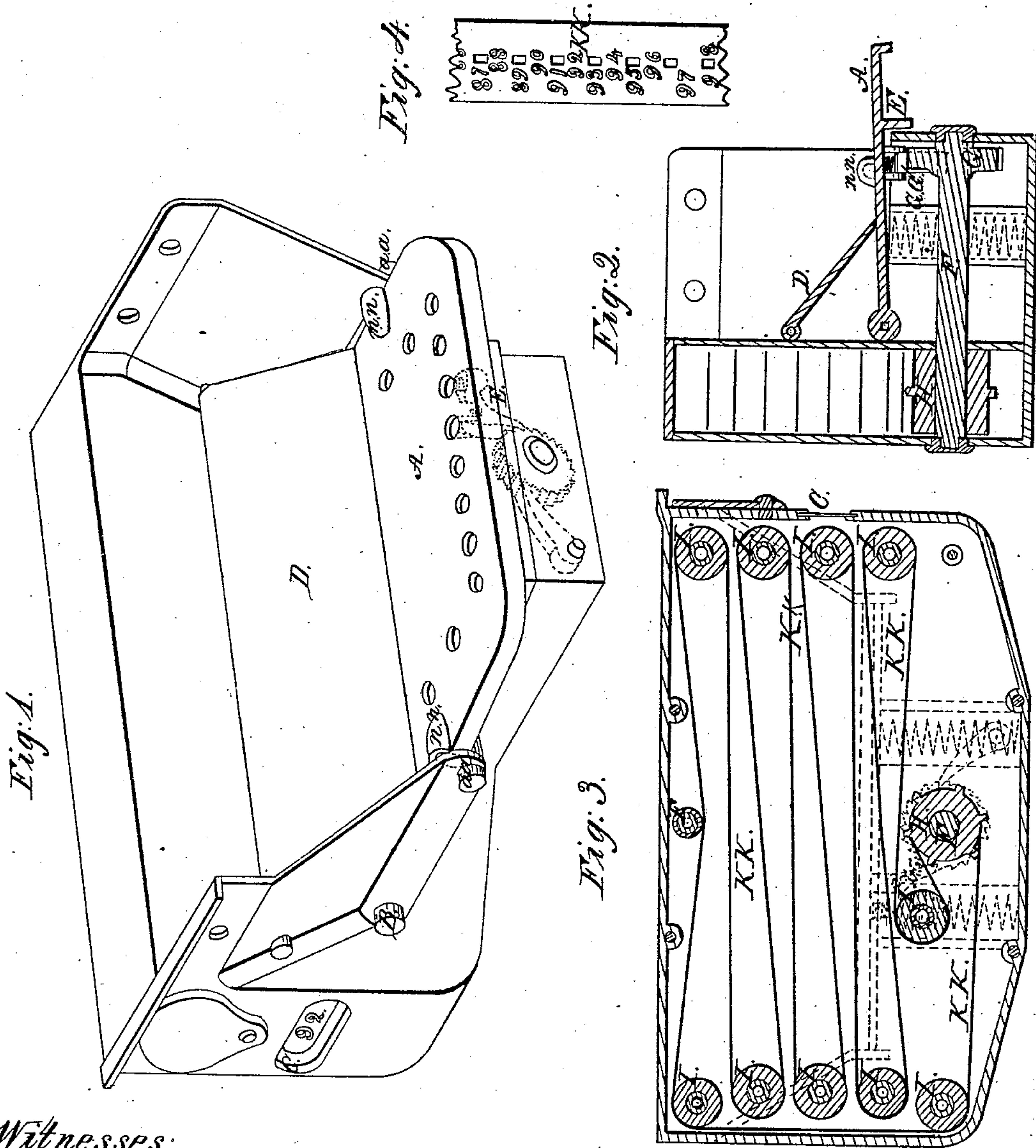


*A. F. Nagle.*

*Passenger Register.*

*N<sup>o</sup> 76,502.*

*Patented Apr. 7, 1868*



*Witnesses:*  
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# United States Patent Office.

