

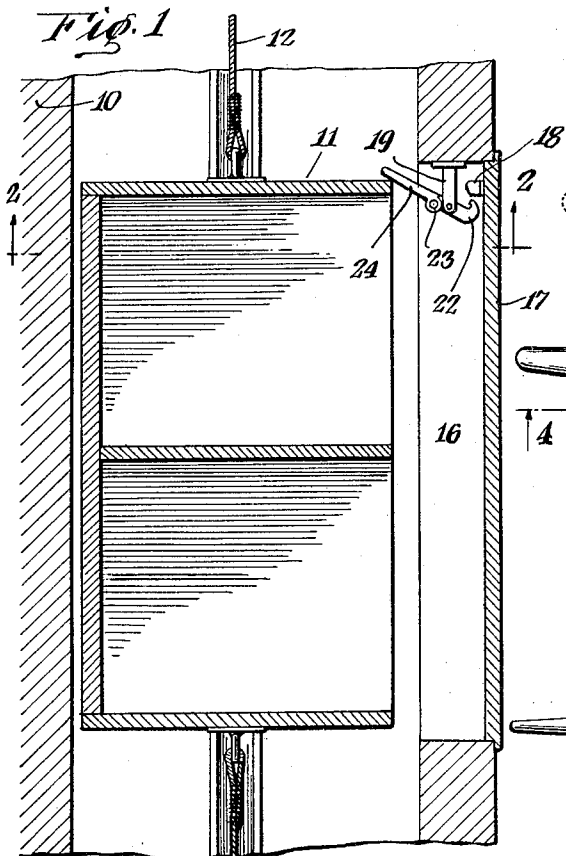
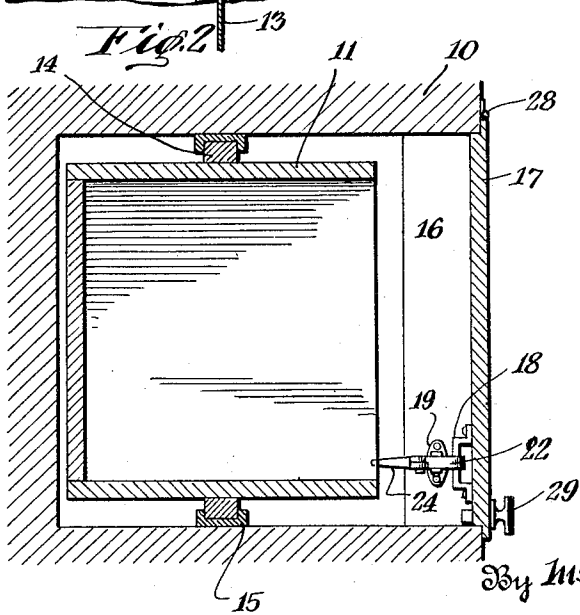
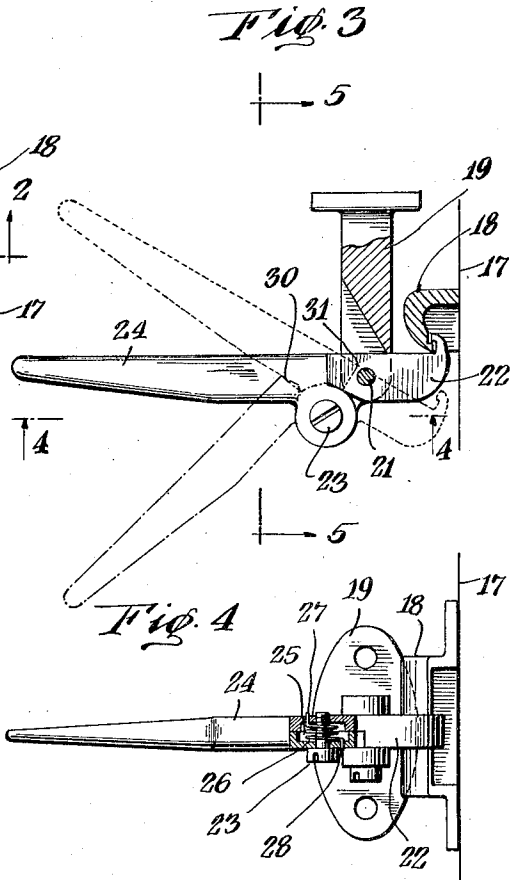
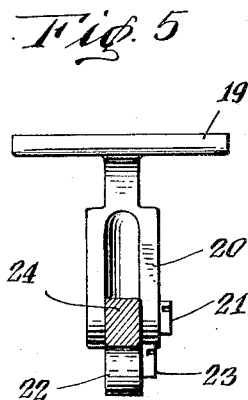
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I. ATTIAS

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DUMBWAITER DOORLOCK

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Inventor

Isidor Attias

By His Attorney

15 Attorney
Maurice R. R. R.

UNITED STATES PATENT OFFICE

ISIDOR ATTIAS, OF NEW YORK, N. Y.

DUMBWAITER DOORLOCK

Application filed January 28, 1931. Serial No. 511,764.

This invention relates to improvements in locking devices, particularly to a dumbwaiter lock, and it is the principal object of my invention to provide such a lock which normally keeps the doors opening into the dumbwaiter shaft locked and allows an unlocking of the same by the operator, only when the dumbwaiter is in front of the door.

Another object of my invention is the provision of a dumbwaiter door lock operating automatically to unlock the dumbwaiter shaft doors when the dumbwaiter is in front thereof and to lock the same again when the dumbwaiter is moving away from the door.

