2 Sheets—Sheet 1.

J. T. ALDRICH.

REGISTERING-GATE.

No. 169,941. Patented Nov. 16, 1875.

Fig 1

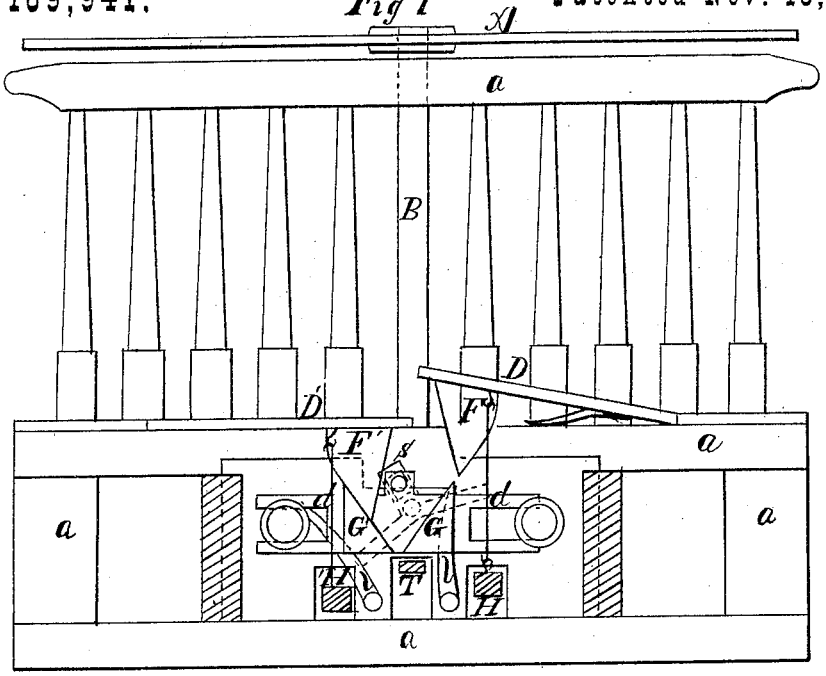
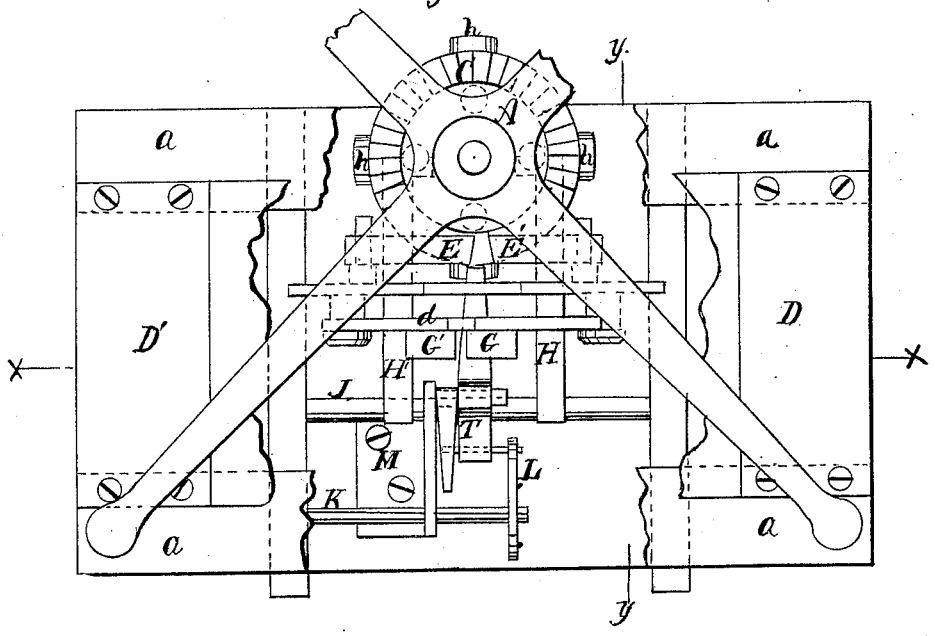


Fig 2



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Inventor:
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Fig. 3

