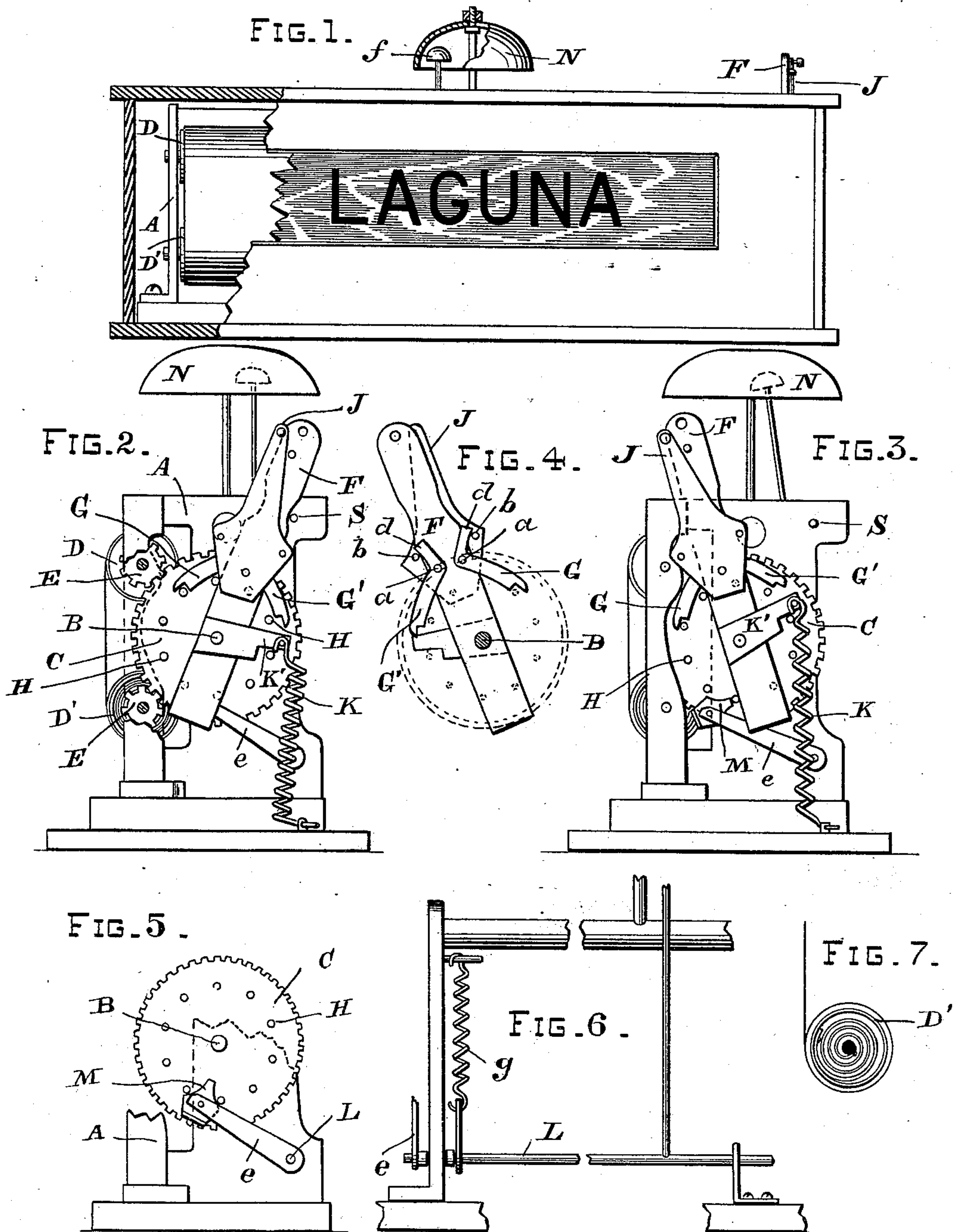


(No Model.)

H. J. WENZEL.
STATION INDICATOR.

No. 254,078.

Patented Feb. 21, 1882.



WITNESSES.

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HERMANN J. WENZEL, OF SAN FRANCISCO, CALIFORNIA.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 254,078, dated February 21, 1882.

Application filed July 9, 1881. (No model.)

To all whom it may concern:

Be it known that I, HERMANN J. WENZEL, a citizen of the United States, and residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Indicator, of which the following is a specification.

