(No Model.) 2 Sheets—Sheet 1.

G. W. HENNION.

DUMB WAITER REGULATOR.

No. 422,409. Patented Mar. 4, 1890.

Fig. 1.

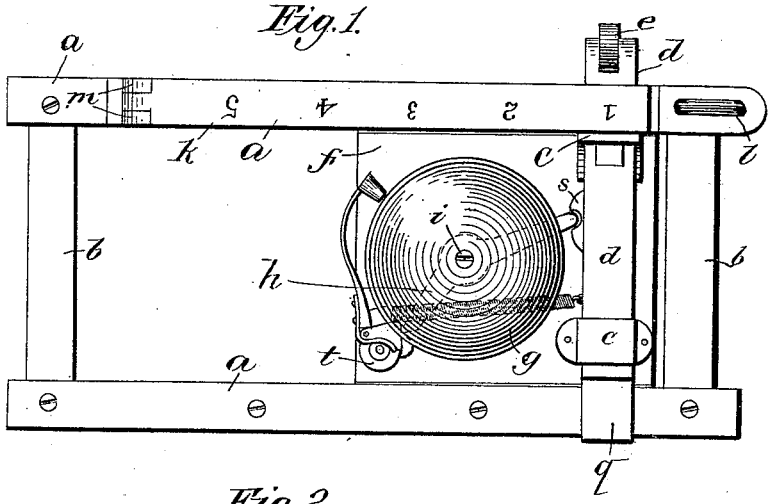


Fig. 2.

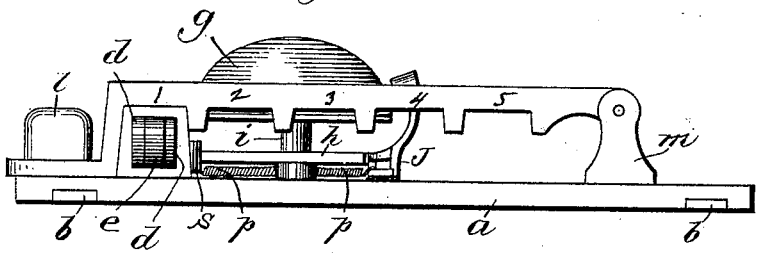


Fig. 3.

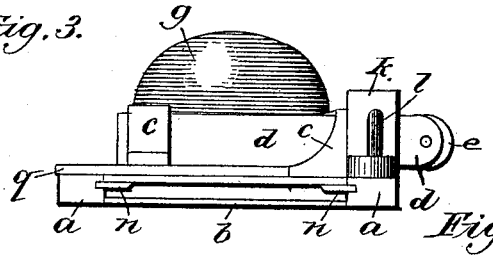


Fig. 6.

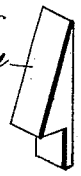


Fig. 5

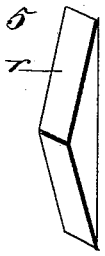
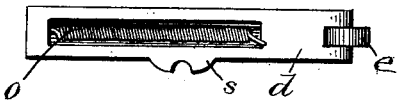


Fig. 4.



