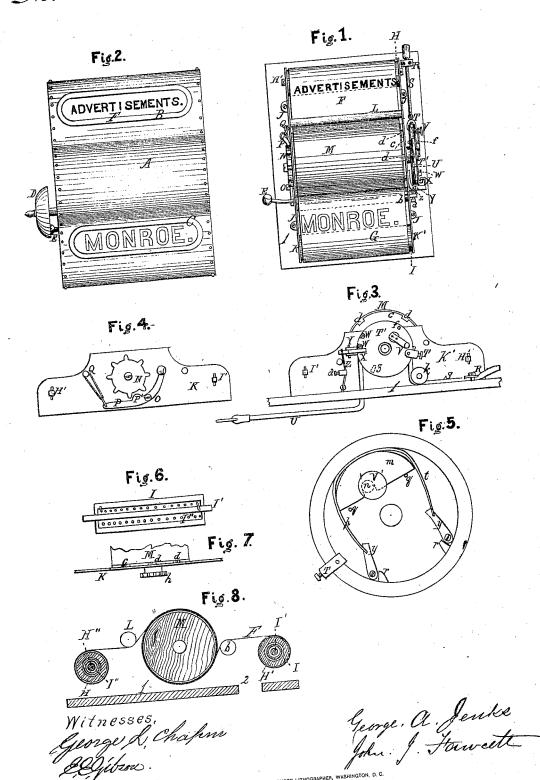
## Jenks.s. Fawcett. Station Indicator.

No. 108.791.

Patented. Nov. 1.1870.



## United States atent Office.

GEORGE A. JENKS AND JOHN J. FAWCETT, OF CHICAGO, ILLINOIS, ASSIGN-ORS TO THEMSELVES AND JOSEPH HAMPSON, OF SAME PLACE.

Letters Patent No. 108,791, dated November 1, 1870.

## IMPROVEMENT IN STREET AND STATION-INDICATORS

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, George A. Jenks and JOHN J. FAWCETT, of Chicago, in the county of Cook and State of Illinois, have invented an "Improved Street-Indicator and Advertiser for Street-Cars and other purposes; and we do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing and letters marked thereon, making a full and true description, in which-

Figure 1 is an elevation of our improved streetindicator and advertiser, the face-cap being removed

to give a view of the mechanism inside.

Figure 2, a face view of the device with the facecap in position, as when in use.

Figures 3 4 are elevations of the opposite ends of the inner frame-work, &c.

Figure 5, an enlarged elevation of a wheel appertaining to the device, detached from the other

Figure 6, a section of one of the rollers, showing one of the coil springs for rolling up the belts.

Figure 7, the ratchet by means of which the large roller is turned.

Figure 8, a longitudinal section of the device, show-

ing the position of the belts.

The present invention relates to an improvement in indicating streets in street-cars and other purposes, as showing advertisements; and

Its nature consists in the novel mechanism whereby that purpose is accomplished, as the whole is hereinafter fully described.

1 A represent a substantial case, having suitable ends, which is conveniently arranged to support the mechanism for operating the lettered or figured belts F G, to show the letters and figures thereon both to passengers and to the driver, as shown by openings at B C, figs. 2 and 8, the opening 2 being for the

That part of the case at A is removable from part 1 for the convenience of reaching the mechanism inside, and of manufacture.

Inside of that part of the case shown at A, and fastened to the part 1, are metal end plates, K K', which support the rollers and other devices hereinafter

A large central roller, M, has bearings in the end plates K K', and to its shaft, on one end, is fixed a wheel, T, and to the other end a ratchet-wheel N.

The function of the wheel T is to rotate the roller M, which is done by means of a bell-cord, U, passing over wheel T and through that part of the frame shown at 1, figs. 1 and 3.

The bell-cord being within convenient reach of the conductor, the belts F G are readily carried over the rollers far enough at each pull of the cord U to bring the name of a street and an advertisement opposite to the openings B C 2.

A rubber cord, S, or other suitable spring, being attached to the wheel T' and to that part of the case shown at 1, carries the wheel T' back preparatory to another pull on the cord U.

The wheel T works loosely on the journal of the roller M, and is made to move said roller by means of a ratchet, h, fig. 7, attached to the shaft of the roller M, and by means of pawls, y y, fig. 5, pivoted to wheel, T, either one of said pawls being held closely to the ratchet-wheel h by means of a single curved spring,

The rollers M H I are designed to turn in either direction, and, to accomplish that purpose, a semidisk, m, is placed in a recess in the inner side of wheel T', and it is so acted upon by an eccentric, V', fig. 5, as to throw either pawl y off from the ratchet h, and throw the other one in by pressing against either prong of the spring t p.

The eccentric is operated by a crank, V, placed outside of wheel T, figs. 1 and 3.

This arrangement for reversing the movement of the rollers is such that a pull on the cord U will give a direct forward movement to the belts F G, and such that, when the eccentric V' is turned by crank V, the backward movement of the wheel T, by rubber spring S, will give a backward movement to said belts.

Stops r, on wheel T, and a stop, z, on plate K' shown by dotted lines, fig. 1, prevent wheel T from turning too far.

The reversing being done at the end of the line, the last street indicated will be the first one on the return

Coil springs I" H' are placed inside of the rollers I H, and attached both to the shafts I' H" of the rollers and to the inner peripheries of the rollers, hold the belts F G in proper position, by being wound up with the large roller, so that when the pawls y are reversed, the springs will, of themselves, roll up the belts on the small rollers and keep them tight.

To prevent the springs I" H' from moving the belts when the cord U is not operating them, a spring-lock, X, is used, whose inner end catches into notches d d, &c., made in the periphery of a plate, C, attached to the roller, said lock passing through the end plate K.

To loosen the catch X, cams W W, attached to the

outer face of wheel T, are made to operate on another

cam attached to the lock, as shown in fig. 1.

To the opposite end of the journal of the roller M is attached a ratchet-wheel, N, which, as the roller M

rotates, operates a spring bell-hammer, P Q E, by means of which a bell, D, fig. 2, will be rung at the same time a street is indicated.

Two belts are used, as shown at fig. 8, overlapping each other on roller M, one belt having the names of streets marked thereon, and the other advertisements, as shown at figs. 1 and 2.

## Claim.

The arrangement and combination of the rollers M H I, placed parallel with each other, the middle roll being the largest, and having attached to one end a ratchet-wheel, N, for ringing the bell D, and to the

other end a wheel, T', which is provided with pawls y and cam-lugs W W, a ratchet, h, curved spring t p, a semi-disk, m, an eccentric, V', and crank V, for reversing the motion, and lugs r r, which strike against a lug, z, on the end plate K', for regulating the distance that the center roll is to move, a spring-lock, Z X, and the coil springs H' I", for taking up the belt, as and for the purpose set forth.

GEO. A. JENKS. JOHN J. FAWCETT.

Witnesses:

G. L. CHAPIN, E. E. GIBSON.