

No. 742,092.

PATENTED OCT. 20, 1903.

M. COSSEY.
LATCH.

APPLICATION FILED JUNE 27, 1903.

NO MODEL.

Fig. 1.

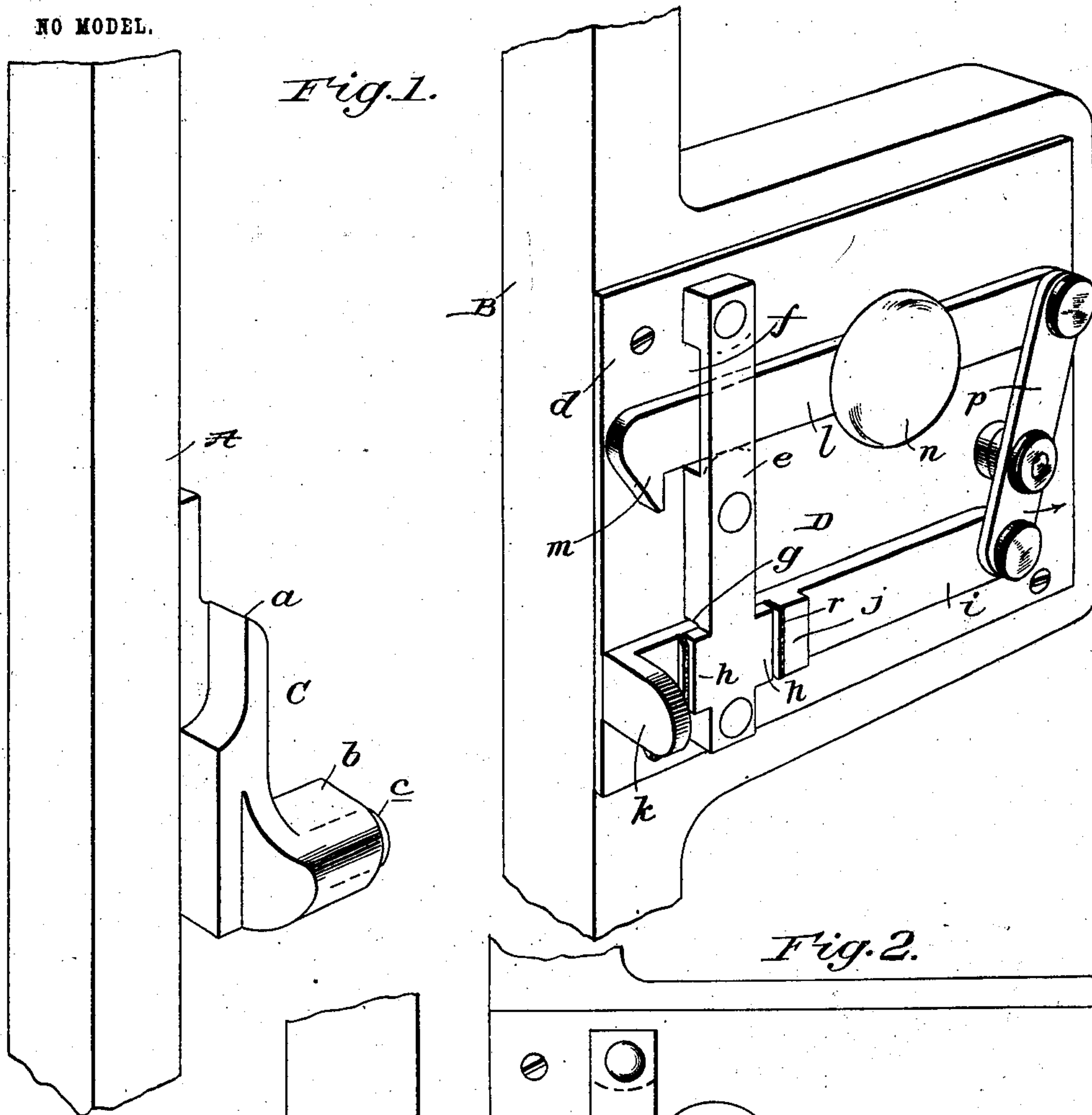


Fig. 2.

