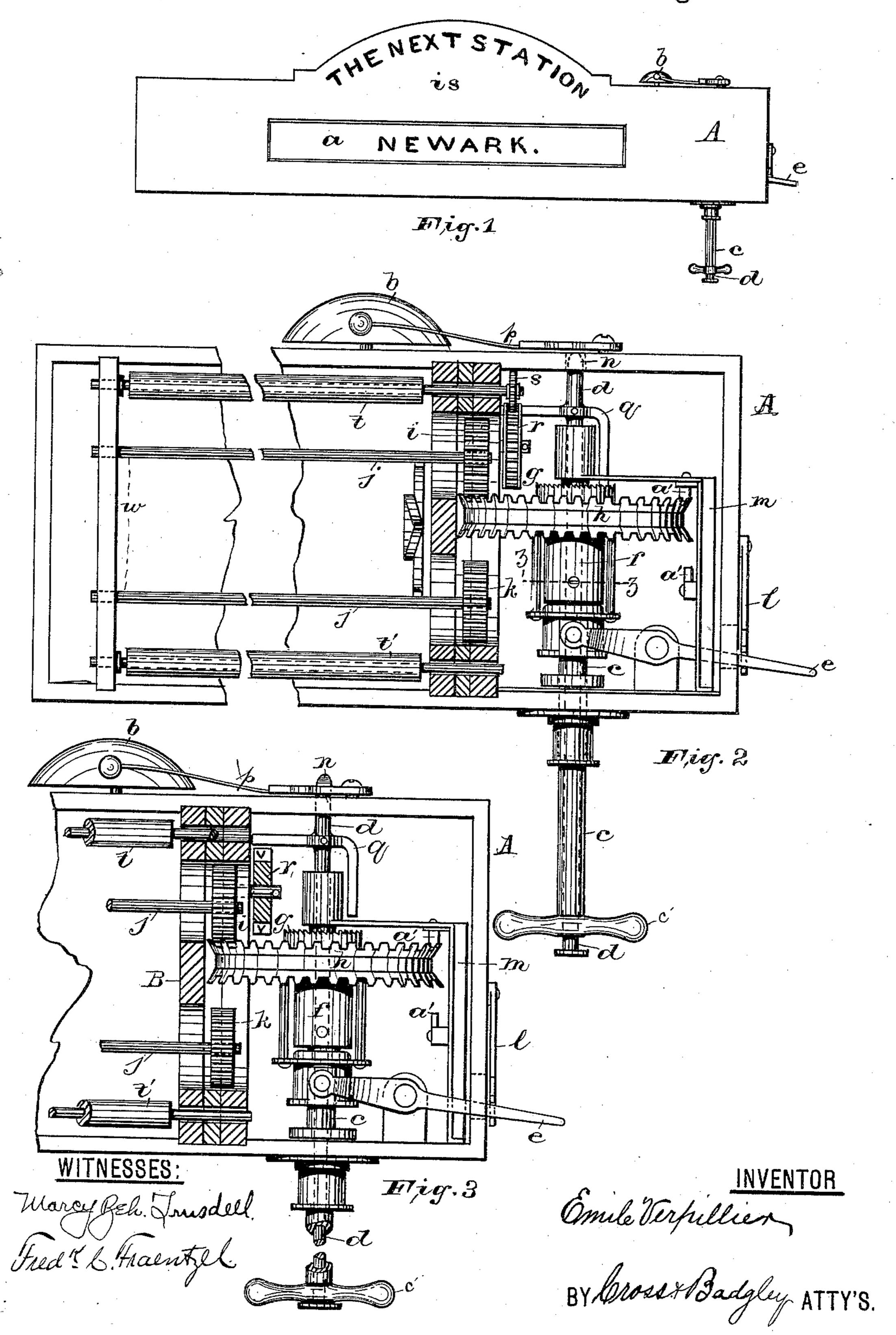
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STATION INDICATOR FOR RAILWAY CARS.

No. 409,812.