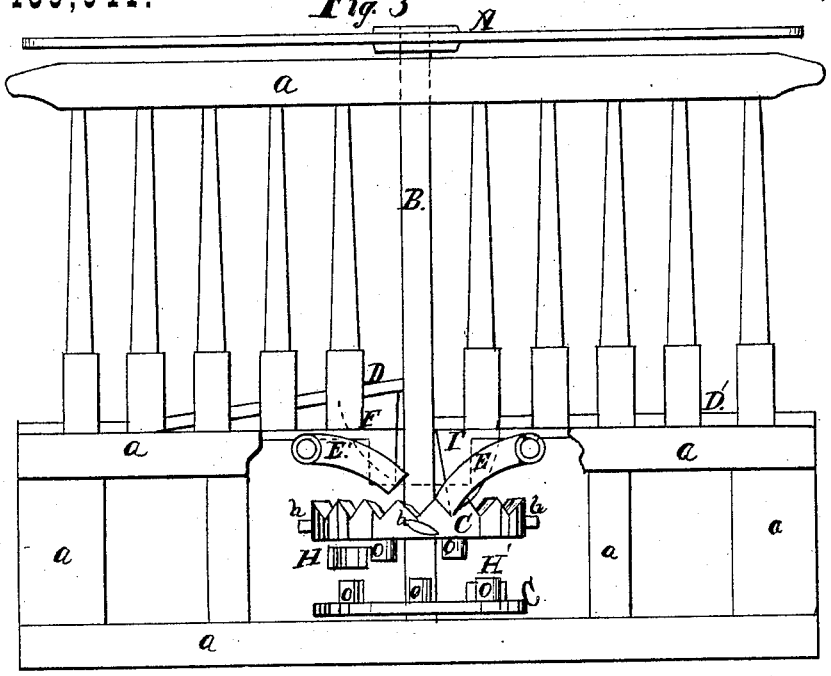
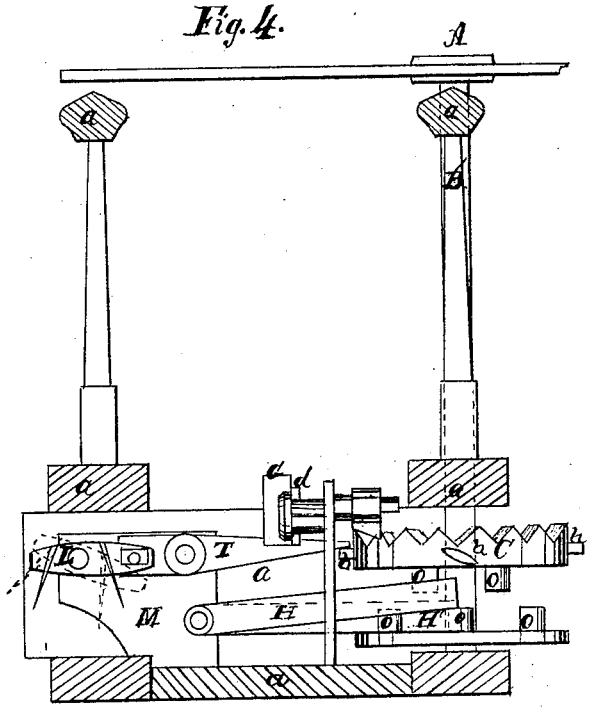


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES T. ALDRICH, OF NORWICH, CONNECTICUT.

IMPROVEMENT IN REGISTERING-GATES.

Specification forming part of Letters Patent No. **169,941**, dated November 16, 1875; application filed July 1, 1875.

To all whom it may concern:

Be it known that I, JAMES T. ALDRICH, of the city of Norwich and State of Connecticut, have invented certain Improvements in Recording Passenger-Registering Gate, of which the following is a specification:

My invention consists, first, in a peculiar construction of a gate or spindle placed at an entrance where it is desirable to register the ingress or egress of passengers, whereby, on a person entering the gate, his weight or pressure unlocks the spindle, which allows the person to pass through, and by swinging the gate to his right it records his ingress, and on passing through from the opposite side, and swinging the gate to the left, it records his egress, or vice versa; but on leaving the gate it locks again, and remains so for the next person. I therefore denominate my invention an alternate acting and locking registering gate or spindle.

My invention consists, second, in a trap or treading pieces placed at an entrance, so that, on a person entering, his weight or pressure depresses them, thereby unlocking the gate or spindle, and allowing the person to register.

