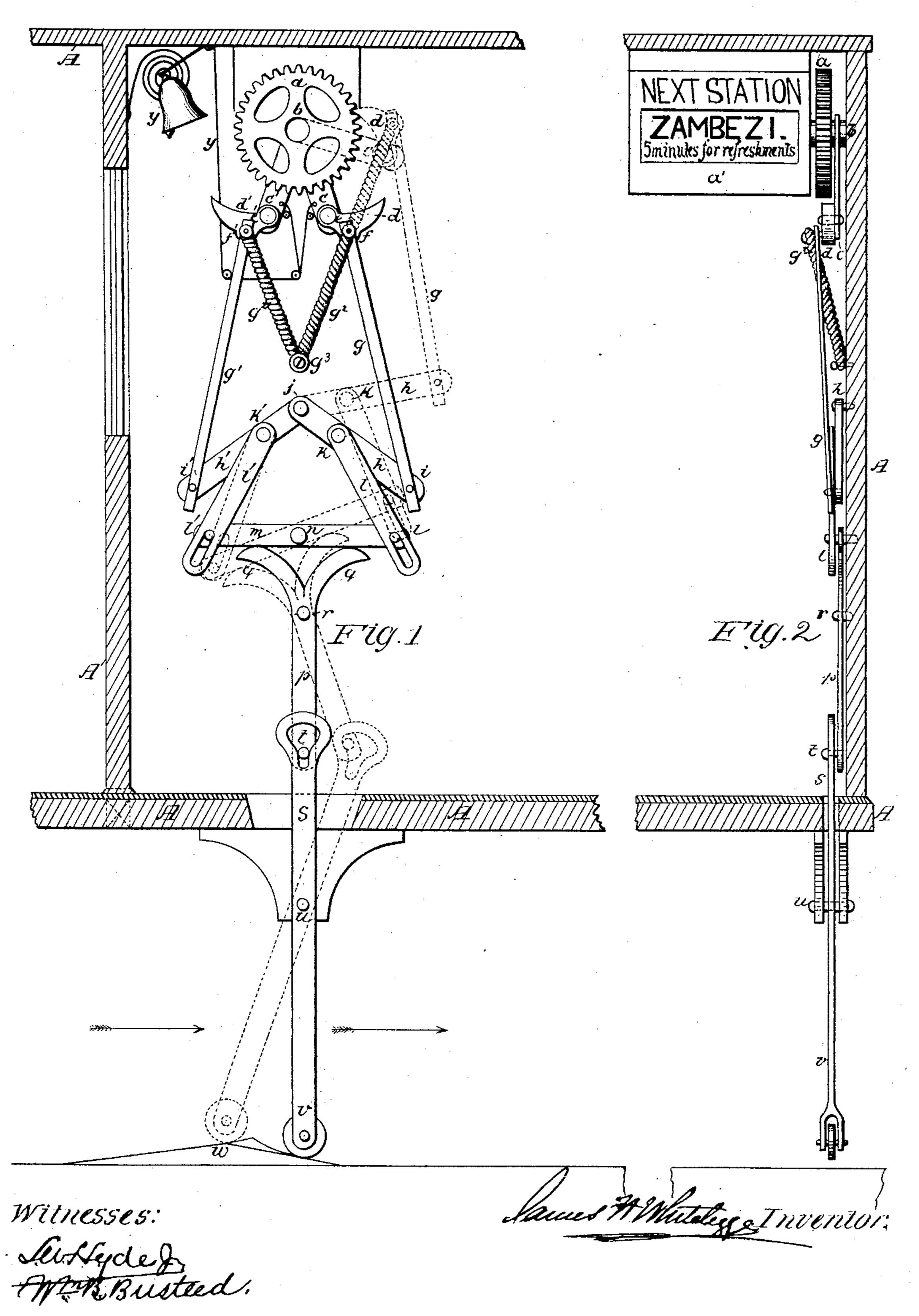
(No Model.)

## J. H. WHITELEGGE.

Automatic Railroad Station Indicator.

No. 237,425.

Patented Feb. 8, 1881.



## United States Patent Office.

JAMES H. WHITELEGGE, OF NEW YORK, N. Y.

## AUTOMATIC RAILROAD-STATION INDICATOR.

SPECIFICATION forming part of Letters Patent No. 237,425, dated February 8, 1881.

Application filed October 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, James H. Whitelegge, of the city, county, and State of New York, have invented a new and Improved Automatic Railroad-Station Indicator, of which the

following is a specification.

The object of my invention is to provide a station-indicator which will indicate and announce automatically and in consecutive order ro to the passengers before arriving thereat the name of the next station at which the train will, stop (or pass,) continuing so to do during the entire trip, and which will, when returning over the same route, indicate and announce 15 correctly in reverse and consecutive order the names of the stations, each at the proper time, so that the passengers will be correctly and timely informed thereof; and my invention consists of combinations of devices, such as 20 levers, connecting-rods, &c., arranged to operate upon a lettered drum, cylinder, ratchetwheel, or shafting, (located in the upper part of the car, at either end or intermediate,) giving it just the necessary turn to bring the 25 proper title of the next station prominently into view at the correct time, the said combinations of levers, &c., being set in motion and operation by an inclined plane or other suitable device connected with the track or any 30 other suitable portion of the road-bed of the railroad while passing over the same.

