

L. CARRIER.  
Dumb-Waiters.

No. 133,561.

Patented Dec. 3, 1872.

Fig. 1.

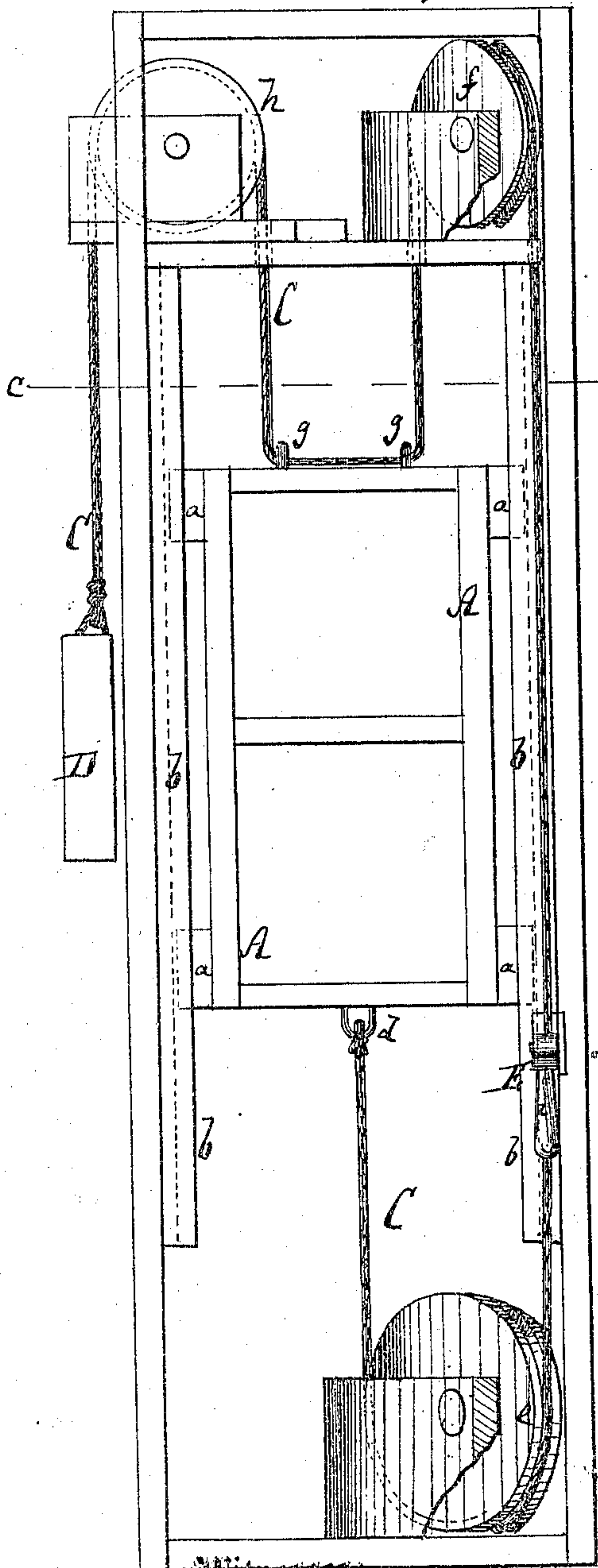


Fig. 2.