Witnesses:
Frank L. Schaffer
George J. Brown

Inventor:
George W. Hennion

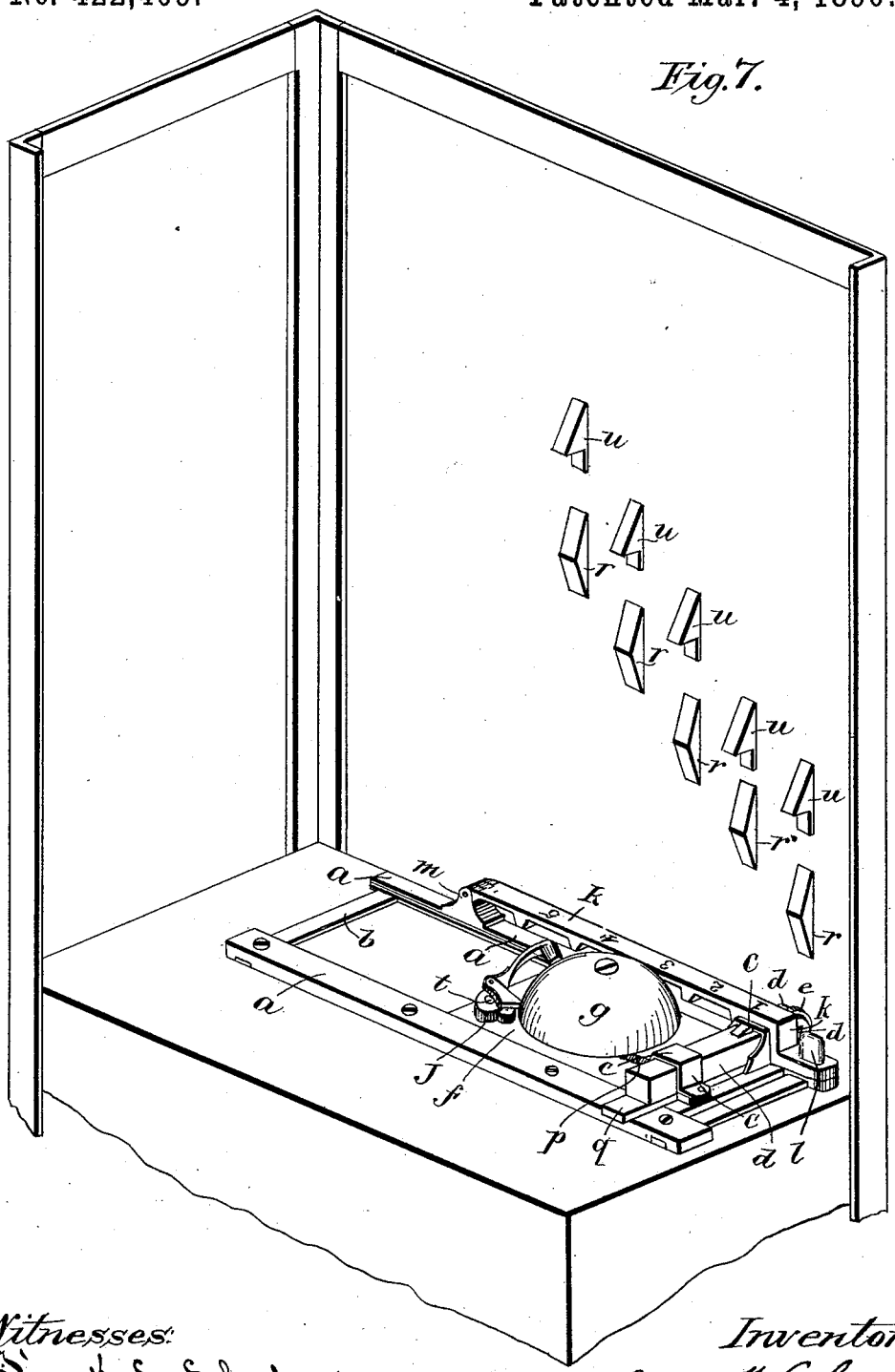
(No Model.) 2 Sheets—Sheet 2.

G. W. HENNION.

DUMB WAITER REGULATOR.

No. 422,409. Patented Mar. 4, 1890.

Fig. 7.



Witnesses:
Frank L. Schafer
George J. Brown

Inventor:
George W. Hennion

UNITED STATES PATENT OFFICE.

GEORGE W. HENNION, OF BROOKLYN, NEW YORK.

DUMB-WAITER REGULATOR.

SPECIFICATION forming part of Letters Patent No. 422,409, dated March 4, 1890.

Application filed July 8, 1889. Serial No. 316,881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HENNION, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Dumb-Waiter Regulators, which improvement is fully set forth in the following specification.

