

(No Model.)

J. W. CORDER.
FIRE ESCAPE.

No. 307,019.

Patented Oct. 21, 1884.

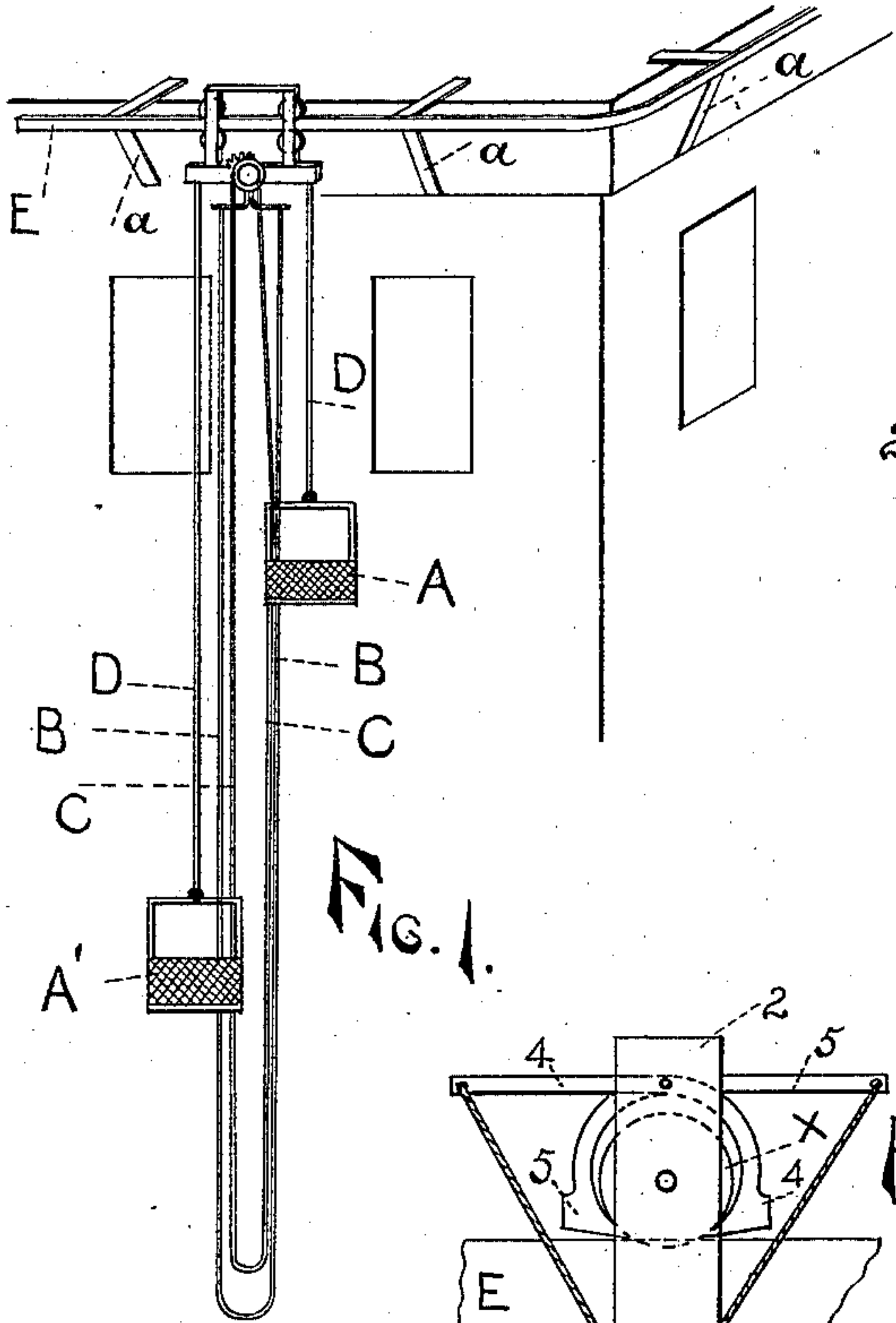


FIG. 1.