A further object of my invention is the provision of a dumbwaiter door locking device of simple and inexpensive construction, yet durable and highly efficient in operation.

A still further object of my invention is the provision of a dumbwaiter door lock, the operating end of which is automatically carried into its normal position by a spring in order to engage with its finger a keeper on the door closing the dumbwaiter shaft opening.

These and other objects and advantages of my device will become more fully known as the description thereof proceeds and will then be specifically defined in the appended claims.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a fragmentary sectional elevation of a dumbwaiter shaft and dumbwaiter therein equipped with a door locking device constructed according to my invention.

Fig. 2 is a section on line 2—2 of Figure 1.

Fig. 3 is a side elevation of the door locking lever partially in section.

Fig. 4 is a bottom plan view of the locking lever seen in the direction of arrows 4—4 of Figure 3.

Fig. 5 is a partly sectional front elevation of the locking lever seen in the direction of arrows 5—5 of Figure 3.

As illustrated, in a dumbwaiter shaft 10 of any conventional type, a dumbwaiter 11

is vertically moved up and down by means of its cables 12, 13, in the usual well known manner guided by its ribs 14 in vertical guide pieces 15 in the shaft.

At each floor of the building the shaft 10 has the usual opening 16 formed in the wall of the dumbwaiter shaft and closed by a door 17.

Near its upper edge on the side of the dumbwaiter shaft the door carries a keeper 18, and depending into the opening 16 is a bracket 19 secured to the upper face of the wall in which opening 16 is formed.

The lower end of the bracket is forked, as at 20, and between the prongs of the fork is pivotally attached, as at 21, a finger 22 adapted to normally engage with its outer end the keeper 18 and to hold the dumbwaiter door locked.

To the inner end of finger 22 is pivotally attached, as at 23, the inner end of a lever 24 having a chamber 25 formed in its inner end through which pivot pin 23 passes, and a spring 26 is wound about said pin within said chamber and has one of its ends secured in the side wall of said chamber on one side of the pin, as at 27, while its other end rests against the other side wall of the chamber on the opposite side of the pin.

The door 17 is hinged, as at 28, to the outer wall of the dumbwaiter shaft and has an operating knob 29. Lever 24 has an outer shoulder 30 formed therewith adapted to engage an inner shoulder 31 of finger 22 if raised by the dumbwaiter top to operate said finger.

In operation, the lever 24 will normally assume the position shown in Figure 3, in broken lines inclined towards below, with the finger 22 engaging the keeper 18, so that the dumbwaiter door 17 cannot be opened.

If the operator is about to collect the garbage or other refuse he raises the dumbwaiter 11 in the usual well known manner, and its upper edge will come into contact with the inner end of lever 24, and elevate the same into the position shown in Figure 3 in dotted lines inclined towards above so that shoulder 30 will engage shoulder 31 of the finger 22 and the same will be disengaged from its

keeper thus allowing an opening of the door. Upon lowering of the dumbwaiter or moving the same to pass door 17 the lever 24 will be forced by its spring again into its position inclined towards the bottom of the shaft so that its finger will again engage keeper 18 and lock the door.

It will be understood that I have described and shown the preferred form of my device only, and that I may make such changes in the construction of my device as come within the scope of the appended claims without departure from my invention.

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

1. A locking device for the doors of dumbwaiter-shafts, comprising a keeper, a bracket adapted to be secured to a wall of a dumbwaiter shaft, a finger pivoted on said bracket, said finger normally engaging said keeper to hold the door locked, a spring, and a lever controlled by said spring adapted to be raised by the dumbwaiter to disengage said finger from said keeper when the dumbwaiter is raised into position in front of the door, said spring automatically engaging the finger with the keeper as soon as the dumbwaiter is moved away from the door.

2. A locking device for the doors of dumbwaiter-shafts comprising a keeper attached to the inner face of the door, a bracket secured to the dumbwaiter-shaft wall depending into the door opening, a finger pivoted on said bracket adapted to engage said keeper, a spring, and an operating lever for said finger controlled by said spring adapted to normally extend into the path of a rising dumbwaiter to disengage said finger from its keeper as soon as the lever is displaced by the rising dumbwaiter, said spring being adapted to guide the lever back into normal position to operate said finger for engaging its keeper.

3. A locking device for the doors of dumbwaiter-shafts, comprising a bracket having a forked lower end, a finger pivoted between the prongs of said fork, a keeper adapted to be normally engaged by said finger, said finger having an inner-shoulder, an operating lever pivoted to said finger having an outer shoulder, and a spring for normally holding said lever in alignment with said finger but allowing an operation of the same upon engagement by a rising dumbwaiter to disengage the finger from its keeper.

4. In a dumbwaiter lock of the class described, a locking finger adapted to normally engage a keeper on a dumbwaiter-shaft door to keep the same locked, a forked bracket between the prongs of which said finger is pivoted, at its inner end, an operating lever having its inner end provided with a chamber and pivotally attached to the inner end of said finger by a pin, a spring wound about said pin within said chamber and having one of

its ends secured in the side wall of said chamber on one side of said pin, and its other end resting against the other side wall of said chamber on the opposite side of said pin, an outer shoulder formed on said lever, and an inner shoulder formed with said finger adapted to engage if the operating lever is raised by the top wall of a dumbwaiter as it is raised into position in front of said door to disengage said finger from said keeper, said spring automatically engaging said finger with the keeper as soon as the dumbwaiter moves away from the door.

In witness whereof I have signed my name to this specification.

ISIDOR ATTIAS.