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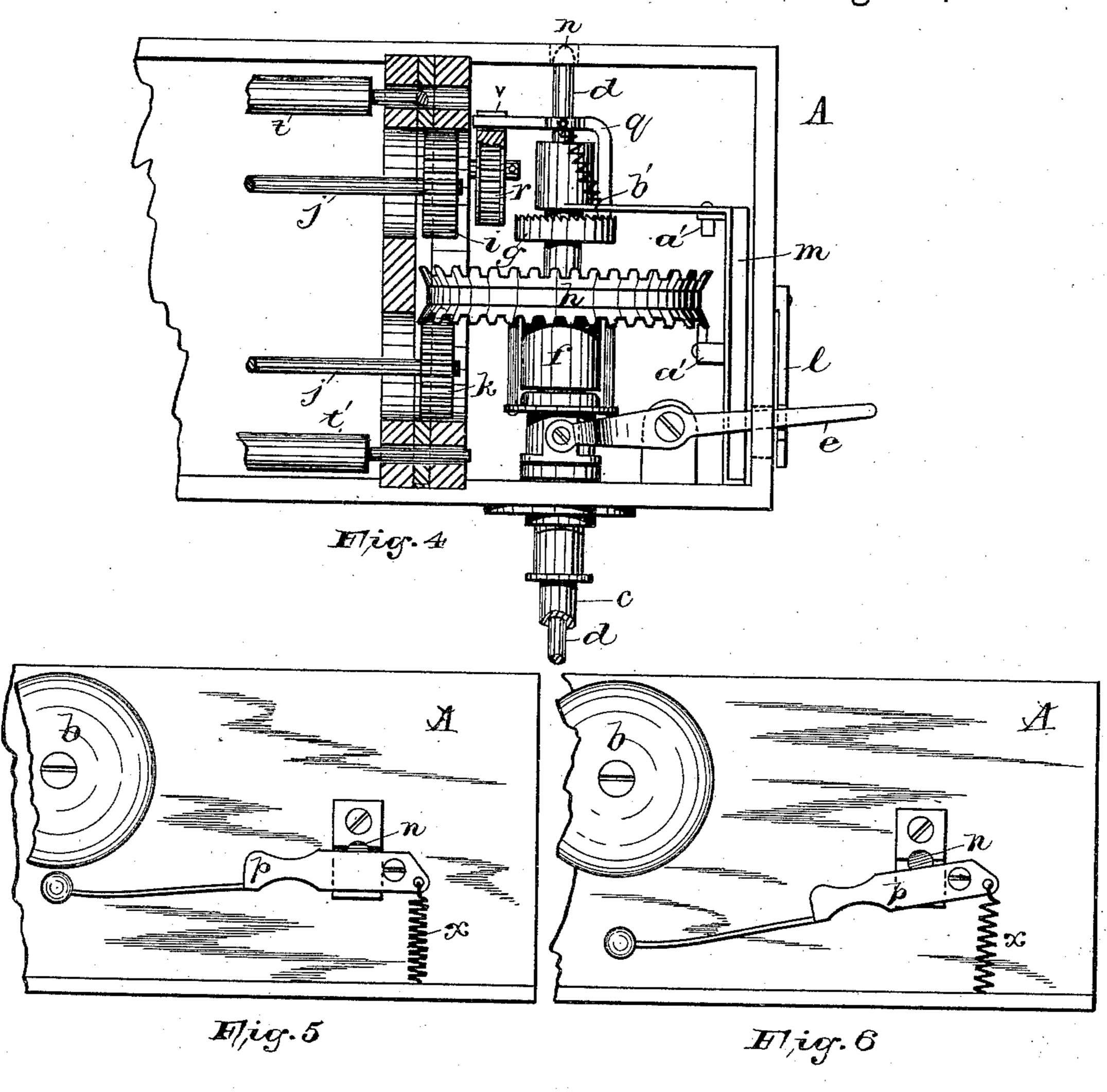


