

F. MYERS.
DOOR-REGISTER.

No. 172,762.

Patented Jan. 25, 1876.

Fig 1

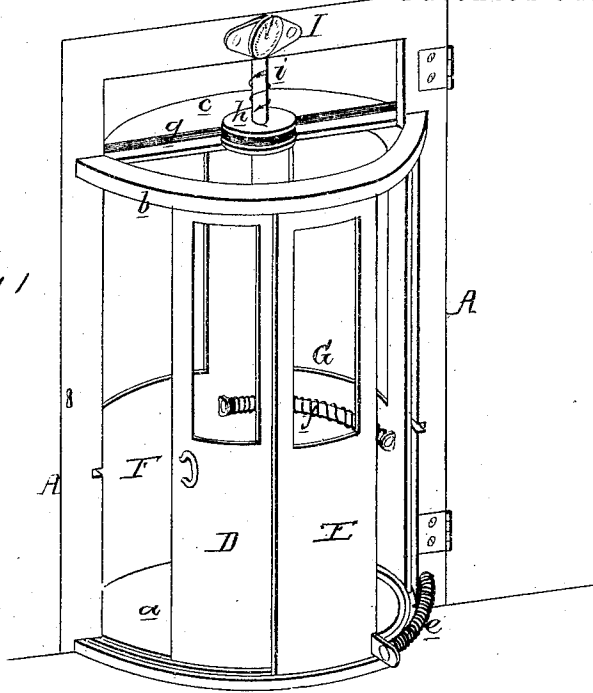


Fig 2

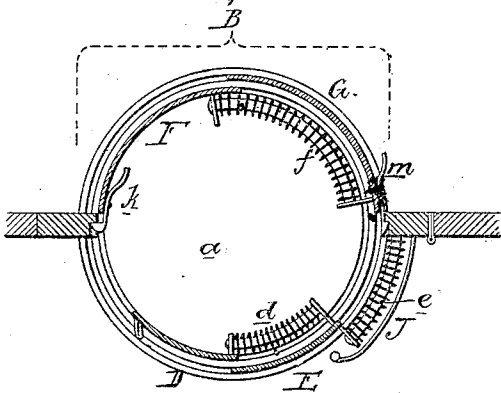


Fig 3

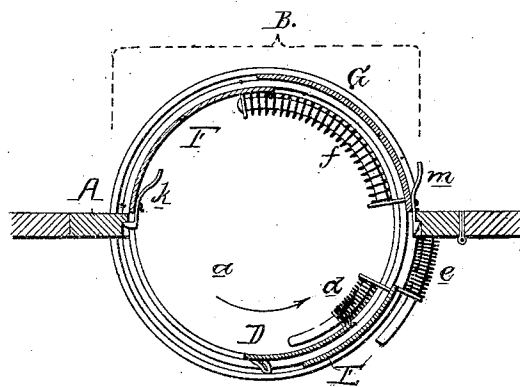


Fig 4

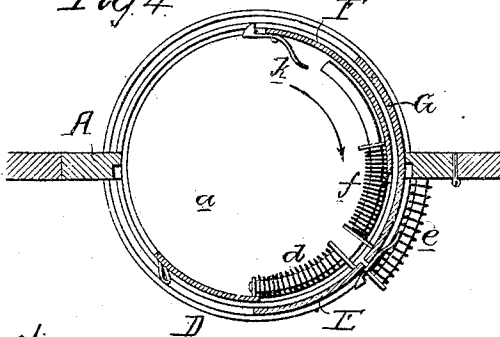
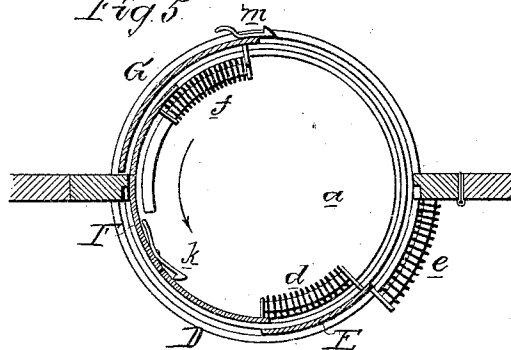


Fig 5



Witnesses
Harry H. Brown
Harry Smith

Felix Myers
by his Attorney
Houston & Son

UNITED STATES PATENT OFFICE.

FELIX MYERS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DOOR-REGISTERS.

Specification forming part of Letters Patent No. **172,762**, dated January 25, 1876; application filed December 23, 1875.

To all whom it may concern:

Be it known that I, FELIX MYERS, of Philadelphia, Pennsylvania, have invented an Improved Registering-Door, of which the following is a specification:

The object of my invention is to construct for public buildings, cars, &c., a simple and effective registering-door, which will afford the same facilities for ingress and egress as an ordinary door; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved door; and Figs. 2, 3, 4, and 5, sectional plan views with the parts in different positions.

