

J. MELLING.  
 Passenger Register.

No. 69,688.

Patented Oct. 8, 1867.

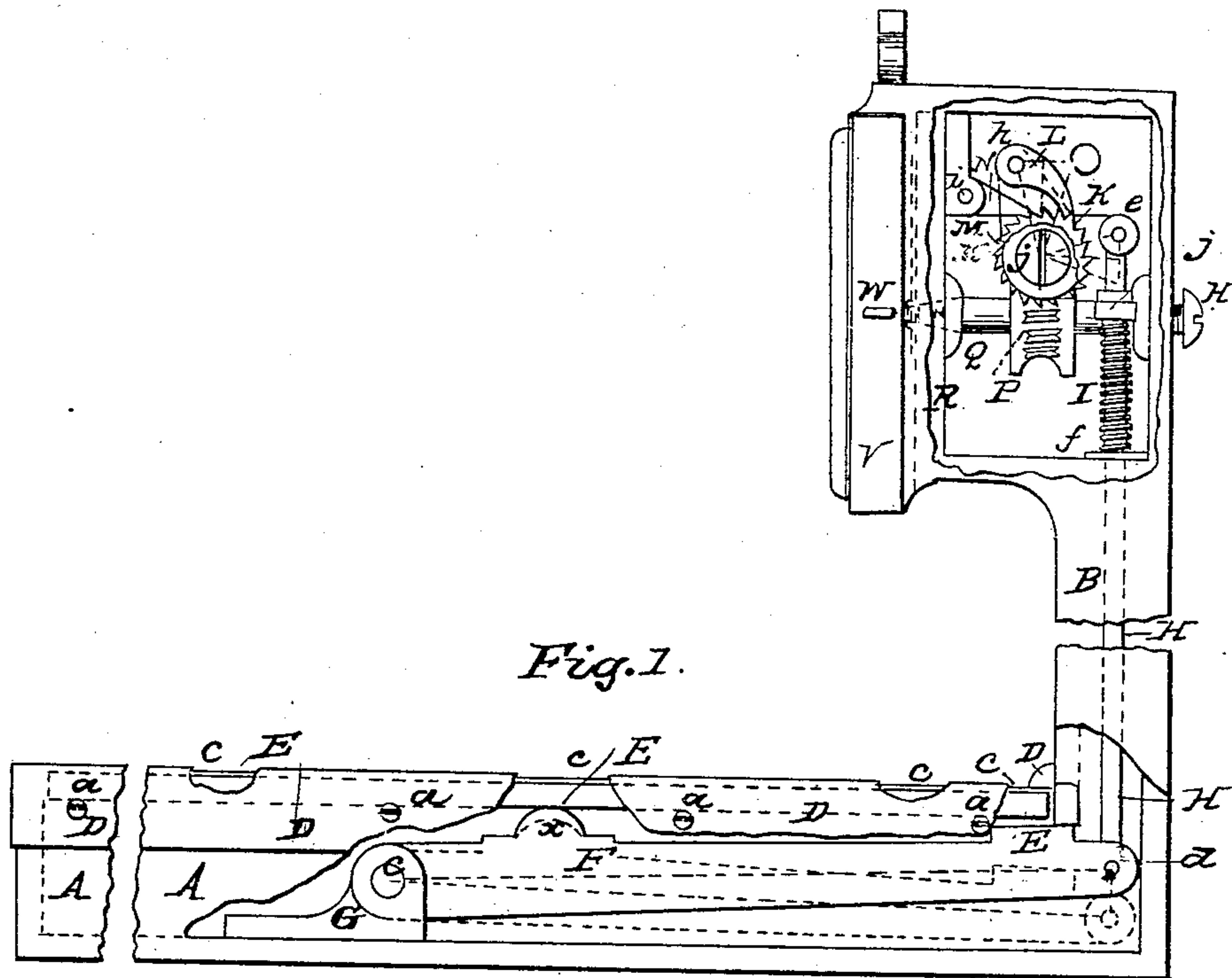


Fig. 1.