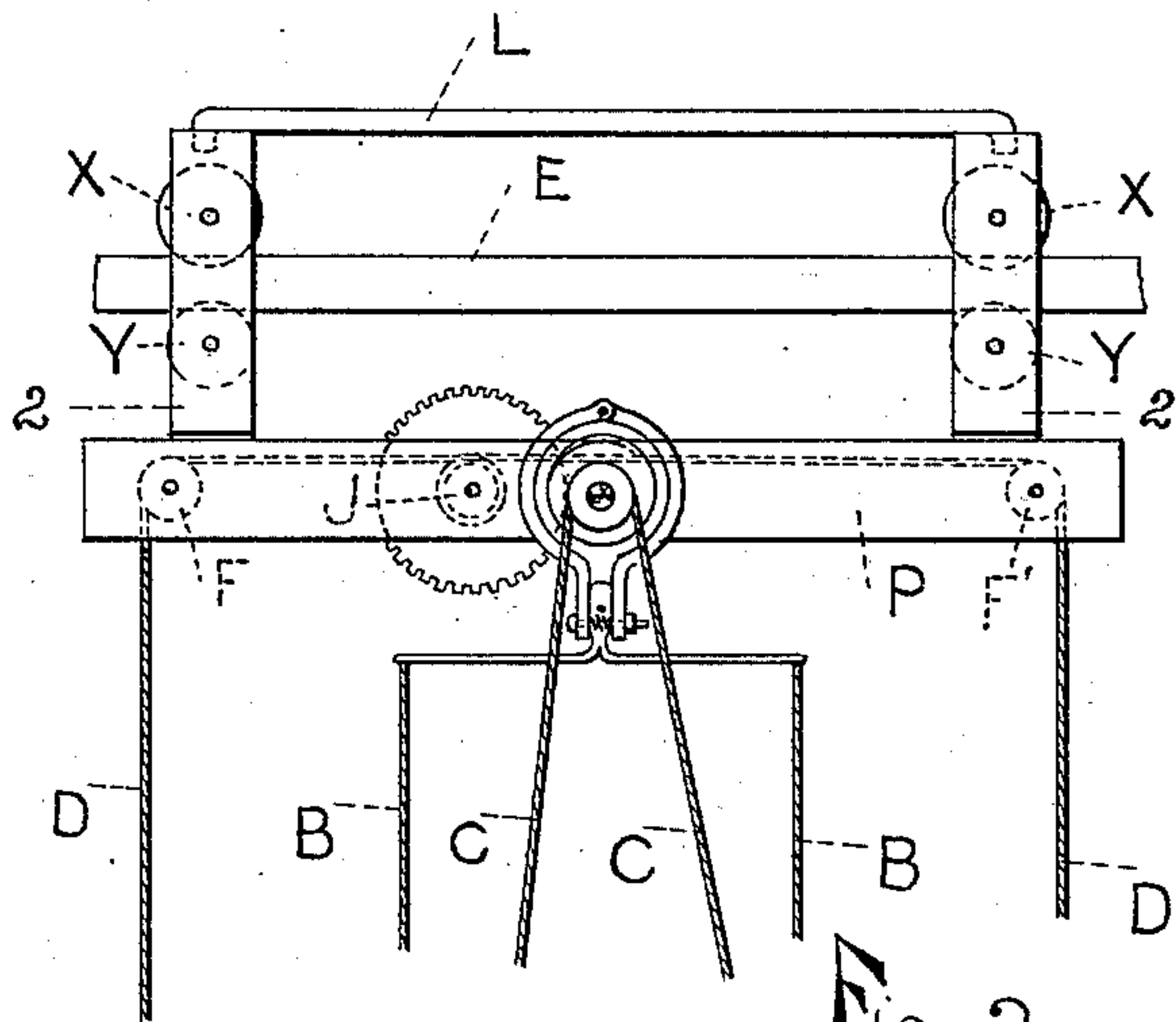


FIG. 2.

