

E. HAMBUJER.  
 Passenger Register.

No. 52,043.

Patented Jan'y 16, 1866.

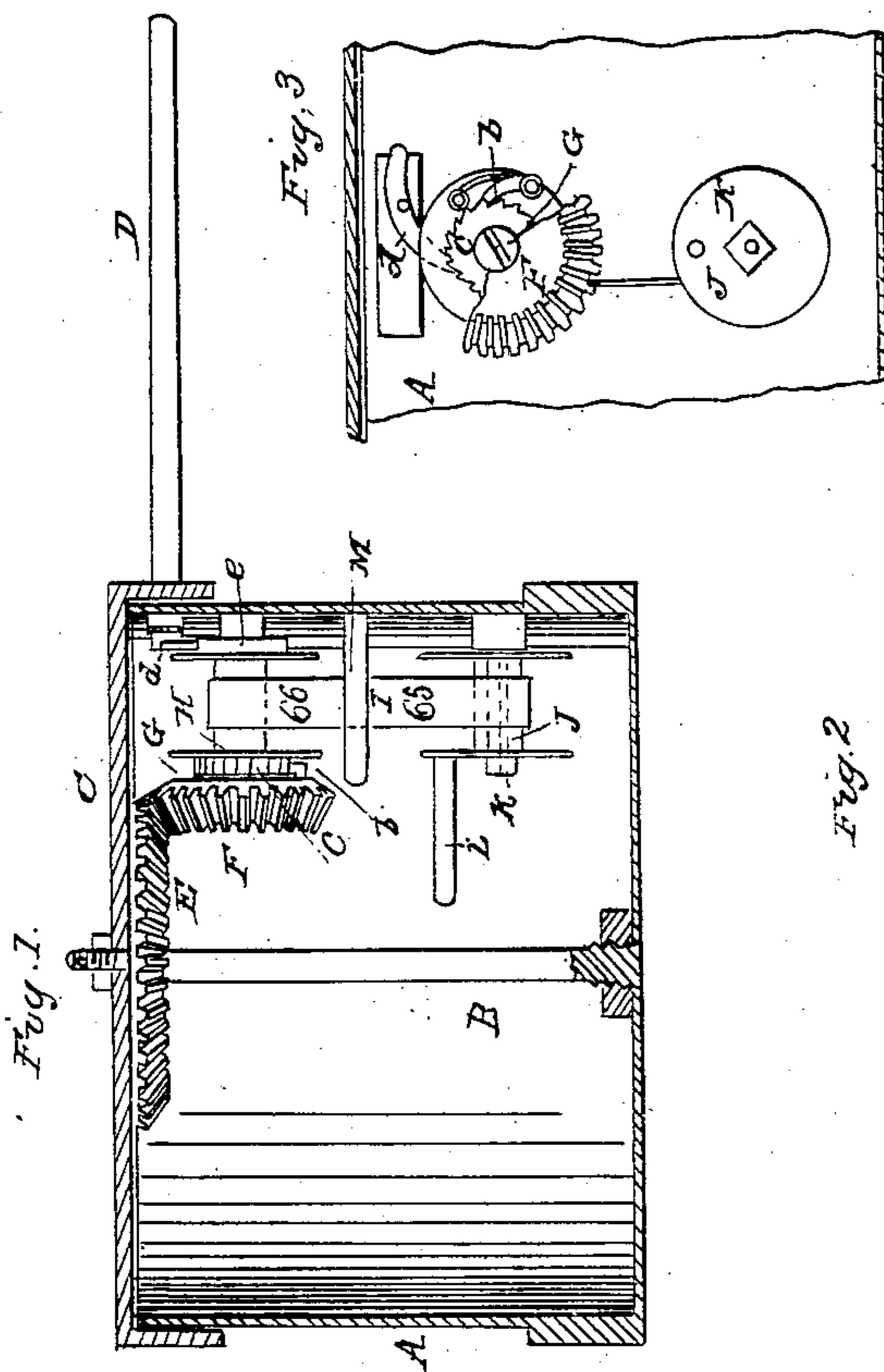
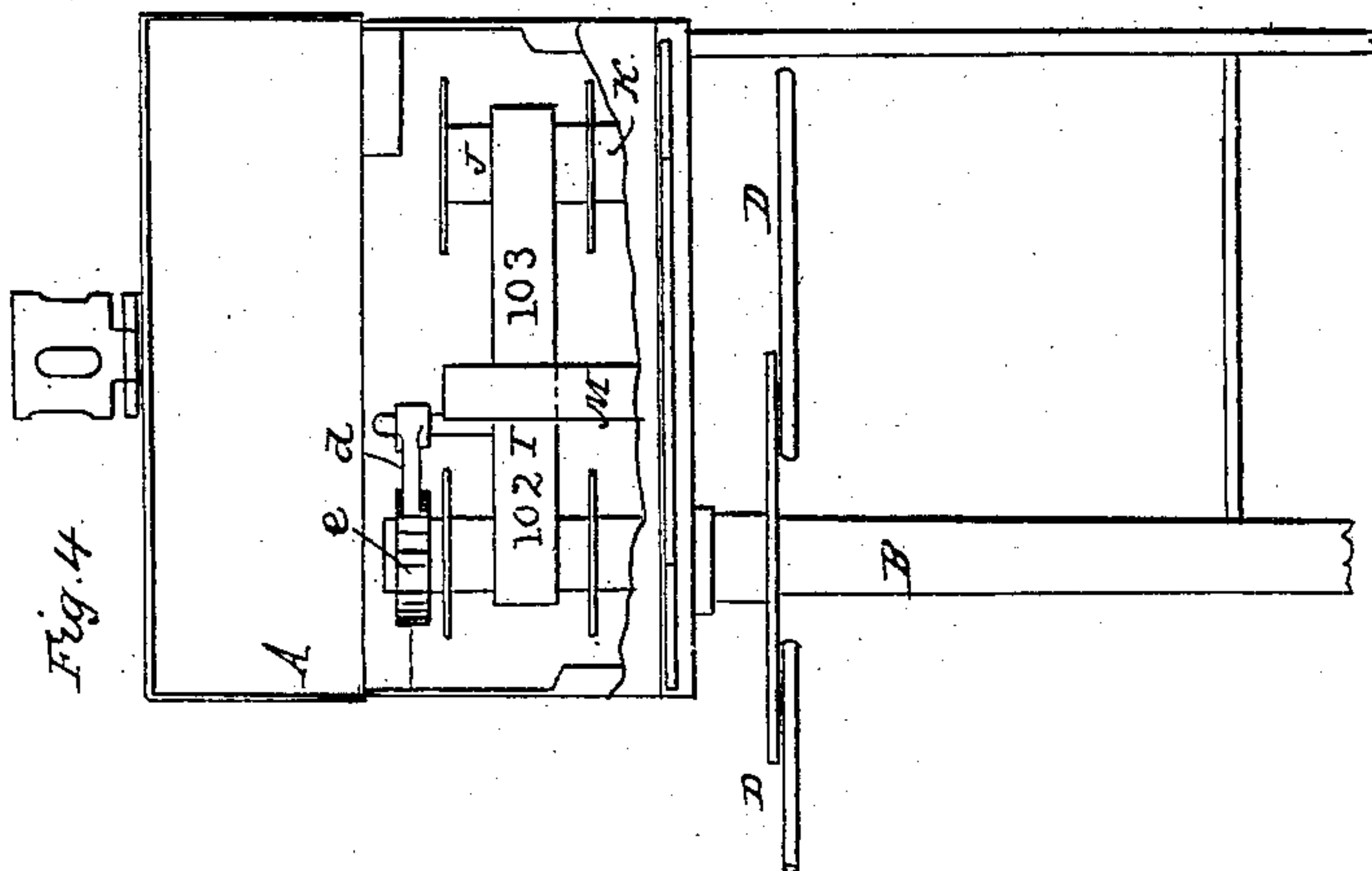