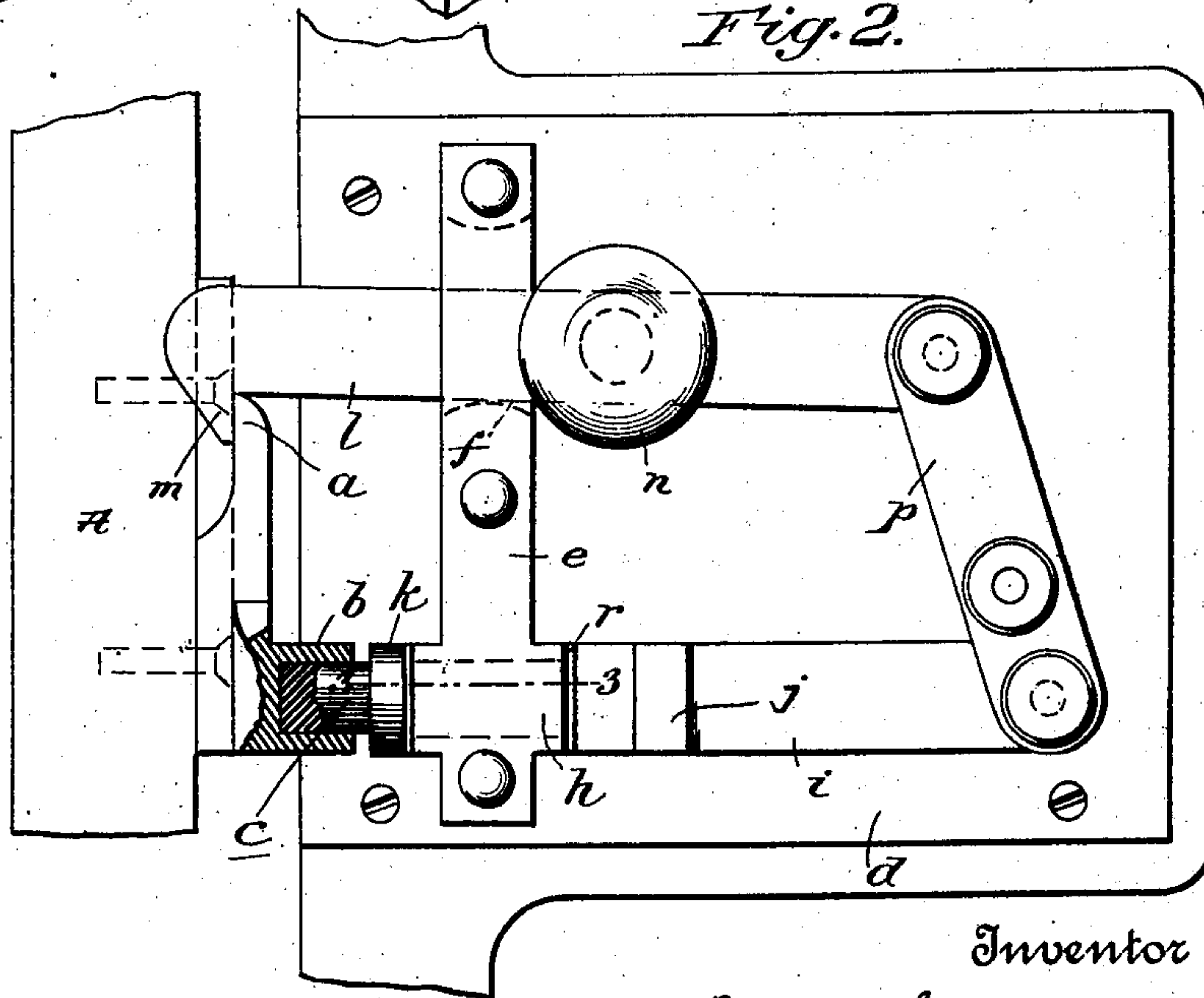
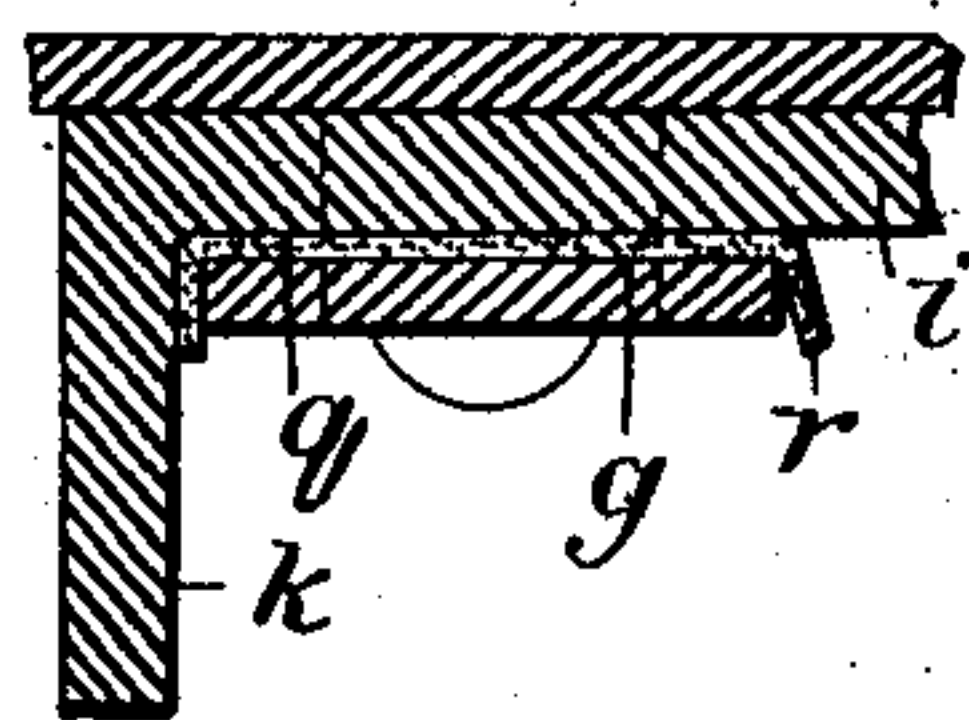