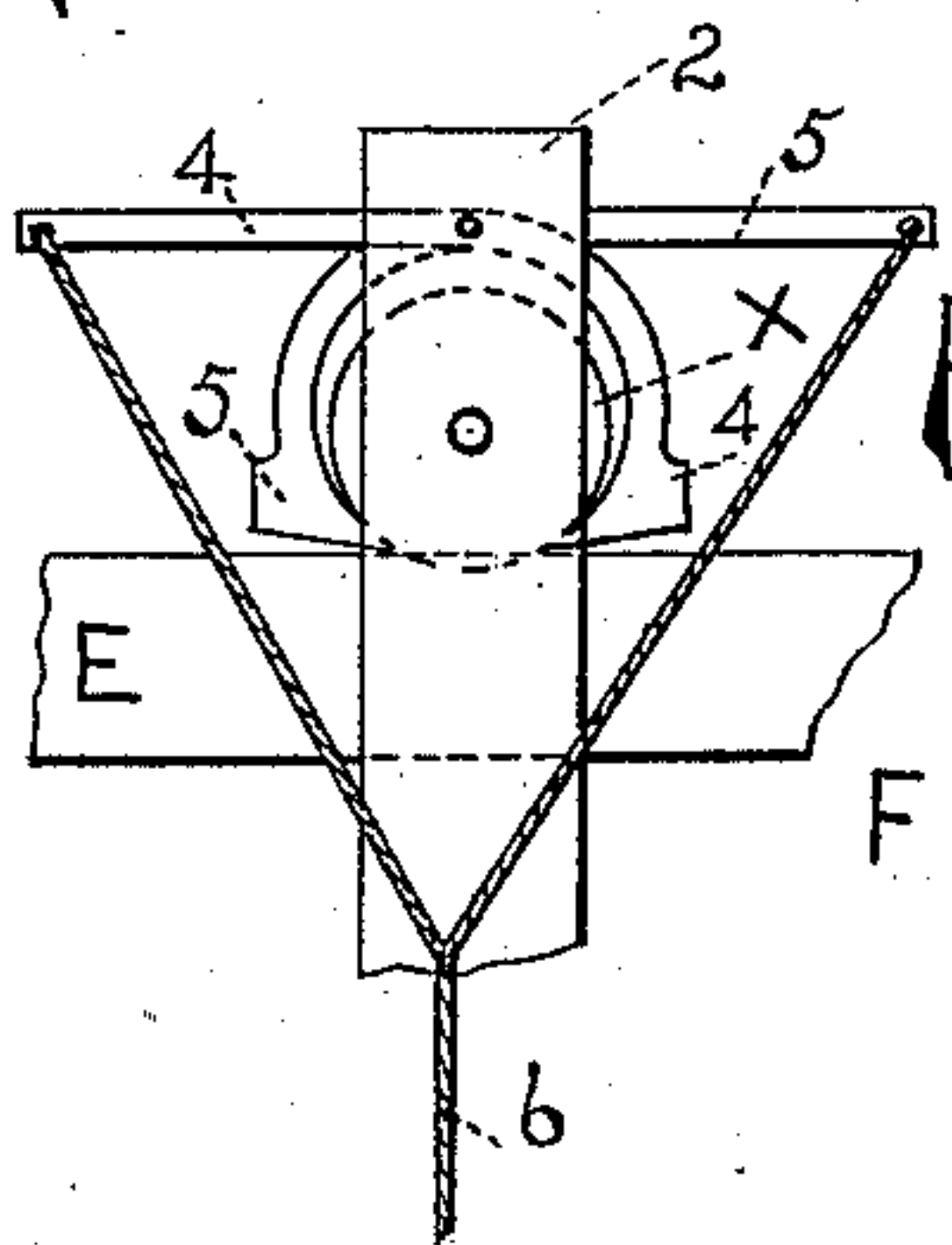


FIG. 3.