Fig. 3

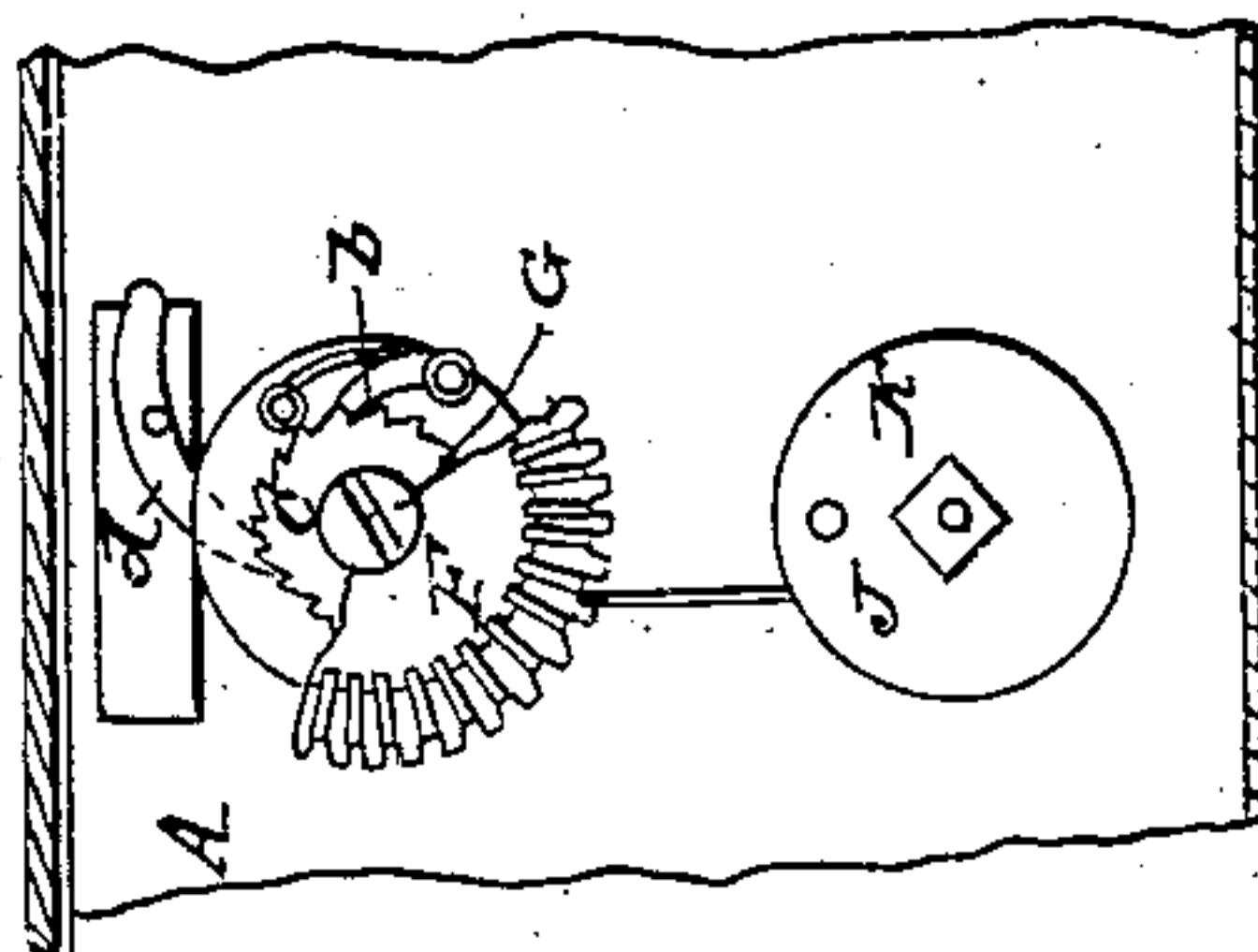
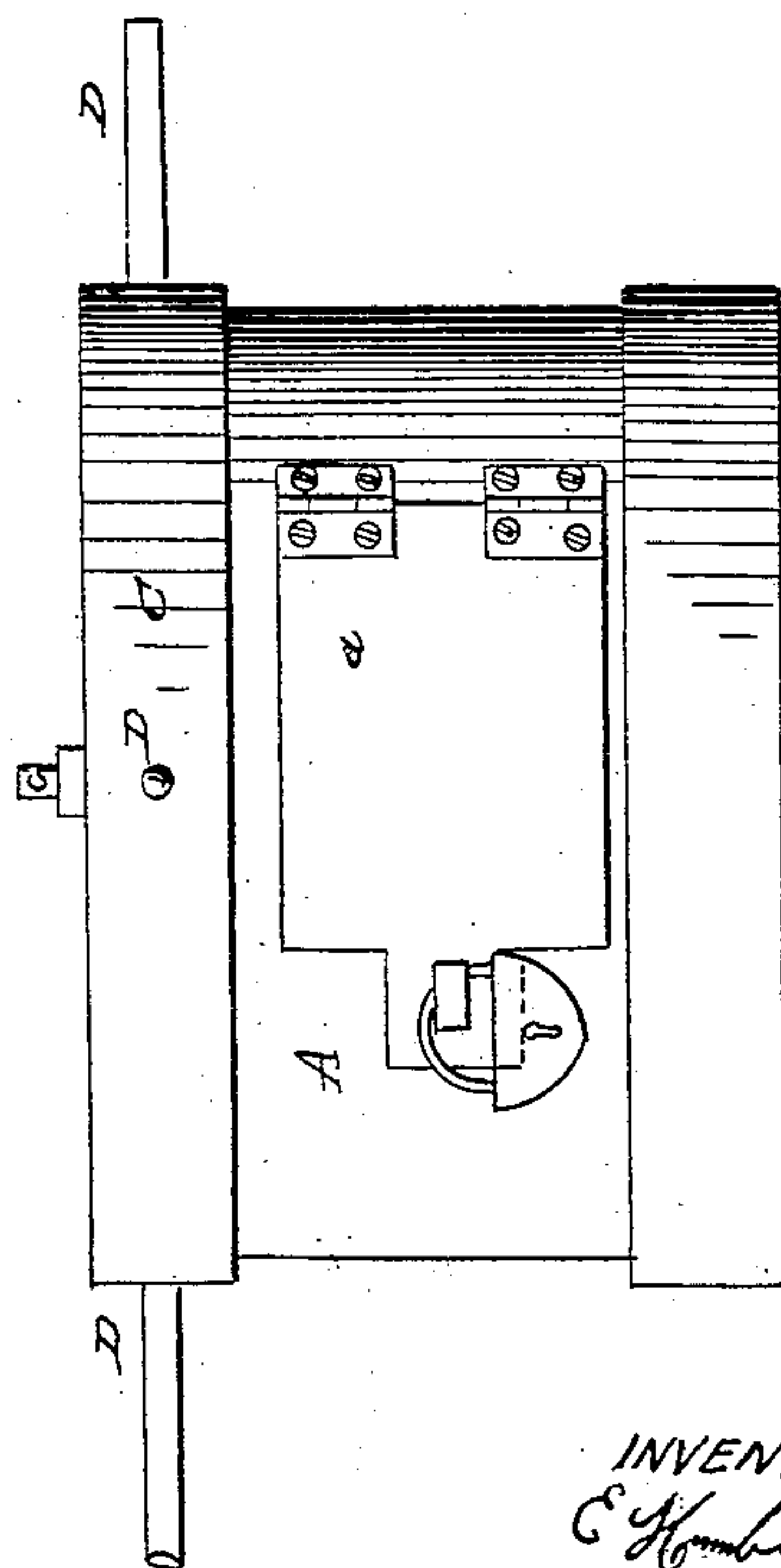


Fig. 2



WITNESSES

A. E. Beach  
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EPHRAIM HAMBUJER, OF NEW YORK, N. Y.

## IMPROVEMENT IN PASSENGER-REGISTERS.

Specification forming part of Letters Patent No. 52,043, dated January 16, 1866.

