

(No Model.)

J. TAYLOR.

FIRE ESCAPE.

No. 299,595.

Patented June 3, 1884.

Fig. 1.

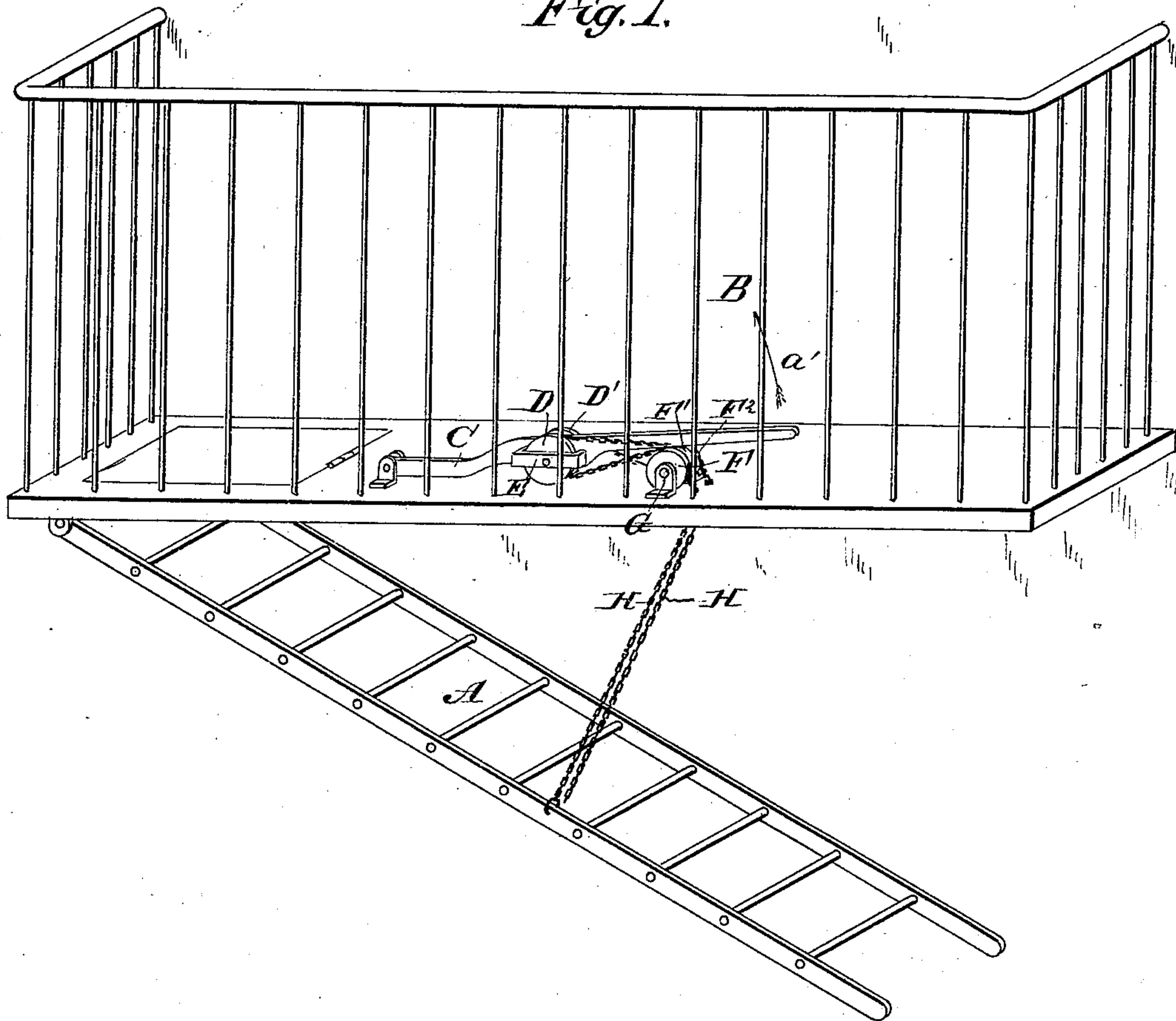
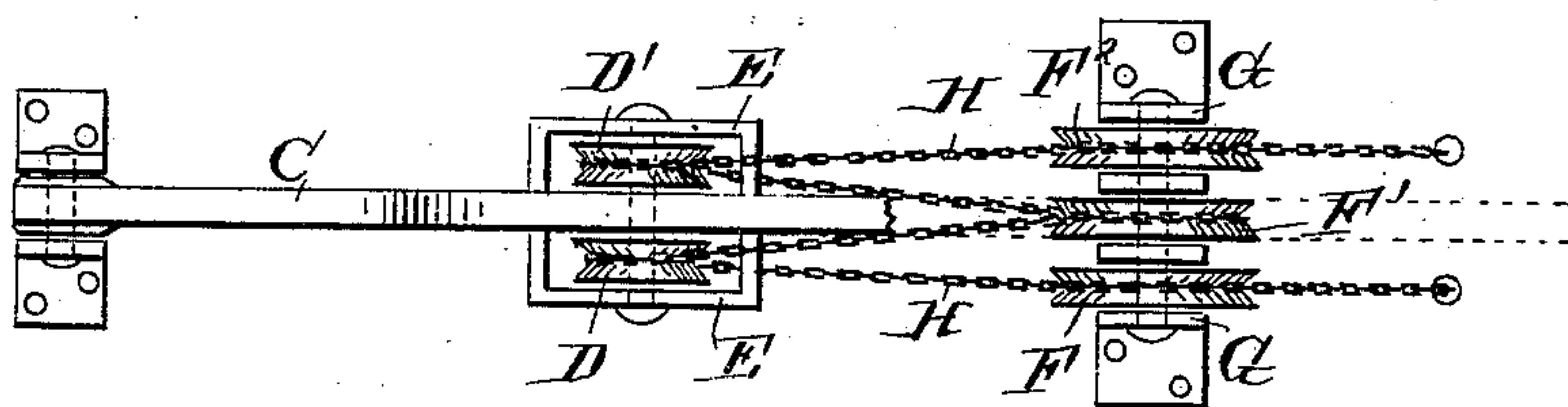


