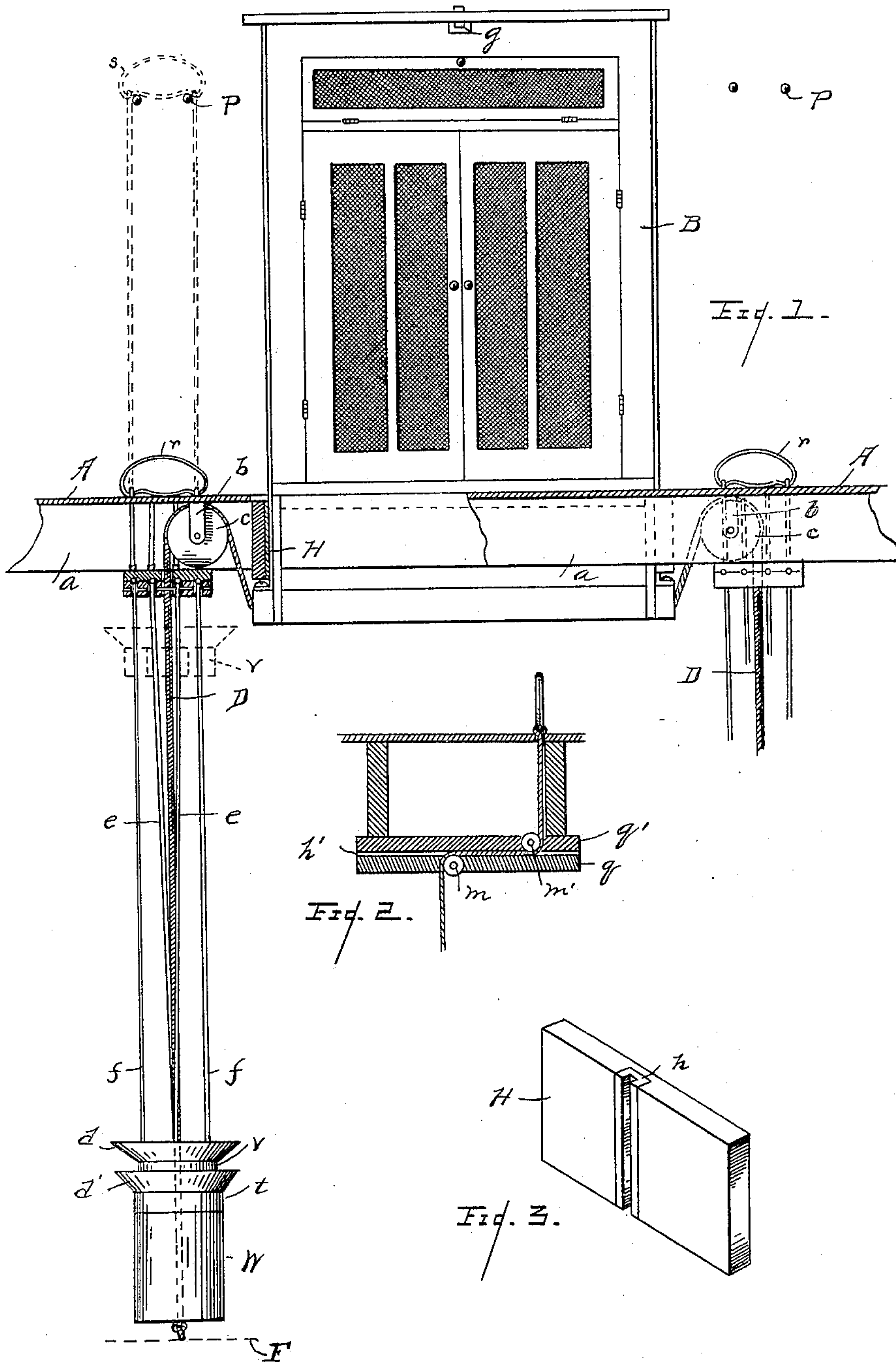


(No Model.)

W. R. FITSHET.
DUMB WAITER.

No. 604,232.

Patented May 17, 1898.



WITNESSES

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WILLIAM R. FITSHET, OF PINNEBOG, MICHIGAN.

DUMB-WAITER.

SPECIFICATION forming part of Letters Patent No. 604,232, dated May 17, 1898.

Application filed November 15, 1897. Serial No. 658,593. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. FITSHET, a citizen of the United States, residing at Pinnebog, county of Huron, State of Michigan, have invented a certain new and useful Improvement in Dumb-Waiters; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to dumb-waiters, and has for its object improvements by which kitchen-safes, ice-boxes, and other articles of a similar character may be arranged to be lifted into the kitchen or depressed below the floor and into the cellar at will, the object being not only to remove the article from the kitchen, but to remove it into the cooler regions of the cellar, where the articles stored in it may be preserved with less exposure to the heated air of the kitchen.