My invention relates to an improvement in dumb-waiter regulators which makes it impossible for a dumb-waiter to go beyond the story or floor desired. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the regulator. Fig. 2 is a vertical side view as it appears set for first story; Fig. 3, a vertical end view; Fig. 4, a bottom view of slide-bolt, showing spiral spring and socket; Fig. 5, a perspective view of beveled bracket; Fig. 6, a perspective view of stopper; Fig. 7, a view in perspective of a section of dumb-waiter with regulator attached, and beveled brackets and stoppers in their position on the inside of shaft through which the dumb-waiter runs.

Similar letters refer to similar parts throughout the several views.

All the parts are made of iron or other metal, and are constructed as follows: Two grooved bars *a*, set parallel to each other, connected by two plain bars *b*, one at each end, set at right angles, firmly fastened together, form the track on which to adjust the regulator. Through these grooved bars *a* there are several countersunk holes wherein to insert screws to secure them to the dumb-waiter. On one end of one of these grooved bars *a* the hinge-socket *m* is attached to receive the hinge end of latch *k*, and on the other end of the same bar *a* there is a thumb-screw *l* attached to secure the latch *k*. This latch *k* has several recesses on the under side, which are numbered from 1 to 5, inclusive. Each number designates a story or floor. The latch *k* is to be increased in length and in the number of recesses to apply to buildings of more than five stories in height, or decreased in length and in the number of openings for buildings less than five stories high.

Between the grooved bars *a* the bottom plate *f* of the regulator is placed. On the under side of said plate *f* four slides *n* are firmly fastened—two on each side—nicely fitted to the grooves in bars *a*, so as to move freely. In the center and top side of plate *f* there is an upright or bolt *i*, firmly fastened to plate *f*, to which the lever *h* is attached in the center, and the gong or bell *g* on the upper end. On the upper corner and top side of plate *f* there is a small upright or bolt *t*, to which the hammer *j* is attached. On top side of plate *f*, directly under the slide-bolt *d*, is a thin bar *q*, which projects out beyond plate *f* and extends to the outer side of grooved bars *a*. On top of this bar *q* two clamps or straps *c* are firmly attached. Through these two clamps or straps *c*, and resting on bar *a*, the slide-bolt *d* is placed. On one end of slide-bolt *d* there is a small wheel *e* to lessen the friction when coming in contact with the beveled brackets *r*. Inside of slide-bolt *d* there is a spiral spring *o* for actuating it in one direction. One end of spring *o* is attached to slide-bolt *d*. The other end is secured to top side of bar *q*. On one side of slide-bolt *d* there is a small socket *s* to receive one end of lever *h*. The center of lever *h* is attached to upright *i*. The other end connects with the hammer *j*. Attached to the hammer *j* there is a spiral spring *p*, the other end of which is secured to plate *f*. The beveled brackets *r* and the stoppers *u* are not attached to the dumb-waiter, but are secured to the inside of the shaft or well in which the dumb-waiter runs, so as to correspond with the recesses in latch *k*. The regulator is secured to the dumb-waiter so that the wheel end of slide-bolt *d* projects out beyond the dumb-waiter far enough to come in contact with the beveled brackets *r* and stoppers *u*.

In order to set the regulator to any story or floor desired, loosen the thumb-screw *l*, then raise the latch *k* and place the slide-bolt *d* in the recess in the under side of the latch corresponding with the number of the story or floor desired, and then replace the latch *k* and fasten it.

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

1. In a regulating mechanism for dumb-waiters, in which a series of stops and brackets are arranged out of alignment along the side wall of a shaft or well, a latch provided with a series of recesses corresponding with

the stops and brackets, and a bolt adapted for adjustment to play through said recesses to contact with the said stops and brackets, substantially as set forth.

2. A regulator for dumb-waiters, comprising a rectangular frame, a base-piece slidable therein supporting an alarm mechanism and having guides for a bolt, said bolt, which is provided with a spring for actuating it in one direction, a latch hinged to said frame and having a series of recesses for the bolt corresponding to the number of stories of the building, and a series of brackets and stops placed on one side of the shaft or well, substantially as set forth.

GEORGE W. HENNION.

Witnesses:
GEORGE J. BROWN,
FRANK L. SCHAFER.