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES TAYLOR, OF NEW YORK, N. Y.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 299,595, dated June 3, 1884.

Application filed October 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES TAYLOR, of the city, county, and State of New York, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in balcony fire-escapes whereby the ladders connecting the balconies can be raised or lowered more readily.

The invention consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of a fire-escape balcony provided with my improvement. Fig. 2 is a plan view of the lever, chains, and pulleys, parts of the lever being broken off.

A ladder, A, which may be constructed as a rigid ladder or as a folding ladder, is pivoted to the bottom of a fire-escape balcony, B. On the floor of the said balcony a lever, C, is pivoted, to which two grooved pulleys, D D', are fastened, on opposite sides, which pulleys are held in suitable frames, E, secured to or formed on the sides of the lever. Three pulleys, F F' F², are pivoted to standards G, secured on the floor of the balcony B. A chain, H, has its ends secured to one of the side bars of the ladder A, at or near the middle of the length of the same. The chain H passes from the side bar of the ladder over the pulley F, around the pulley D, around the pulley F', around the pulley D', over the pulley F², and is then fastened at its other end to the side rail of the ladder. If the lever C is thrown in the direction of the arrow a', a sufficient length of the chain H will be taken up to raise the ladder to the under side of the

floor of the balcony. If the lever C is drawn in the reverse direction of the arrow a', the chain H will be slackened sufficiently to permit the ladder to swing down.

The pulleys D D' and F F' F² are arranged to act as a differential pulley, and the ladder can be raised without requiring any very great exertion of force, and the lever need be thrown but a comparatively small distance.

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

1. The combination of the lever C, pivoted to a support or balcony, provided with the pulleys D D', the chain H, and the pulleys F F' F², substantially as described, for operation as set forth.

2. The combination, with a ladder, of a support to which it is pivoted, a lever, a differential pulley formed by pulleys on the lever and on the support, and of a chain secured to the side bars of the ladder and passing over the pulleys, substantially as herein shown and described.

3. The combination, with a ladder, of a support to which it is pivoted, a lever pivoted on the support, pulleys pivoted on the lever, and pulleys pivoted on the support, and of a chain secured to the side bars of the ladder and passed over the several pulleys, substantially as herein shown and described.

4. The combination, with a ladder, of a support to which it is pivoted, the lever C, pivoted on the support, the pulleys D D', pivoted to the lever, the pulleys F F' F², pivoted to standards G on the support, and of the chain H, secured to the side bars of the ladder and passed over and around the several pulleys, substantially as herein shown and described.

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Witnesses:

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