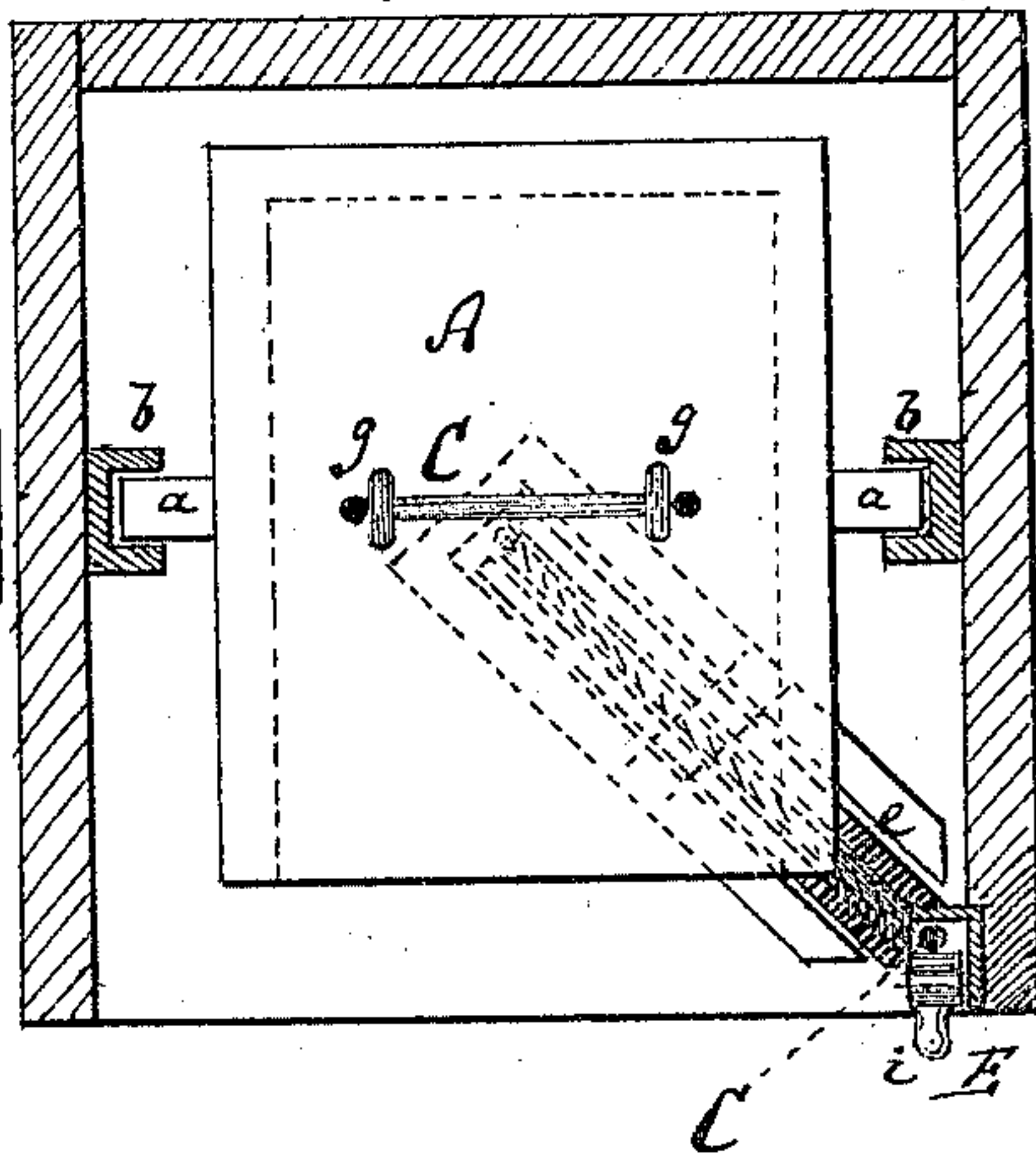
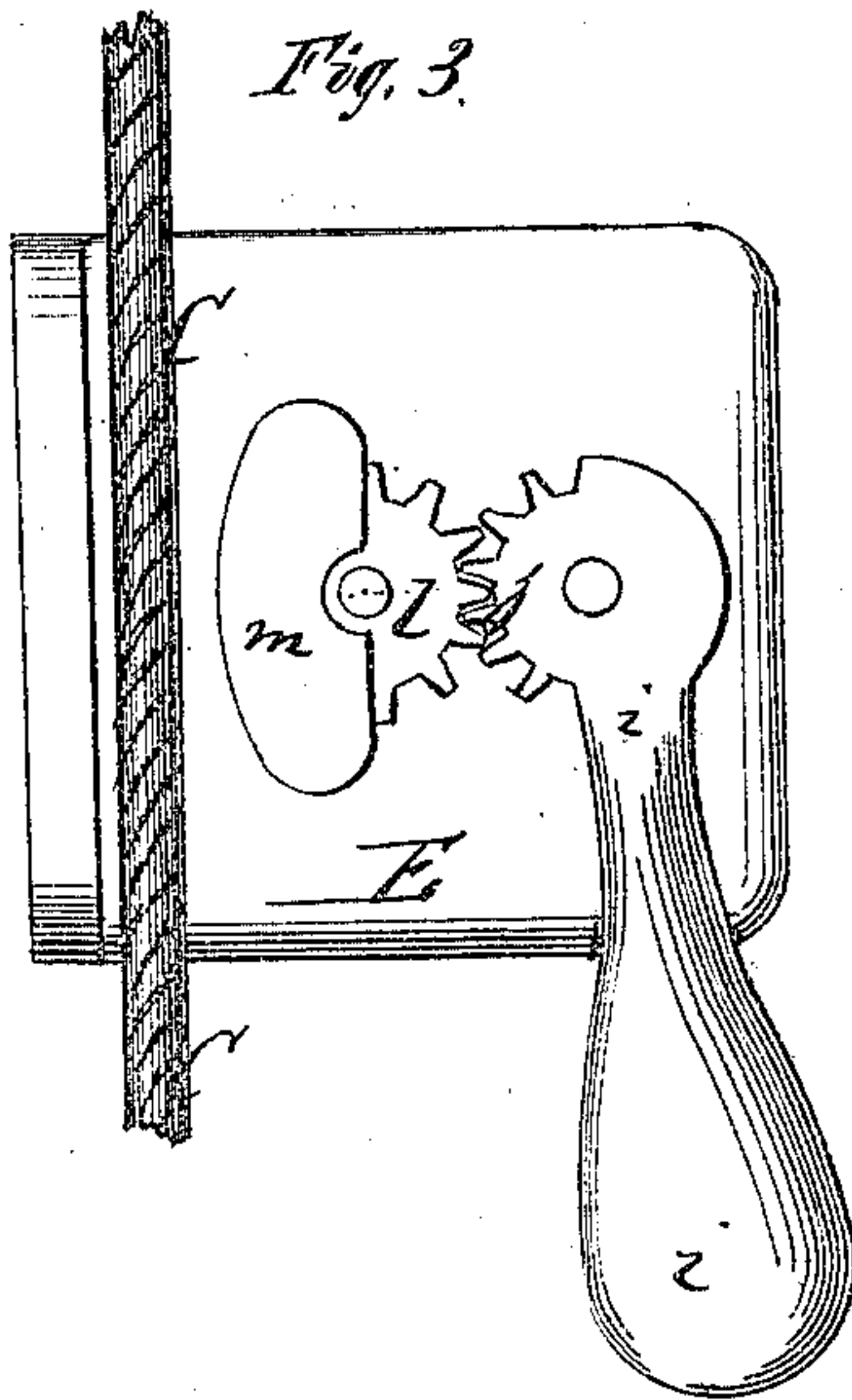


Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

LOUIS CARRIER, OF NEW YORK, N. Y.

## IMPROVEMENT IN DUMB-WAITERS.

Specification forming part of Letters Patent No. **133,561**, dated December 3, 1872.

*To all whom it may concern:*

Be it known that I, LOUIS CARRIER, of the city, county, and State of New York, have invented a new and Improved Dumb-Waiter, of which the following is a specification:

Figure 1 is a front elevation, partly in section, of my improved dumb-waiter. Fig. 2 is a horizontal section of the same on the line *c c*, Fig. 1. Fig. 3 is a detail face view of the clamp.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of suspending and balancing dumb-waiters, with the object particularly of holding the suspension-rope tense by the same weight that acts as balance for the dumb-waiter.

The invention consists in such an arrangement of said rope, and in such a manner of placing the pulleys and devices which hold it, that there will altogether be but one rope used for raising, lowering, and balancing the dumb-waiter, the balance-weight always holding it tense. The invention also consists in a new style of double-acting clamp for taking hold of the rope and holding the dumb-waiter at suitable height.

In the accompanying drawing, the letter A represents the dumb-waiter, of suitable size and shape; and B the case or frame wherein it moves. The dumb-waiter has projecting ears *a a* at the sides entering grooved guides *b b*, which are secured in the frame B, as shown. C is the rope by which the dumb-waiter is connected with the weight D that balances it. One end of this rope is attached to the under side of the dumb-waiter, and the other end to the weight D. From its connection at *d* with the dumb-waiter the rope passes around a pulley, *e*, hanging in the lower part of the frame B, is then extended up to and around a pulley,

*f*, which hangs in the upper part of the frame B, and thence carried down to connect with the top of the dumb-waiter. Here the rope passes through one or more staples, *g g*, fastened to the top of the dumb-waiter, and is then carried up again and over another pulley, *h*, and down to receive the weight D. Thus it will be seen that there is but one rope connecting with the top and bottom of the dumb-waiter, which rope is always held stretched by the weight, as it can be freely drawn through the staples. The pulleys *e* and *f* are set oblique, as indicated more particularly in Fig. 2, to bring the rope between *e* and *f* to the side of the frame B and within convenient reach of the attendants. There may also be clamps at the side of the frame B for gripping the rope and thereby locking the dumb-waiter at suitable height. The guides *b* may have leather or other elastic sides to be noiseless in operation. The clamp E, which is shown in the drawing, and more particularly in Fig. 3, is intended to be double acting. The clamp-lever *i* carries a toothed segment, *j*, which is in gear with a toothed segment, *l*, on the clamp proper *m*, so that in whichever direction the lever *i* may be swung it will carry the clamp *m* with one end against the rope C and lock the rope so it cannot be pulled in either direction.

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

The dumb-waiter A combined with single rope and weight, together with intermediate pulleys, as and for the purpose described.

LOUIS CARRIER.

Witnesses:

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