In the drawings, Figure 1 shows the invention in elevation. Fig. 2 shows a detail of the means for changing the direction of the cords which are connected with the auxiliary weights. Fig. 3 shows the guide through which the runner on the side of the safe travels.

A indicates the floor of the house, through which at the proper place there is cut a hole of the proper size and shape to permit the safe or other article of furniture to pass vertically.

B indicates a safe which is of ordinary form of construction, except that the bottom part of it extends below the bottom of the safe proper about the distance of the floor-joist, so that when in its lifted position, as shown in Fig. 1, the bottom of the extension reaches a short distance below the bottom or under edge of the floor-joist *a*. The edge of the hole through the floor is rabbeted, and the top of the safe is provided with a counter-rabbet, so that when in its lowermost position the safe rests with its top level with the floor, forming no obstruction above the floor.

To the floor are secured hangers *b*, which support sheaves *c*. To the bottom of the safe are secured strong cords which pass over the sheaves *c* and to the free ends of which are attached weights *W*. There are two main

cords *D*, one passing from each side of the bottom of the safe, over a sheave, and each sustaining a weight *W*, which is the main weight, and the two of said weights should slightly overbalance the weight of the empty safe and should be so arranged with reference to the safe that when the safe is in its most elevated position the weights will just reach and rest on the floor of the cellar. *F* indicates the floor of the cellar.

In addition to the weights *W* at the end of each cord there is with each cord one or more auxiliary weights and means for lifting them out of weight tension at will. These auxiliary weights are used to counterbalance the contents of the safe, and since the contents of the safe may sometimes be heavy and sometimes light the auxiliary weights are arranged so that the total weight of the counterbalance may be made to correspond with the total weight of the safe and its contents.

The means by which I lift the auxiliary weights out of tension consists of the parallel cords *e e*, attached to the lower auxiliary weight *t* and passing through the middle hole or perforation of any or all auxiliary weights which may be placed above the lowest auxiliary weight, passing through suitable holes in the floor and having attached to them at their upper ends a lifting-ring *r*. If more than a single auxiliary weight is used, each weight has its own pair of cords and its own lifting-ring. Thus the second auxiliary weight *v* (shown in the drawings) has the lifting-cords *f f* and the lifting-ring *s*.

The cords *e e f f*, leading from the rings *r s* to the auxiliary weights, preferably lead through the floor on a line about even with the back of the safe, (such a safe is generally located so that the back is near a wall,) and for each of the cords there are provided two sheaves *m m'*, arranged to carry the cord forward to a position directly over the weight.

With each auxiliary weight there is used, preferably, a plate or deeply-concaved dish *d d'*, the object of which is to catch the slack of the cords *e e f f* when the safe *B* is pushed downward. When this occurs, the cord *d* lifts the weight *W*; but inasmuch as the lifting-rings *r* and *s* have not been previously lifted the small auxiliary cords, by which the auxiliary weights are independently lifted,

become slack, and unless some provision is made for taking up or catching the slack these cords will be apt to foul the main weight. The pans *d d* catch the slack and prevent it
5 from fouling the other cords.

If both the auxiliary weights are under tension—that is, with their weight resting on the main weight—the top pan will catch all the slack of both sets of cords; but if, as some-
10 times happens, the upper weight has been lifted out of tension by drawing it upward and catching its lifting-ring *s* over the pin *P* in the wall then the slack of the small cords that lift the lower weight will be caught in the
15 lower pan when the safe is depressed. It is therefore desirable to have provision of this or some other similar character made with each one of the auxiliary weights.

At each side of the safe is a runner-bar *k*
20 *k*, and in a transom *H* in the floor are guide-ways *h*, properly arranged to engage the runner-bars *k k*.

In the top of the safe is a spring-bolt *g*, that catches in a properly-arranged housing in the
25 floor when the safe is depressed and holds the

safe down. This method of lifting a provision-safe from the cellar into the kitchen and depressing it from the kitchen into the cellar can be applied with equal readiness to an ice-box or any similar article of furniture. 30

What I claim is—

The combination with a provision-safe, a main counterweight for said safe, a cord connecting said safe and counterweight, and a sheave over which said cord passes, of an aux- 35
iliary weight adapted to be added to said main counterweight, cords whereby said auxiliary weight may be lifted from said main weight, means for sustaining said auxiliary weight in this lifted position, and a dish on 40
said auxiliary weight arranged to take up the lifting-cords of said auxiliary weight as they are slackened, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM R. FITSHET.

Witnesses:

CHARLES F. BURTON,
V. M. CLOUGH.