A is a hinged door, and B a circular cage or box, carried by and forming part of this door, and projecting partly on the outside and partly on the inside of the same.

The cage B is composed of a series of segmental sliding doors, D, E, F, and G, which are acted upon by suitable springs *d*, *e*, *f*, and *g*, the tendencies of the latter being to maintain the doors in the positions shown in Fig. 2, so as to partly inclose the outer portion of the cage and entirely inclose the inner portion.

The doors D and E are guided at the lower edges by grooves in the circular base-plate *a* of the door, and at the top by similar grooves in a semicircular bar, *b*. The door F is guided by a groove in the plate *a*, and in the semicircular plate *c*, which forms the top of the inner half of the cage, while the door G is guided by a groove at the bottom, but is attached at the top to the said plate *c*, and partially turns the same when it is moved.

The spring *g*, which is used to insure the return of the door G to its normal position, Fig. 2, consists of a strip of rubber or other elastic material, and acts upon the door through the medium of a pulley, *h*, attached to the plate *c*, and connected, also, to the rod *i*, by which the top of the cage is pivoted, so that any movement of the door G is necessarily transferred to this rod *i*.

The movement of the rod *i* in the direction of the arrow, Fig. 1, causes the operation of a

suitable registering device, I, attached to the door A; but the movement of the rod in the opposite direction does not affect the register.

The door F is provided with a spring-catch, *k*, or other suitable locking device, which can be opened only from the inside of the cage; and the door G has a similar locking device, *m*, which can be opened only from the inside of the apartment to the door of which the device is applied, or from the interior of the cage, by means of a suitable key.

The catch *k*, when closed, prevents the movement of the door F in the direction of the arrow, Fig. 4, and the catch *m* prevents the movement of the door G in the direction of the arrow, Fig. 5; but these catches are so arranged that they will not interfere with the movement of the doors in the opposite directions.

The door A has a suitable lock, so that authorized persons may enter the apartment through this door without operating the registering apparatus.

The operation of the above-described device is as follows: A person wishing to enter the apartment moves back the doors D and E, as shown in Fig. 3, and enters the interior of the cage, the doors closing behind, owing to the action of their springs. The lock *k* is then opened and the door F moved around in the direction of the arrow, Fig. 4, and, when the spring *f* has been compressed, this motion is communicated to the door G, which also slides until it reaches the position shown in Fig. 4, causing, meanwhile, through the medium of the plate *c* and pulley *b*, a movement of the rod *i* in the direction of the arrow, Fig. 1, and a consequent operation of the registering device I. As the person enters the apartment the doors F and G, owing to the action of the springs *f* and *g*, return to the position shown in Fig. 3, ready to register the entrance of another person.

Any one desiring to leave the apartment first opens the lock *m* from the interior, and then moves the door G in the direction of the arrow, Fig. 5, this motion being also communicated to the door F, until they both reach the position shown in Fig. 5, when a space is pre-

sented large enough to permit the entrance of the person, behind whom the doors close.

The doors D and E are now moved back by the person within the cage until they reach the position shown in Fig. 3, and do not interfere with a free exit.

The conductor of a car or any other authorized party can enter without registering by simply unlocking the door A and opening the same, or by first entering the cage, and then opening the lock *m* by means of a suitable key, so as to permit the opening of the door G.

The spaces for entrance to and exit from the cage B are such that, while they readily allow the passage of one person, they will not permit the entrance of more than one at a time; and, on reference to the drawing, it will be seen that the doors D E and F G are so arranged that, when open, they abut against each other, thereby preventing both the entrance and exit openings of the cage from being open at the same time.

An important feature of my invention consists in combining the registering-cage B with an ordinary door, A, as this allows the rapid exit of the occupants of the apartment when they desire to leave in a body.

In some cases, where the cage B is of large size, the doors F and G may be made inde-

pendent of each other, the door F, in this case, being connected to the registering apparatus instead of the door G.

A screen, J, may be employed to protect the spring *e*, and to prevent tampering with the catch *m* from the outside.

I claim as my invention—

1. The combination of the hinged door A with a registering-cage, B, carried by the said door, all substantially as set forth.

2. The cage B, projecting on both sides of a door or partition, A, and provided on the outside with spring-doors D E, and on the inside with spring-doors F G, the latter being connected to the registering apparatus.

3. The combination of the cage B with the doors F and G, the former being provided with a lock which can only be opened from the inside of the cage, and the latter with a lock which can only be opened from the inside of the apartment to which the door is applied, all as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FELIX MYERS.

Witnesses:

HARRY HOWSON, Jr.,
HARRY SMITH.