My invention consists, third, in a peculiar construction of circular plates attached to the spindle, they having stop-notches for dogs or pawls; also are divided into segments, with studs or pins, so to stop or lock the gate at any position desired, whereby not allowing a passenger to make but one register at a time.

My invention consists, fourth, in a registering-cam placed on the periphery of the circular plates, whereby, on swinging the gate to the right, the cam strikes the registering mechanism, which denotes ingress, and by swinging the gate to the left it denotes egress.

Figure 1 represents a front or side elevation of an entrance through the line *x x*, Fig. 2, with my device as partly operated. Fig. 2 is a plan view of an entrance with the trap cut away, showing the recording and other mechanism with the gate as part operated. Fig. 3 is a back or side elevation with the device as part operated. Fig. 4 is an end or side view of the recording and other mechanism through the line *y y*, Fig. 2.

In these drawings, *a* represents the wood or frame work; A, the gate; B, the spindle; C, the circular plates, Figs. 3 and 4; D′ D, the treading-pieces, Figs. 1 and 3; E′ E, the dogs or pawls, Figs. 2 and 3; F′ F, the inclines attached to the treading-pieces, Figs. 1 and 3; G′ G, inclines on the sliding piece, Figs. 1 and 2; H′ H, the stop or lock levers; *l′ l*, the levers that keep the sliding piece *d* central, Fig. 1; J, the shaft that the lock-levers swing on, Fig. 2; K, the rock-shaft that the locking punch-lever is attached to, Figs. 2 and 4; L, the registering rock-lever, with punches or prickers attached, Figs. 2 and 4; M, the plate or stanchion that holds the rocking punch and tilt levers, Figs. 2 and 4; *h*, the registering-cams on circular plate, Figs. 2, 3, and 4; T, the tilt-lever that works the rocking punch-lever L, Figs. 2 and 4; *d*, the sliding piece that holds incline cams G′ G, Fig. 1, and which throws the rocking crotched lever S, Fig. 1, to one side, and thereby lifts the dogs and holds them up while a person is passing through the gate, Fig. 1. On the ingress of a passenger his weight or pressure depresses the trap D′, which causes incline F′ to act on incline G′, thereby drawing the sliding piece *d* toward the person, and throws the crotched lever S, Fig. 1, to one side, thereby raising the dog E′ out of the stop-notches in circular plate C, Fig. 3. At the same time the stop-lever H′ falls from stud *o*, upper plate, Fig. 3, thereby unlocking spindle B, so as to allow the passenger to swing the gate part way, or to swing it until the stud *o*, bottom plate, strikes the stop-lever H′, Fig. 3, thereby stopping the gate from moving either way. (Position of gate, Fig. 2.) On the passenger getting thus far it compels him to depress trap D, and release trap D′. At the same time stop-lever H′ leaves stud *o*, bottom plate, thereby unlocking the gate, and allowing the person to move on, or swing the gate and pass out. At the same time cam *h* on circular plate C depresses or lifts one end of tilt-lever T, thereby rocking the punch-lever L, Fig. 4, far enough to prick or punch a hole in a paper filter, thereby recording ingress. The egress of a passenger is recorded in like manner; but I do not consider the

r g stering-cam *h* to be so essential an element, f r I might use the treading-pieces D′ D for that purpose.

It is proper here to notice the difference between this invention and other registering-gates. In them a person passing through quick would cause the gate to register more than once, or leave it so that a person would have to stop and turn the gate before he could enter. To obviate this it requires a man to take charge. In mine this could not happen, for it makes no difference with how much force the gate swings, it locks in passing through, and always stops in position for another to enter, therefore registering but once. Nor does it require any one to attend it. In other gates an evil-disposed person can stand and swing the gate, thereby making a false record. In mine a person is obliged to pass through in order to register, as it is locked at all times, except when a person is passing through, thereby securing a true record.

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

1. A wicket or turnstile, A, in combination with check-plates C C and the alternate-acting cams *h*, and the intermediate lever mechanism T and L, or their equivalents, constructed so as to record the ingress or egress of passengers alternately or independent of each other with any suitable register.

2. In combination with the above, the traps or treading-pieces D D′ and lock or stop levers H H′, and dogs or pawls E E′, and inclines G G′, or their equivalents, so constructed as to alternately lock the turnstile as a passenger passes through the entrance.

JAMES T. ALDRICH.

Witnesses:
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