No. 622,185. Patented Mar. 28, 1899.

C. J. FEDER.

RAILWAY ADVERTISING APPARATUS.

(Application filed Dec. 23, 1898.)

(No Model.) 2 Sheets—Sheet 1.

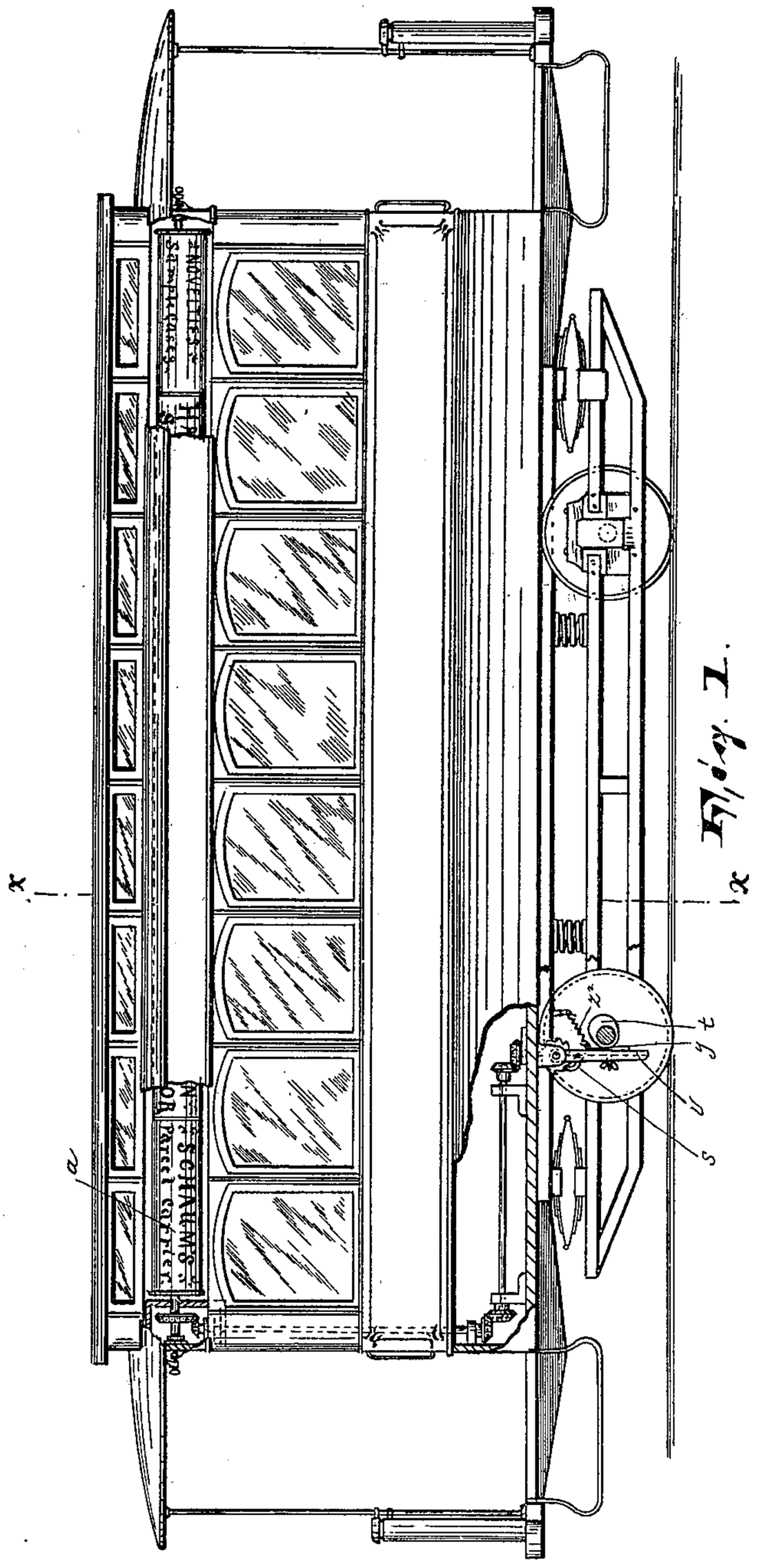

Fig. 1.