*To all whom it may concern:*

Be it known that I, EPHRAIM HAMBUJER, of No. 6 Allen street, in the city, county, and State of New York, have invented a new and Improved Passenger-Register; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical section of this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse section of the same. Fig. 4 is a modification of the same.

Similar letters of reference indicate like parts.

This invention consists in the use of an endless or long continuous apron or strip of canvas or other flexible material marked with a series of figures commencing at one end and running along in regular order to the other end of the apron or strip, in combination with a box inclosing said strip and with a vertical arbor armed with radiating arms and placed in the passage-way of a ferry or in any other passage through which a series of persons pass, the number of which shall be ascertained, in such a manner that each person, in passing said upright arbor, is compelled to push against one of the radiating arms and to impart to the arbor a partial revolution, which, being transmitted to the apron or strip, causes the same to advance one figure, and that by these means the exact number of persons passing through the passage-way is registered and can be ascertained at any moment. The apron or strip is stretched over two drums, and it is prevented from turning back by ratchet-wheels and pawls or by other suitable devices.

A represents a box of sheet metal, wood, or any other suitable material, and provided with a door, *a*, through which access can be had to its interior. Through this box extends a vertical arbor, B, which may either be arranged as shown in Fig. 1, or which may be constructed in the manner shown in Fig. 4. In the former case the arbor is stationary and firmly secured to the bottom of the box, and the top or cover C of said box is made to turn loosely on the upper end of said arbor. From this cover ex-

tend three or more radiating arms, D, and secured to its inner surface is a bevel-wheel, E, which gears into another bevel-wheel, F, mounted on the end of a horizontal arbor, G. This arbor carries a drum, H, which rotates loosely thereon, being connected with the bevel-wheel F by a pawl, *b*, and ratchet-wheel *c*, so that in turning the bevel-wheel in one direction the drum is compelled to rotate, but in turning the bevel-wheel in the opposite direction the drum remains stationary. A stop-pawl, *d*, and ratchet-wheel *e* prevent said drum from turning back.

From the drum H extends an apron or strip, I, of canvas or other flexible material, to a drum, J, which is mounted on an arbor, K, and which can be turned by a hand-crank, L. This crank serves to wind the strip or apron back on the drum J after it has all been taken up by the drum H. The strip or apron is marked with figures, commencing at 1 and running along in regular order to its end. These figures are at such a distance apart that a partial revolution imparted to the top or cover will cause a new figure to pass an index or partition plate, M, (see Figs. 1 and 4,) so that when the box is opened the exact number of revolutions imparted to the cover of the box can be ascertained.

Instead of connecting the radiating arms to the cover of the box, however, they may be connected to the arbor, as shown in Fig. 4. In this case the drum H is mounted on the arbor inside the box, and the apron or strip extends over the second drum, J, which is mounted on a vertical arbor. The operation is in both cases the same.

The box or arbor is placed in the passage-way of a ferry or in another passage-way so that nobody can pass without coming in contact with one of the radiating arms, and that each person in passing through the passage-way is compelled to impart to the cover C or to the arbor a partial revolution, and the apron or strip is moved and a new figure is advanced beyond the partition-plate M. Persons passing through the passage-way in the opposite direction turn the cover or arbor without imparting motion to the apron, which is not allowed to move backward.

On opening the box the exact number of per-

sons having passed through the passage-way can be ascertained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The apron or strip I, extending over drums H J, in combination with the vertical arbor B

and radiating arms D, constructed and operating substantially as and for the purpose set forth.

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Witnesses:

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C. L. TOPLIFF.