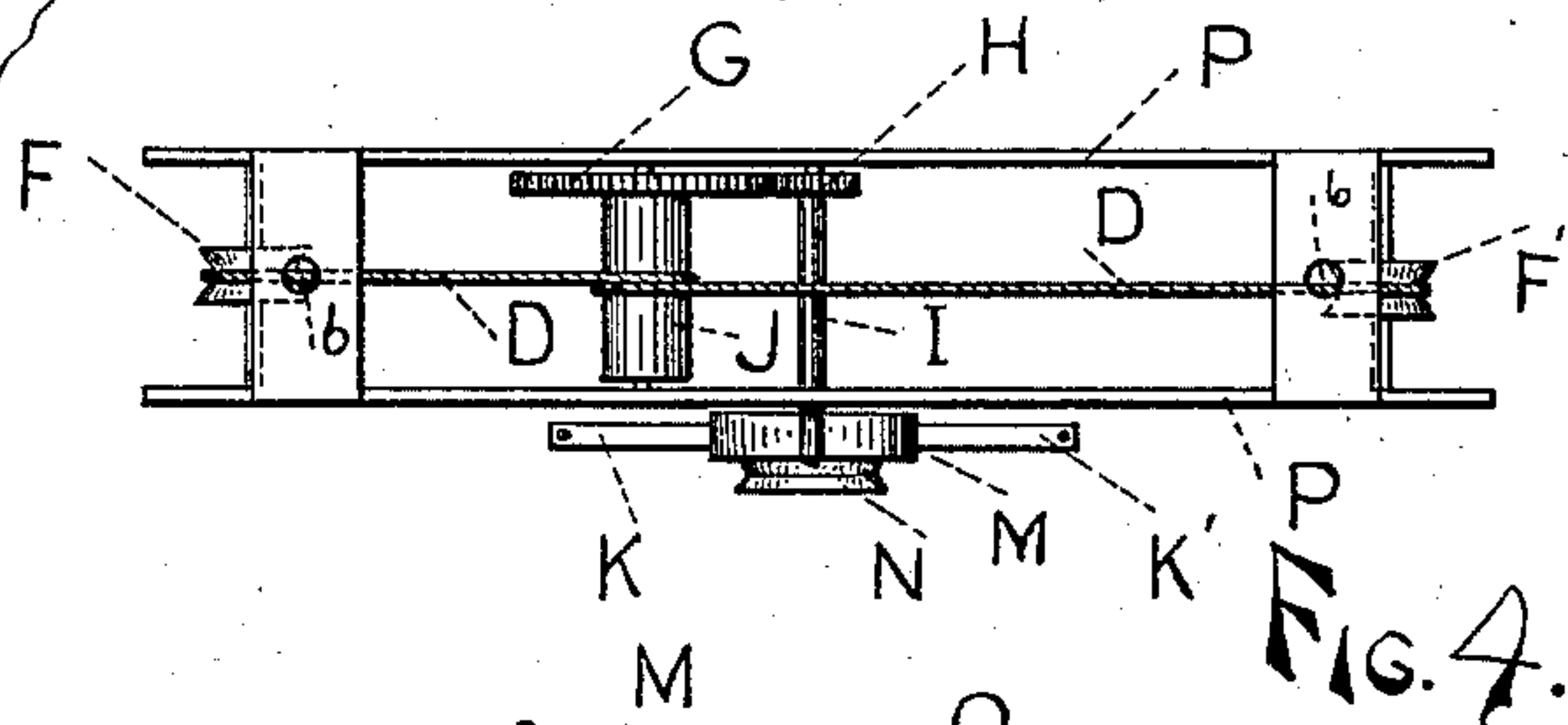


FIG. 4.