It also consists, in combination therewith, of a duplicate set of devices, whereby the lettered or indicating drum, cylinder, &c., will be given a reversed motion as the train moves in the opposite direction to that first mentioned.

It further consists in the combination therewith of a bell, gong, or other sounding device, as an annunciator, serving to call or attract attention thereto at the time of bringing the name of the station into view.

In the drawings accompanying, Figure 1 is a face view of the apparatus, showing the combinations of devices comprising the same, supposed to be located at one end of a car and against the side wall thereof, a portion of the car-body being shown in section. Fig. 2 is an end view of the same, showing a face view of the drum or indicating-cylinder with title of station.

The letter A indicates on the drawings parts

of the car to which my apparatus is supposed to be applied.

a indicates a cog-wheel upon shaft b, and to the same is attached a drum, cylinder, endless 55 ribbon, or other suitable device containing the names of the stations, so that as the wheel a is turned either way one name may be exposed at a time. At a' is shown a device for that purpose. c is a vibrating arm, using the shaft 60 b as a pivot.

At d is shown a pawl, formed to fit the ratchets of cog-wheel a when engaged therewith at the proper time. The pawl d is pivoted at e to the vibrating arm e, and at f is pivoted to 65 said pawl d a connecting-rod, g, which, reaching downward, is pivoted to a lever, h, at i. Said lever h has its fulcrum at pivot j, and at k thereon is pivoted a connecting-rod, l, which, reaching downward, is pivoted, by or through 70 a slot at its lower end, to a vibrating or balance lever, m, arranged upon a fulcrum-pivot, n.

At  $g^2$  are shown coiled springs, attached at upper end to d, over the same pivot to which is attached rod g, and at lower end to a pivot, 75  $g^3$ . The object of spring  $g^2$  is to keep down the pawl d or away from the wheel a when not required in operation.

The several parts indicated by the letters c', d', e', f', g',  $g^{2\prime}$ , h', i', k', and l' are duplicate 80 parts, exactly corresponding with those lettered without the mark, and form the revers-

ing half of the apparatus.

At p is shown a lever extending downward vertically from the lever m, pivoted at r, and 85 having its upper end branched or Y-shaped, as shown by prongs qq, curved properly, so as to operate upon bottom face or edge of lever m by pressure as either prong may be brought to bear thereon. This lever p may 90 extend downward to the track or road-bed device shown at w, or may be lengthened out by a lever, s, connected therewith at t, as shown, and having at its lower end a wheel, v, enabling it to run freely over the inclined plane w, 95 which, as it is moved over, brings it to the position shown by dotted lines, and communicating motion to the several parts of the apparatus all the way up to ratchet-wheel a, as fully shown by dotted lines representing po- 100 sition of said parts while operated upon by motion of the lever p, and they in turn giving

motion, by means of the pawl d, to the ratchet or cog wheel a, and, as it is turned, thereby giving motion to the indicating device in the upper part of the car upon or connected with the shaft b or wheel a. When the lever p is not operating it stands vertically and motionless; but when reaching the inclined plane w, or other device, attached to the track or roadbed, it is brought out of its perpendicular condition and swung either way, according to the direction of the train.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

15 1. The combination consisting of ratchet-wheel a, vibrating arm c, pawl d, connecting-rod g, holdback-spring  $g^2$ , vibrating lever g, connecting-rod g, balance-lever g, and forked lever g, all connected and arranged to operate substantially as shown, and for the purpose set forth.

2. The combination consisting of ratchet-wheel a, vibrating arm c, pawl d, connecting-rod g, holdback-spring  $g^2$ , vibrating lever h, connecting-rod l, balance-lever m, forked lever p, and auxiliary lever s, all connected and ar-

ranged to operate as shown, and for the purpose set forth.

3. For the purpose of giving rotary motion to ratchet or cog wheel a and a reverse mo- 30 tion when requisite, the combination consisting of duplicate vibrating arms c c', duplicate pawls d d', duplicate holdback-springs  $g^2$   $g^{2'}$ , duplicate connecting-rods g g', duplicate vibrating levers h h', duplicate connecting-rods 35 l l', balance-lever m, and forked lever p, when combined and arranged to operate essentially as shown and described.

4. In combination with shaft b, vibrating arms c, rods g, levers h, rods l, and lever m, 40 the alarm bell or gong g, connected in such manner that when motion is imparted to lever g by action of lever g the alarm device g will be operated upon automatically and its sound give notice to the passengers that the train is 45 approaching a station and that the indicator is set, giving the name of the station, as herein described and set forth.

JAMES H. WHITELEGGE.

In presence of— WM. B. BUSTEED, HENRY ELMER.