A. F. NAGLE, OF PROVIDENCE, RHODE ISLAND.

*Letters Patent No. 76,502, dated April 7, 1868.*

## IMPROVEMENT IN PASSENGER-REGISTERS.

*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, A. F. NAGLE, of the city and county of Providence, in the State of Rhode Island, have invented a new and improved Passenger-Register, by the use of which the officers of a passenger-railway will be enabled to form an approximate estimate, nearly correct, of the number of fares for which the conductor or driver receives payment, and for which he should duly account.

My invention is equally applicable to and desirable for an omnibus, a street-car, a steam-car, or any public vehicle for similar uses, or other place where a register is required.

The nature of my invention consists in the peculiar construction of a step, to be placed in the usual position upon a vehicle.

The step, being deflected by the weight of a passenger stepping in or out, causes a number indicating the movement to be shown at an opening provided for that purpose.

To enable others skilled in the art to construct and use my invention, I will proceed to describe, with the assistance of and reference to the accompanying drawings, its construction and operation.

Figure 1 represents a step, say for a passenger-car, containing my improvement.

A is the tread of the step.

B is, with its mate at the opposite end of the step, an axle or hinge attached to step A, and upon which it vibrates.

*a a* are pintles, set through the frame into slots in step A, positions of which are marked *n n*.

*C c* is an opening, through which a band exhibits certain figures numerically arranged. A passenger stepping on A, depresses it, and, by mechanism hereafter described, causes the movement of the step to be registered at C.

D is a hinged flap, resting upon the step A, and so arranged, resting at an easy angle, that the perpendicular motion of the step A is not interfered with, and is designed to prevent a person from stepping too near the fulcrum B, thereby creating no movement, and defeating the object desired.

E is an apron, attached to and moving with the step, to prevent any person from interfering with the proper action of the mechanism within.

Figure 2 represents a cross-section of the centre of fig. 1. Letters A, B, D, and E are reproduced in section.

F is a shaft; upon its right-hand end, G, is fastened a ratchet-wheel, G and H; upon the other end a cog-wheel, H.

G G, a pawl, (with spring to keep it forward,) is fastened to the under side of the step A, and, by its position, is always in proper relation to the ratchet-wheel G.

The downward movement of the step A by pressure, therefore, causes the ratchet-wheel G, its shaft F, and the cog-wheel H to revolve. A spring-pawl is also placed in contact with the ratchet-wheel G, to prevent any backward motion. This pawl is shown in dotted outline in figs. 1 and 2. Springs are placed beneath, and in contact with the under side of step A, so arranged as to keep the step elevated when no person or other weight is upon it. In the drawing are shown spiral springs, but any of the various forms of spring would fulfill the purpose equally as well.

Figure 3 represents a longitudinal section of that portion of fig. 1 in which the opening C appears. The cog-wheel H is here shown in end-section, as is shaft F, to which it is fastened.

I I I are rollers, revolving on spurs or thimbles.

K K is an endless band, perforated with square holes, into which the cogs on wheel H are, by its revolving, inserted, causing the band to move regularly upon and with the rollers I to the required distance, and change the number, as shown at C. The band K K is made of rolled copper, to prevent stretching or variation, and has numbers so stamped upon or cut through it, as to be plainly visible at the desired point, C. The number of rollers I, and length of the band K K are optional, being determined only by the number of separate indications desired.

Figure 4 represents a portion of the endless band K K, with its openings for cogs of wheel H to enter, and the figures numerically arranged.

The operation of my invention has been fully explained in connection with the foregoing detail of construction.

I claim as my own invention—

The step A, in combination with the pawl G G, the ratchet-wheel G, the shaft F, the cog-wheel H, the rollers I I I, and the band K K, or their separate equivalents, arranged substantially as described, and for the purpose specified.

A. F. NAGLE.

Witnesses:

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