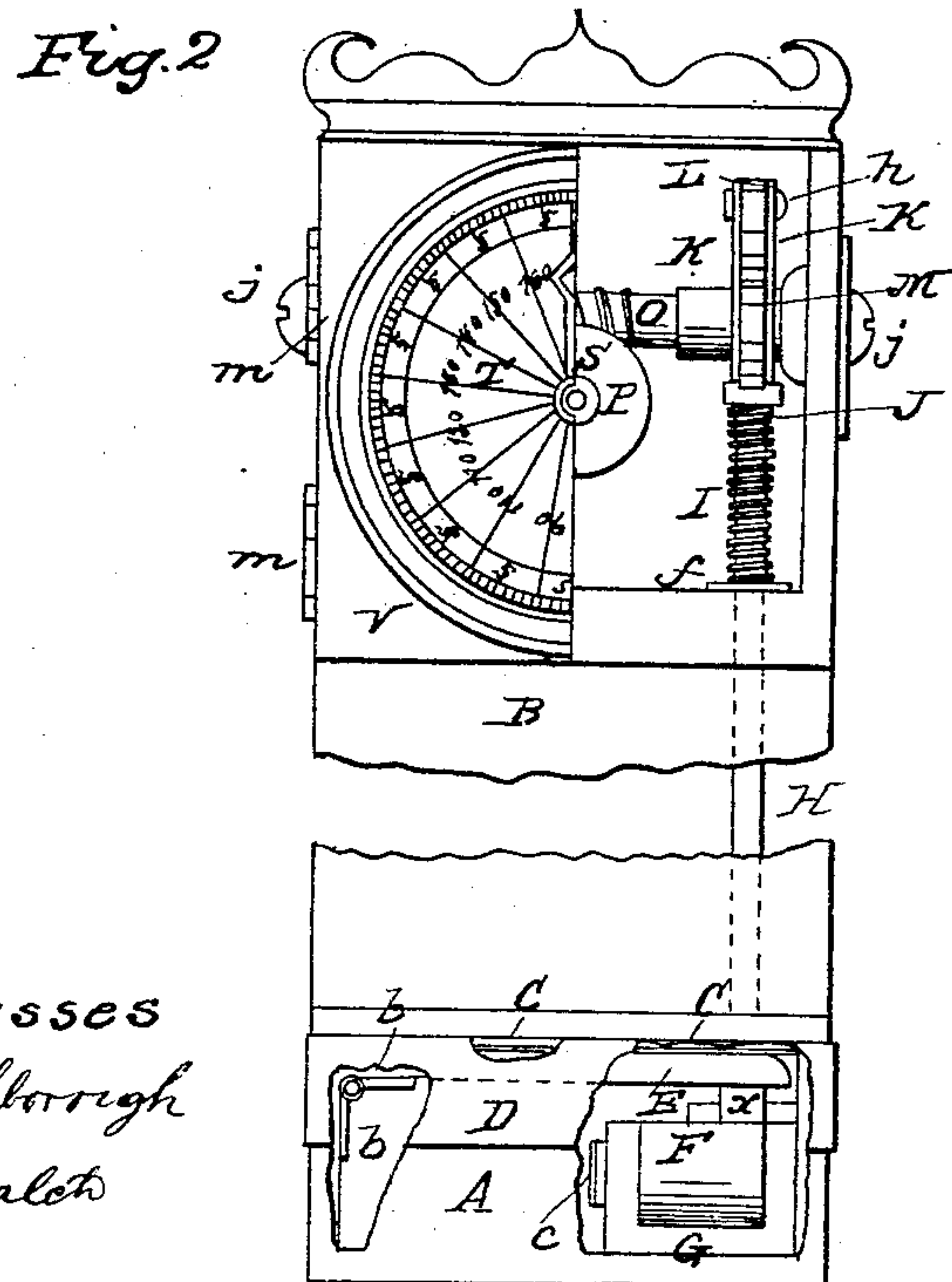


Fig. 2

Witnesses  
 J. M. Loughborough  
 Fred. A. Hale

Inventor  
 John Melling

# United States Patent Office.

JOHN MELLING, OF ROCHESTER, NEW YORK.