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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BALL BEARING DOOR HANGER COMPANY.

LATCH.

SPECIFICATION forming part of Letters Patent No. 742,092, dated October 20, 1903.

Application filed June 27, 1903. Serial No. 163,348. (No model.)

To all whom it may concern:

Be it known that I, MYRON COSSEY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Latches, of which the following is a specification.

My invention pertains to latches, more particularly latches for elevator-doors; and it has for one of its objects to provide a simple latch of such construction that when the door to which the latch is applied is open all parts of the latch will rest within the outline of the door, where they will not be liable to catch against the clothing of persons passing through the door-opening, while when the door is closed the engagement of the catch with its keeper will be assured.

Another object of the invention is to provide a latch with simple and inexpensive means for reducing the noise incident to the operation of the latch to a minimum.

Other advantageous features of the invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, in which—

Figure 1 comprises disconnected perspective views of the separable members of my improved latch. Fig. 2 is a view, partly in side elevation and partly in vertical section, illustrating said members as connected; and Fig. 3 is a detail section taken in the plane indicated by the broken line 3 3 of Fig. 2.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is an elevator-door jamb; B, a sliding elevator-door; C, that member of my improved latch which is fixed to the jamb, and D the member carried by the door. The latch member C comprises a casting or other piece of metal adapted to be secured to the jamb A and having a beveled keeper *a* and a socket *b* and a buffer *c*, of rubber or other yielding material, arranged in and projecting from said socket. The member D is made up of a body *d*, adapted to be connected to the door; a guide *e*, fixed to the body and having ways *f g* and also having lateral projections *h* at the opposite ends of the way *g*; a slidable bar