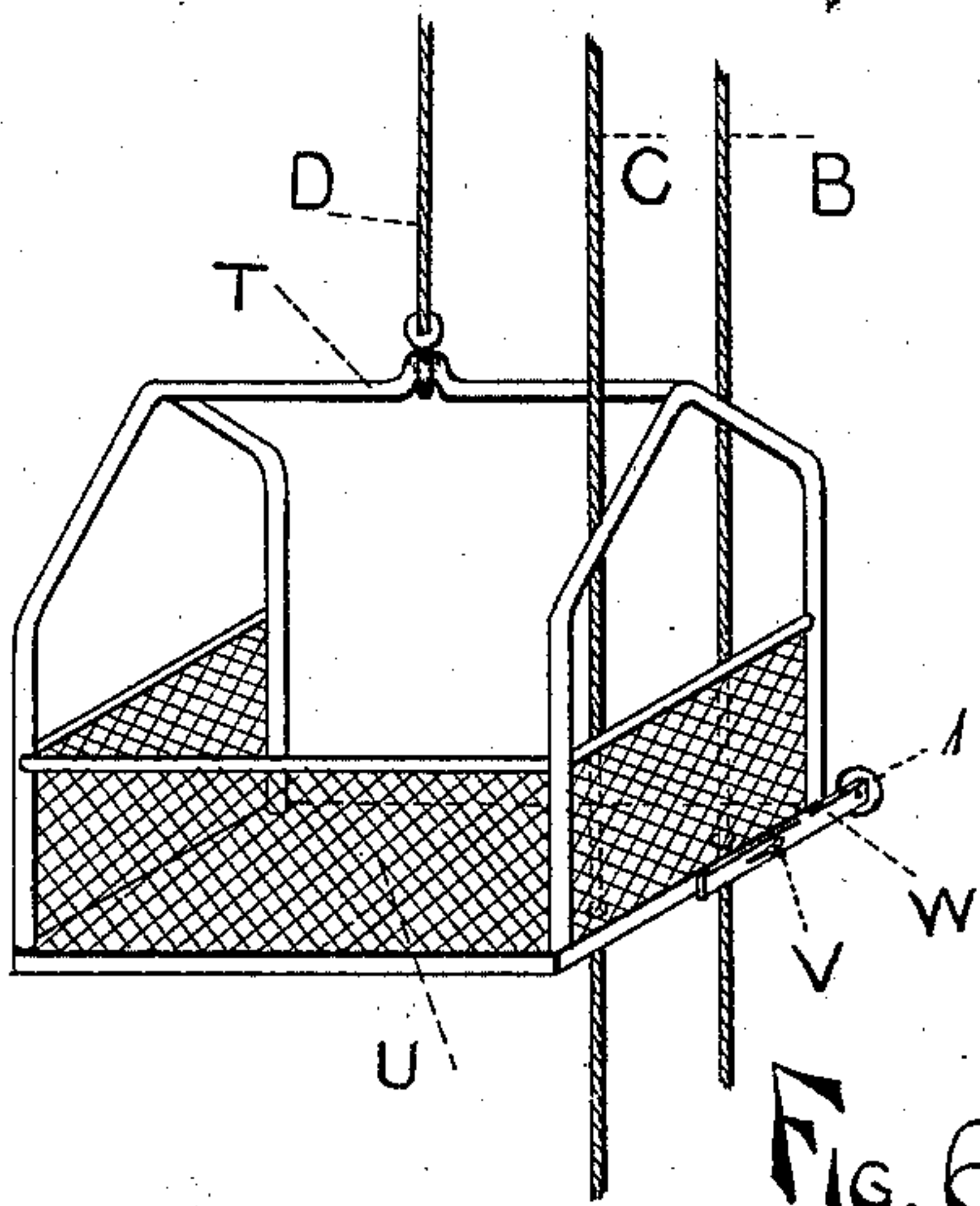


FIG. 5.