The object of my invention is to provide an indicator for railway-cars to indicate the name of streets, stations, post-offices, &c., and generally to exhibit names, signs, and figures in advertising a business, the whole being inclosed in a box having a glass front and a gong connecting with the mechanism to sound an alarm.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation, partly broken away. Fig. 2 is an end elevation, showing the position of the operating mechanism when at rest. Fig. 3 is an end elevation, showing the position of the parts the instant before the alarm is sounded. Figs. 4, 5, 6, and 7 are detail views.

Similar letters refer to similar parts throughout the several views.

To the frame-work A, in which the main portion of the machine operates, is connected the stud B, on which the toothed wheel C and operating-levers are placed.

Within the casing, and having their bearings upon the frames A A, are two longitudinal indicating-rollers, D D', having a flexible belt or web wound upon them and printed with the names of stations or other exhibits, the lower roller, D', being provided with a coiled spring to take up the slack of the web, as is seen in Fig. 7. The outer or front ends of these rollers are provided with pinions E E, the teeth of which mesh into the teeth of the wheel C, when the lever F is operated.

The lever F is connected to the stud B, on which it moves forward and back, and carries with it two pawls, G G', which move on the pins a a against stops b b, as is clearly shown in the rear view of the lever F at Fig. 4, so that when the said lever is operated the ends of these pawls engage against the studs or pins H H on the face of the wheel C, and move the wheel to the right or left, as desired, and carry with it the rollers D D', and thus present the names of streets, &c., upon the web or indicating-band to the glass front of the machine.

A movable reversing-plate, J, is connected to the face of the operating-lever, which, when moved to the right or left, lifts up one of the pawls at either side from its pin on the wheel C by means of the studs or pins b b engaging the lugs d d at the upper end of the pawls.

A spiral spring, K, is attached to the lower end of the metal frame and connects with the operating-lever F by means of a lug and pin, K', which keeps the operating-lever in position and carries it back when moved forward to produce a partial revolution of the rollers.

To the shaft L is connected a triangular piece, M, which moves in an automatic manner upon the pins H H on the face of the wheel C at the end of the connecting-arm e. This triangle has a lateral movement between two of the series of pins upon the face of the wheel C, and holds the same while in position when the stroke is made. The shaft L also operates a hammer, f, which is controlled by a spiral spring, g, upon the inner face of the frame, and extends up through the casing of the box, and as the lever F is operated this hammer is made to strike a bell or gong, N, stationed also at the top of the box or casing, so as to attract the attention of passengers toward the indicator. The lever is worked either by the driver of the car or by the conductor, or by both, by a cord or cable connection with the lever F.

In practice, to change the names or numbers upon the indicator or belt, the lever F is moved to the left, when the pawl G will engage a pin on that side of the wheel or disk and carry the wheel forward, moving the pinions D D' and rollers E E. At the same time the triangular piece M will be released from one of the spaces between the pins and enter the next series, and another name will be presented from the roller, when the hammer will strike the gong or bell. The spiral spring K draws back the lever F to the stud S, the pawl G will be disengaged from its pin, and the pawl G' ready to engage with its pin. Now, if the lever F be moved to a position as shown in Fig. 3, the pawl G will be relieved and become active, and with the assistance of the pawl G' the reverse movement of the machine is produced.

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

1. The movable reversing-plate J, pivoted to

the lever F, and provided with pins *b b*, adapted to engage with the pawls G G', whereby the movement of the lever F throws said pawls alternately out of engagement, substantially as and for the purpose specified.

2. The combination, with the indicating-rollers D D', having pinions E E, and the wheel C, gearing with said pinions, and provided upon its face with pins H H, of the lever F, having pawls G G' pivoted thereto, and reversing-plate J, pivoted to lever F, and provided with pins *b b* for engagement with said pawls, whereby the pawls G will alternately engage with the pins H when the lever is moved to the right or left, and thus operate the indicating-rollers, substantially as shown and described.

3. The combination, with the lever F, having lug K', spring K, and pawls G G', provided with lugs *d d*, of the reversing-plate J, having pins *b b*, adapted to engage with the

lugs at the ends of the pawls G G' and lift them alternately, substantially as and for the purpose set forth.

4. The triangular piece M, connected to the hammer-shaft L by means of the arm *e*, and operating upon the pin *h* between the two pins upon the face of the wheel C, so that the wheel C will be held in position and be made to strike the gong at the proper time when the position of the indicator is changed, the whole constructed, arranged, and operating substantially in the manner as herein set forth and specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 24th day of June, 1881.

HERMANN J. WENZEL. [L. S.]

Witnesses:

C. W. M. SMITH,

CHAS. E. KELLY.