i, movable through the way *g* and having abutments *j k* disposed at opposite sides of the projections *h*; a slidable and gravitating catch *l*, movable through the guideway *f* and having a beveled hook *m* at its forward end and also having a knob *n*; a lever *p*, fulcrumed at an intermediate point of its length on the body and loosely connected, preferably in a pivotal manner, to the slide-bar *i* and the catch *l*, and a strip *q* of rawhide arranged in the guideway *g* and having end portions *r*, adapted to lap over the ends of the projection *h* after the manner best shown in Fig. 3.

With the latch members C and D relatively arranged as shown it will be observed that when the door is closed the abutment *k* on the slide-bar *i* will bring up against the buffer *c*, with the result that the lever *p* will be rocked in the direction indicated by arrow in Fig. 1 and the hook *m* of the catch *l* will be caused to ride up over and drop into engagement with said keeper—this latter because of the fact that the bar *i* is pressed rearwardly and the catch *l* forwardly by the engagement of the said bar *i* with the buffer *c*. It will also be observed that when the elevator-conductor grasps the knob *n* and presses it toward the right to open the door the catch *l* will be moved toward the right and into a position entirely within the outline of the door, in which position it is not liable to catch into the clothing of persons passing through the door-opening. It will further be observed that when the bar *i* is moved rearwardly its abutment *k* will bring up against the rawhide covering the front projection *h*, while when said bar is moved forwardly its abutment *j* will strike against the rawhide covering the rear projection *h*. From this it follows that the rawhide packing is enabled to reduce to a minimum the noise incident to the operation of the latch.

While I prefer to use rawhide packing for the purpose stated—this because of the strength and durability of such material—I desire it understood that other suitable material may be used for the purpose without involving a departure from the scope of my invention. I also desire it understood that rawhide or other suitable packing may be used between all of the striking parts of my

latch and the parts against which such first-mentioned parts strike without departure from my invention.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however,

to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A latch member comprising a body, provided with guideways, a bar movable through one guideway, and having abutments, a gravitating catch movable through the other guideway, and a connection between the bar and the catch for moving one by the other.

2. A latch member comprising a body, a guide *e* fixed thereto, and having two ways, a bar movable through one way, and having abutments disposed at opposite sides of the guide *e*, a gravitating catch movable through the other way, and a lever fulcrumed on the body, and having arms connected to the bar and the catch.

3. The combination of a door-jamb, a sliding door, a latch member carried by the door, and comprising a movable bar, a movable catch, and a connection between the bar and catch for moving the latter by the former; the said parts being so positioned that when the catch is in its rear position, the said catch and the movable bar will entirely rest within the outline of the door, and a latch member arranged on the jamb, and comprising a

keeper for the catch, and a device for engaging the bar; the said device resting nearer the door than does the keeper.

4. A latch member comprising a body, a guide *e* fixed thereto, and having two ways, a bar movable through one way, and having abutments disposed at opposite sides of the guide *e*, packing interposed between the said abutments and guide *e*, a gravitating catch movable through the other way, and a lever fulcrumed on the body, and having arms connected to the bar and the catch; in combination with a member comprising a casting having a keeper for the catch, and a buffer carried by the casting, and arranged to engage the bar.

5. A latch member comprising a body, provided with guideways, a bar movable through one guideway, and having abutments, a gravitating catch movable through the other guideway, a connection between the bar and catch, and packing arranged in one guideway, and arranged to be engaged by the abutments on the bar.

6. In a latch, a member comprising a body, provided with guideways, a bar movable through one guideway, and having abutments, a gravitating catch movable through the other guideway, and a lever fulcrumed on the body and connected to the bar and the catch, in combination with a member having a keeper for the catch, and a buffer for engaging the bar.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MYRON COSSEY.

Witnesses:

F. T. ELLITHORPE,
WM. H. CORNILS.