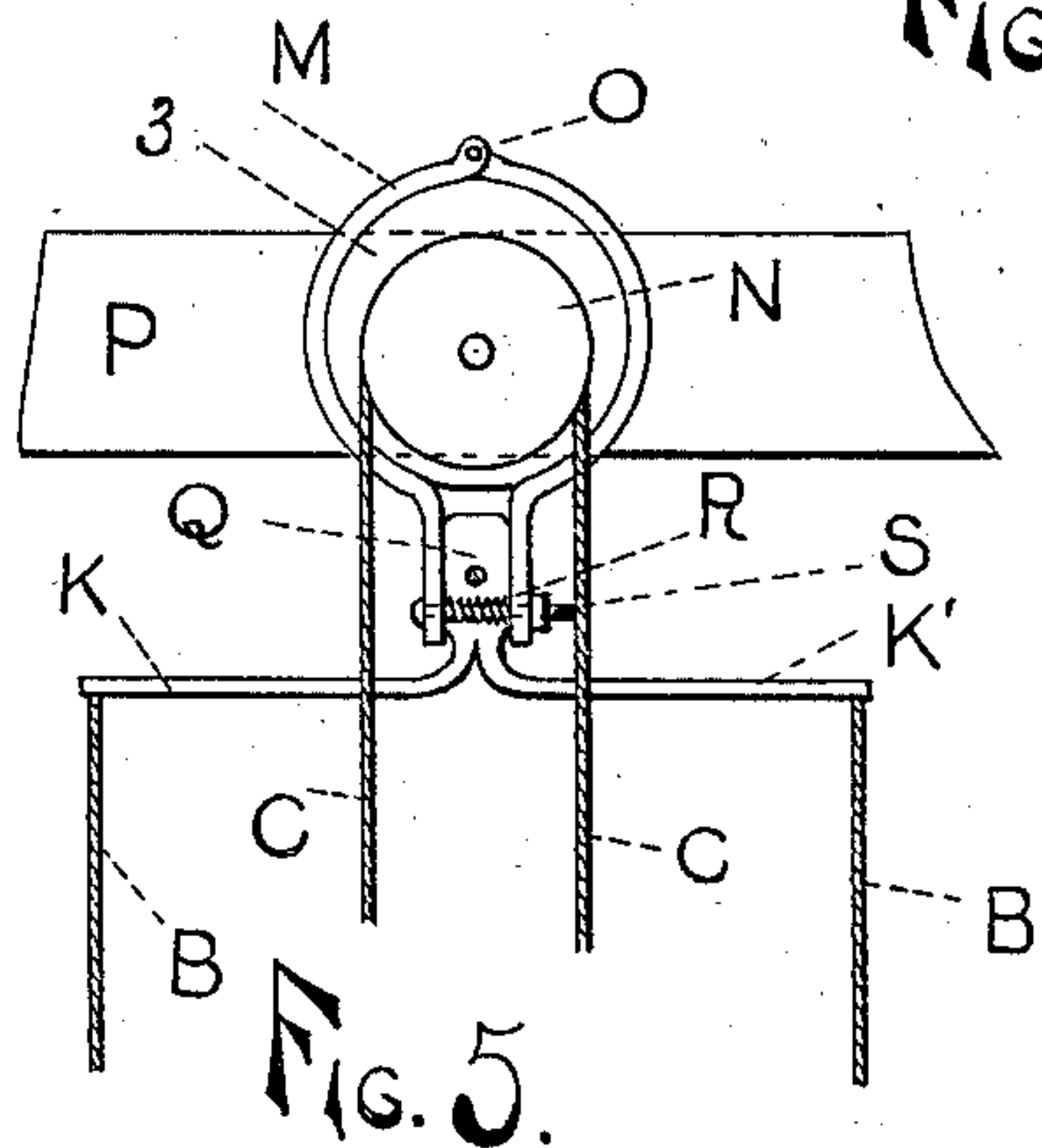


FIG. 6.

WITNESSES:

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 307,019, dated October 21, 1884.

Application filed June 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, JESSE W. CORDER, a citizen of the United States, residing at the city of Grand Rapids, county of Kent, and State of Michigan, have invented a new and useful Fire-Escape, of which the following is a specification.

My invention relates to improvements in fire-escapes in which the escape is adjusted to a building by means of a stationary track made fast to the top of a building, that the escape may be run round the building at pleasure to any point, passing round the corners as readily as on the sides; and the objects of my improvements are, first, to provide a continuous track around the building on which the escape will operate; second, to provide two baskets, so that while the one is ascending the other is descending, and may be stopped at any window or opening at any height and take a person on; and, third, that my invention may be used as an elevator when so desired, thereby making it useful at all times; and, finally, it may be fastened at a given point, and power attached for its more convenient use as an elevator. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention adjusted to a building, showing its position. Fig. 2 shows a side elevation of the carriage which operates on the track. Fig. 3 shows a side view of a brake for holding the carriage at any point. Fig. 4 is a plan view of the lower portion of the carriage, showing drum and gearings. Fig. 5 is a side view of a cam-brake to regulate the speed of descent of the baskets. Fig. 6 is a perspective view of the basket.