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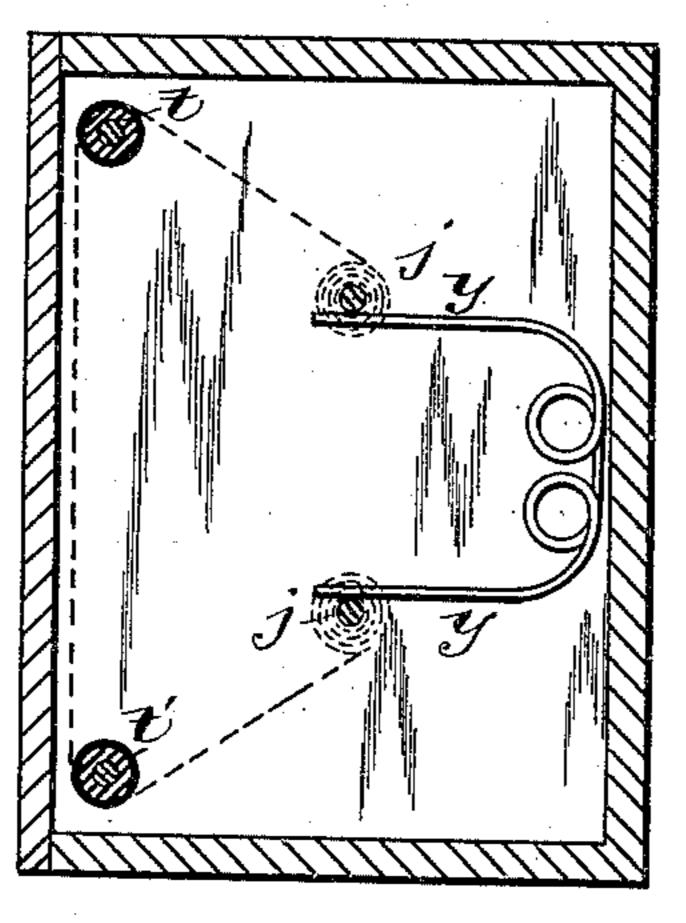
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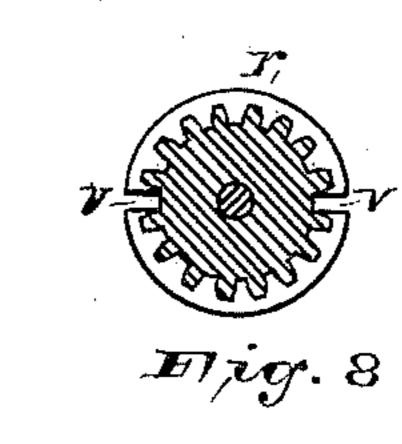


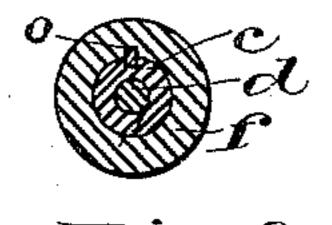
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## WITNESSES:

Fred & B. Fraentzel.







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INVENTOR Emile Verpillien

BY Corrss & Badgley ATTY'S.

# United States Patent Office.

EMILE VERPILLIER, OF NEWARK, NEW JERSEY, ASSIGNOR OF TWO-THIRDS TO LOUIS DUMONT, OF SAME PLACE, AND BERNARD BERNIGOLE, OF NEW YORK, N. Y.

#### STATION-INDICATOR FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 409,812, dated August 27, 1889.

Application filed March 22, 1889. Serial No. 304,298. (No model.)

To all whom it may concern:

Be it known that I, EMILE VERPILLIER, a citizen of the United States, residing at Newark, in the county of Essex and State of New 5 Jersey, have invented certain new and useful Improvements in Station-Indicators for Railway-Cars, Steamboats, and other Conveyances; and I do declare the following to be a full, clear, and exact description of the in-10 vention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which

15 form a part of this specification.

My invention relates to devices for indicating stations or stopping-places about to be approached to the passengers on railwaytrains and other conveyances, and has for its 20 objects, first, such an announcement of such stations or stopping-places as may be readily seen and comprehended by such passengers, in lieu of the almost unintelligible verbal announcements heretofore made by brake-25 men or other persons, for which purpose it is intended that my device shall be placed in some conspicuous place within the car or other conveyance; second, to afford facilities for enabling the operator to bring the name 30 of the station into view and fix the same in such position by means of an automatic locking adjustment; third, to provide an automatic alarm which shall sound simultaneously with the announcement of the station, 35 and, fourth, to provide an attachment for reversing the order of announcements without changing the direction in which the operating-lever is turned. I attain these objects by the device and mechanism illustrated in 40 the accompanying drawings, in which—

Figure 1 is a front elevation of my device. Fig. 2 is a similar view with the front of the inclosing-case removed, showing the operative mechanism in elevation, with parts broken 45 away. Fig. 3 is a view similar to Fig. 2, but with the rod d and its attachment elevated. Fig. 4 is similar to Figs. 2 and 3, but with the operating mechanism reversed for the return trip. Figs. 5 and 6 are plan views of 50 a part of my device, showing the alarm-bell

and striking mechanism with the latter in two different positions. Fig. 7 is a transverse section on the line w, Fig. 2. Fig. 8 is a transverse section of the flanged wheel r, Fig. 2. Fig. 9 is a transverse section on the 55 line z, Fig. 2.

