they are completely covered and protected when thus folded.

Figure 1 is a side elevation of a fire-escape embodying this invention, the ladder being in position for use; Fig. 2, a similar elevation, showing the apparatus as partly moved toward its folded position; and Fig. 3 shows one of the foot-pieces separately.

The apparatus consists, essentially, of a series of rungs or foot-pieces, *a*, pivoted at 2 upon the wall *A* of a building in proper position to be easily reached from the windows, the said rungs being provided with projections *b* at their outer ends. A series of braces, *c*, are pivoted at 3, below the pivotal points of the corresponding rungs, and are provided at their free ends with eyes *d*, embracing the rungs *a*, and adapted to slide longitudinally thereon, the said eyes engaging the projections *b* when the rungs are in their horizontal position, as shown in Fig. 1, and thus forming a

support for each of the said rungs independently. The said rungs are preferably connected together at their outer ends to enable them to be operated simultaneously in the process of folding up at the sides of the building, or being turned to the horizontal position, they being shown in this instance as connected by a chain, *f*, passing over a pulley, *h*, above the upper rung of the series, and then passing down the wall *A* of the building to any desired point from which the apparatus is to be operated. The free or outer ends of the rungs also preferably have connected therewith a shield or cover, *m*, forming the front of an inclosing-case for the apparatus when folded up, and assisting in steadying the ladder when the rungs are in horizontal position. (Shown in Fig. 1.)

The apparatus is either inclosed in a recess in the wall of the building, or the latter is provided with projecting pieces *n*, forming the sides of the inclosing-case or housing, which is completed by the shield *m* when the apparatus is folded up.

It will be seen that the chain *f* and shield *m* are not absolutely essential to the apparatus, as each rung is supported independently by its corresponding brace, and the said chain and shield do not necessarily add anything to the support of the apparatus.

The rear ends of the foot-pieces (see Fig. 3) are forked or made double, and each end thereof engages a suitable eye-piece, 2, so that the said foot-piece cannot twist or turn over about its longitudinal center.

I claim—

1. In a fire-escape, the combination of a series of rungs or foot-pieces pivoted upon the building, with a series of corresponding braces, also pivoted upon the building, the said rungs and braces being adapted to fold substantially parallel with the sides of the building, as and for the purpose set forth.

2. A series of rungs pivoted at one end upon the building, and provided at their other end with a projection, combined with a series of corresponding braces pivoted at one end upon the building, and connected with the said rungs at their other end, and adapted to engage the projections thereof and support the said rungs when in a horizontal position, substantially as described.

3. The combination, with the series of rungs and their corresponding braces pivoted upon the building, of the operating-chain by which all the said rungs and braces may be moved
5 simultaneously, substantially as and for the purpose set forth.

4. The combination of the rungs A, and corresponding braces, c, pivoted upon the building, as described, with the shield m, connected
10 with the outer ends of the said rungs, substantially as and for the purpose set forth.

5. The combination of the rungs A and

braces c, co-operating therewith, both pivoted upon the building, with the shield m, connected with the said rungs, and their operating- 15 chain, substantially as described.

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

GEORGE A. CLAPP.

Witnesses:

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