Similar letters refer to similar parts throughout the several figures.

a a a are braces to support the track *E* to the building.

A A are baskets attached to the cable *D D*, which passes over idle-pulleys *F F*, and is passed one or more times round the drum *J*, for the purpose of creating a friction on said drum sufficient to propel the baskets. The cables *B B* are attached to the levers *K K* of the cam-brake *Q*, which is made in two sec-

tions and jointed at *O*, and clasps friction-wheel 3 firmly, causing brake on the revolution of said friction-wheel, which brake is firmly held at the bottom by two spiral springs, *R*, which are provided with tension-nuts *S* on the ends of the same, thereby allowing the friction-wheel 3 to turn in the said brake *M*, when the brake is loosened on the said friction-wheel, by working the levers *K K*, that the said baskets may be raised or lowered as rapidly as desired.

C C is a hand-cable passing over the grooved-flange portion of the wheel 3, as shown at *N*, the object being to propel the gearings *H* and *G*, driving the drum *J*, and thus setting in motion the baskets *A A*, thereby allowing a person in the basket to elevate or lower himself, or to stand on the ground and operate the escape in rescuing others. The track *E* encircles the whole or part of the building, as may be desired, allowing the escape or elevator to be run to any point along the track and there worked.

I is a shaft on which friction-wheel 3 and the grooved flange *N* and the small spur-wheel *H* are attached at opposite ends, as shown in Fig. 4, in connection with the large spur-wheel *G*, made fast to drum *J*, for the purpose substantially as before described.

The bar *L* is firmly attached to the truck supports 2 2, as shown in the drawings, so that when passing a corner on said track the trucks may turn as a common caster, being provided with a pivotal pin passing through a hole in the carriage-frame *P P*, (shown at 6 6,) *P P* being side pieces of the lower portion of the carriage-frame.

The basket is made oblong, with four sides, having the side next the building open, *T* representing the bail or arm, *U* door of the basket, *V* a slot and set-screw to allow the slotted bar *W*, which receives the caster-wheel 1, to be adjusted so as to keep the basket a desired distance from the building, the caster working against the wall of the building.

X Y X Y represent the upper and lower pulley-wheels, respectively, supporting the carriage on track *E*.

4 and 5 are clutches to pulley-wheel *X*, for the purpose of stopping and securing the

escape or elevator from moving farther on the track at any point desired.

I am aware that prior to my invention fire-escapes have been made to be operated on a track somewhat similar to mine, but am not aware of any that is adjusted to the track as mine, or that there has yet been patented a fire-escape having two baskets worked as mine. I therefore do not claim, broadly, the general combination of the escape in connection with the means of running it around the building on the track; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The double truck with two sets of pulleys or travelers, X Y X Y, fastened to the supports 2 2, which supports are so adjusted to the lower portion of the carriage P P at 6 6, forming a pivot or swivel, that the truck may follow the track around the corner, substantially as described.

2. The combination of the brake M, jointed at O, passing round the friction-wheel 3, firmly secured by two spiral springs, R, and tightened by nuts S on the head of the cam Q, in con-

nection with levers K K, and operated by the cable-wire B B, and the flange N on friction-wheel 3, over which passes endless chain or cable, substantially as described.

3. The combination of the carriage by which cable D D, to which baskets A A are suspended, passes over pulleys F F, with one or more turns round drum J, and gearings G H, substantially as described.

4. The self-dropping clutches 4 and 5, dropping on the track E in front and behind wheel X, substantially as described.

5. The combination of the baskets A A on cable D D, passing over the idle-pulleys F F, round the drum J, in connection with gearing G, H, and I, and the friction-wheel 3 and N, and the brakes M, and the cam Q, and levers K, with spiral spring R, and nut S, and the hinge-joint O, all which are pivoted to supports 2 2, with X Y X Y, and connected by bar L at the top, substantially as described.

JESSE W. CORDER.

Witnesses:

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