Similar letters refer to similar parts through-

out the several views.

The nave of the master-wheel h is vertically adjustable upon the barrel or tube c, 60 and is engaged therewith by means of a key o. (See Fig. 9.) The barrel or tube c has upon its upper extremity the ratchet g, to receive the arm q, as will be described, and is secured to the side and bottom of the in- 65 closing-case by means of a plate m. To this plate m the pawls  $\alpha \alpha$  are fastened, so as to act respectively upon the cogs of the masterwheel h and prevent backward motion. The master-wheel h engages with the pinion i, (or 70) k, according to the position of the lever e,) and communicates motion to the rollers jjwhen the barrel c is turned in operating the machine. The rollers j j receive a reverse motion by elevating the lever e, which causes 75 the master-wheel h to engage with the pinion k. To prevent displacement of the lever e, the double hook l, or any suitable equivalent, may be used.

r is a flanged cog-wheel provided with slots 80 or notches v v at regular intervals, and placed to engage with and receive motion from the pinion s, attached to the distending-

roller t.

d is a rod sliding in the barrel c and ter- 85 minating at the top of the inclosing-case A in a beveled end n. This beveled end extends through an aperture in the top of the case, and serves to operate the bell-hammer p and sound an alarm, as will be described.

To the rod d is attached an arm q, bent at right angles so as to engage with the ratchet g and slots v v in the flanged wheel r. This arm is made to press upon and against the flanges of the wheel r by the spring b', which, 95 when one of the slots v v is brought in contact with the horizontal arm, causes it to fall into the slot, while the perpendicular arm engages with the ratchet g, thus locking the mechanism; and at the same time the bev- 100

eled end n of the rod is withdrawn, so as to liberate the bell-hammer p and sound an alarm. When the rod d and its attachment are elevated, the arm q disengages from the 5 slot v and ratchet g, thus permitting the barrel c, with its engaging mechanism, to be turned until the next slot comes under the arm, while the beveled end n, being thrust under the bell-hammer p, raises it for the 10 next alarm-stroke.

y y is a tension-spring secured at the middle to the side of the partition B, the extremities of which press on the rollers jj, and serve as a brake to keep the apron or 15 band taut and present a smooth even front.

t and t' are distending-rollers placed one at the top and the other at the bottom, just inside the inclosing-case, so as to bring the apron flush with the opening a, while the 20 rollers j j are placed near the center of the case, and are supplied with the pinions i and k, respectively, so as to receive motion from the master-wheel h, as described. Over the distending-rollers t and t' is placed a canvas 25 or other flexible material, fastened at either end to the rollers j, j, forming a band or apron upon which is lettered the names of the stations to be announced, at such intervals that the name of each shall come opposite the 30 opening at  $\alpha$  whenever the arm q drops into one of the slots v and rings the bell.

Having fully described my invention, and the manner of its operation, what I claim, and desire to secure by Letters Patent of the 35 United States, is—

1. In station-indicators, the rollers j, j, t, and t', having canvas or other flexible material fastened and distended thereon, with tension springs y y, and provided with the pinions i

and k, in combination with the master-wheel h 40 and cylinder f, vertically adjustable by means of the lever e upon the barrel c, and engaged therewith by means of the key o,

substantially as described.

2. The rod d, having a beveled end n at its 45 upper extremity to operate the bell-hammer p, and provided with the arm q, to communicate with the slot v in a flanged wheel r and ratchet g, and movable within the barrel c, independently thereof, for the purpose speci- 50 fied.

3. The combination, in station-indicators, of the rod d, sliding within the barrel c, the bell-hammer p at the top, provided with a spring x, a flanged wheel r, having slots vv, 55 and communicating with the distendingroller t, the barrel c, engaging the nave f, vertically adjustable thereon, the master-wheel h, engaging with the pinions i or k, and the rollers j,j, to which said pinions are attached, 60

all substantially as set forth.

4. In station-indicators, the combination of a canvas band or belt with the stations to be announced distended upon rollers t and t'and attached to rollers j j, with a master- 65wheel h, vertically adjustable upon a barrel or tube c, engaging therewith, so as to reverse the order of announcement without changing the direction of the operating-lever c', and rod d, sliding within the tube c, and operating 70 the bell-hammer p simultaneously with the announcement of the station at a.

In testimony whereof I affix my signature

in presence of two witnesses.

EMILE VERPILLIER.

Witnesses:

CHAS. W. GRAVES, ALFD. S. BADGLEY.