*Letters Patent No. 69,688, dated October 8, 1867.*

## PASSENGER REGISTER.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN MELLING, of Rochester, in the county of Monroe, and State of New York, have invented a new and useful Count Register for door-ways of buildings and vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation, a portion of the front face of the frame being displaced to show the working parts.

Figure 2 is a transverse view, showing the face of the door, glass, and dial-plate, one-half of each of which is removed for the purpose of showing the working parts.

Like letters indicate corresponding parts in both figures.

This invention consists in providing a simple and efficient count register for the door-ways of buildings, rail-cars, and other vehicles, where a correct record of the number of persons passing through is desired.

To enable others to make and use my invention, I will describe its construction and operation.

I construct a hollow door-sill or box, A, with a vertical chamber and head-box, B, of cast iron, or other suitable material, that shall prevent tampering with the working parts of the apparatus. On the edges of the said hollow door-sill A is placed a deflecting plate, C, of iron, or other suitable metal, which is held down on the edges of said hollow sill A by means of right-angled metal pieces D, secured thereto by screws *a*, as shown. To this box A, and in the inside, under the said deflecting plate, is hung a flap-lid, E, by hinges *b*, and the vibrating portion of it rests upon the raised point *x* of lever F. Said lever F is hinged by a joint-pin, *c*, in the stand G, which is fastened to the bottom of box A, inside. To the outer or vibrating end of the lever F is attached a rod, H, by a joint-pin, *d*, at the lower end. The upper end of the rod is attached by a joint-pin, *e*, to pawl-frame cheeks K. On the rod H is placed a spiral spring, I, the lower end of which rests upon a washer, *f*, on a bridge in chamber B, and the top end of the said spring I presses against a collar, J, fastened to the rod H, as shown. There is a moving pawl, L, hinged to these lever cheeks by a joint-pin, *h*. At the downward movement of the rod H this pawl acts against the notches of the ratchet-wheel M, which is then locked by a secondary or lock-pawl, N, secured in a stand by a joint-pin, *i*. The ratchet-wheel M is secured to the worm-shaft O, turning on steel or other suitable metal bearings *j*. The worm of this shaft works into worm-wheel P, secured on shaft Q, the rear end of which is supported and moves in a bearing, *k*, and the front end is turned tapering, and hangs in a suitable bearing in the plate R, against which the dial-plate T is placed, as shown in fig. 1. On the front end of the worm-wheel shaft is placed a finger, S, secured by a nut, *l*. This finger points to the divisions on the dial-plate, changing one notch at every downward movement of the deflecting plate C, caused by the tread of a person passing. One-half of the door V, with its glass, the finger S, and dial-plate T, is seen in fig. 2. The door V may be provided with any suitable lock, and the superintendent only of the car or building to which the register is applied is furnished with a key. Any person entering a door-way will naturally tread on the deflecting plate C, which moves the lever F, and thereby the rod H, compressing the spiral spring I. This carries forward the pawl L, and turns the ratchet-wheel M, which is then locked by the pawl N. The worm-wheel P, with its shaft Q, carries its finger S forward one degree on the dial at every forward movement of the pawl L. As the foot of the person passing is lifted from the deflecting plate, the spiral spring is instantly relieved from its compression, and it readjusts the several parts ready for the tread of the next person passing through the door-way, which must repeat the operation of the registering. It is therefore evident that no person can enter any room or vehicle through the door-way provided with one of these instruments without the knowledge of the superintendent, or person to whom the account or number is to be rendered.

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

1. The arrangement of the deflecting plate and hollow sill A, in combination with the lever F, substantially in the manner and for the purposes herein described.

2. In combination with the deflecting plate C and lever F, the worm-gearing and register-hand and dial, all arranged and operating in the manner shown and described, and for the purpose set forth.

JOHN MELLING.

Witnesses:

WM. S. LOUGHBOROUGH,  
FRED. A. HATCH.