WITNESSES:

Wm. D. Bell.

Robert J. Pollitt.

INVENTOR

Charles J. Feder,

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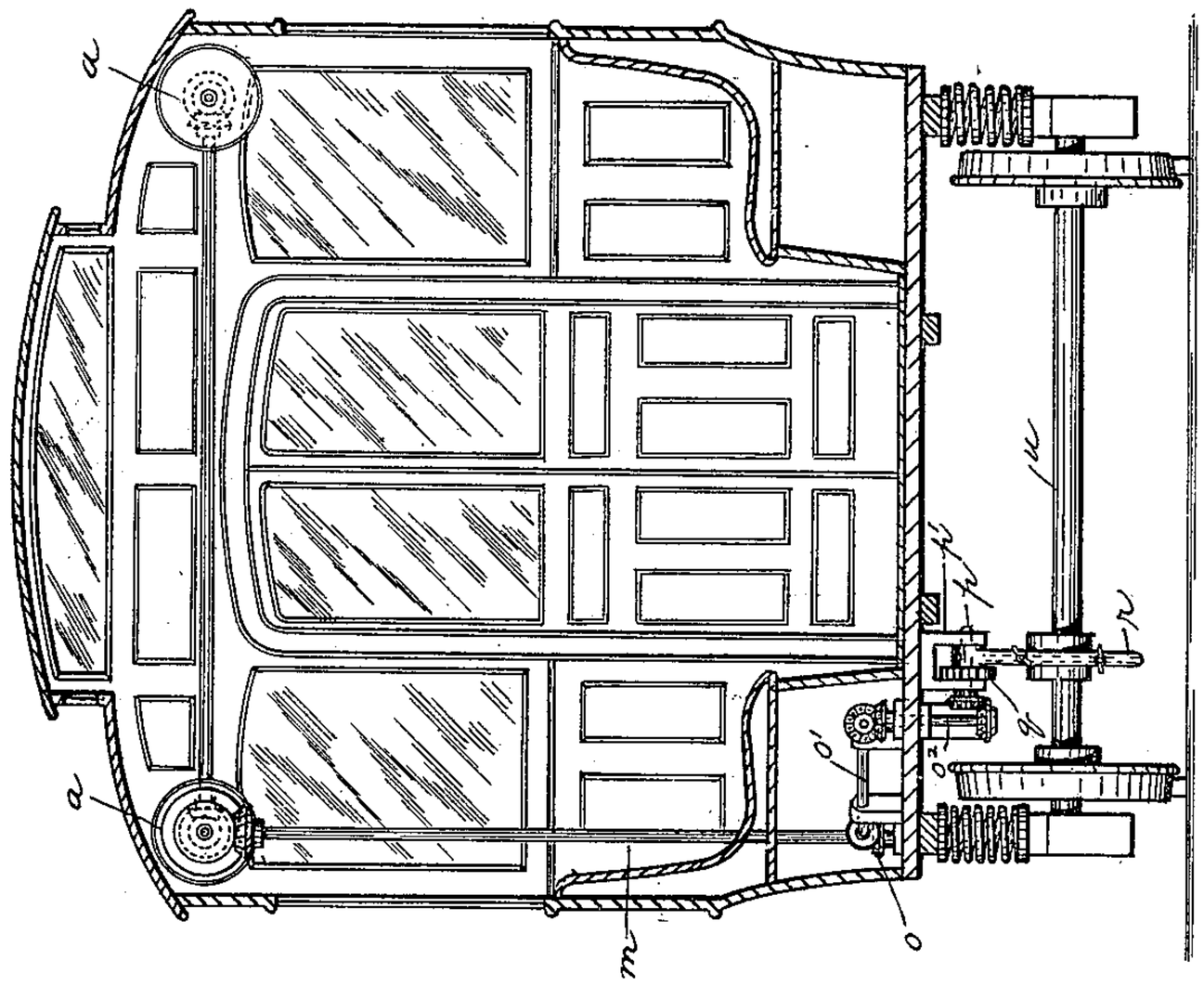

Fig. 2.

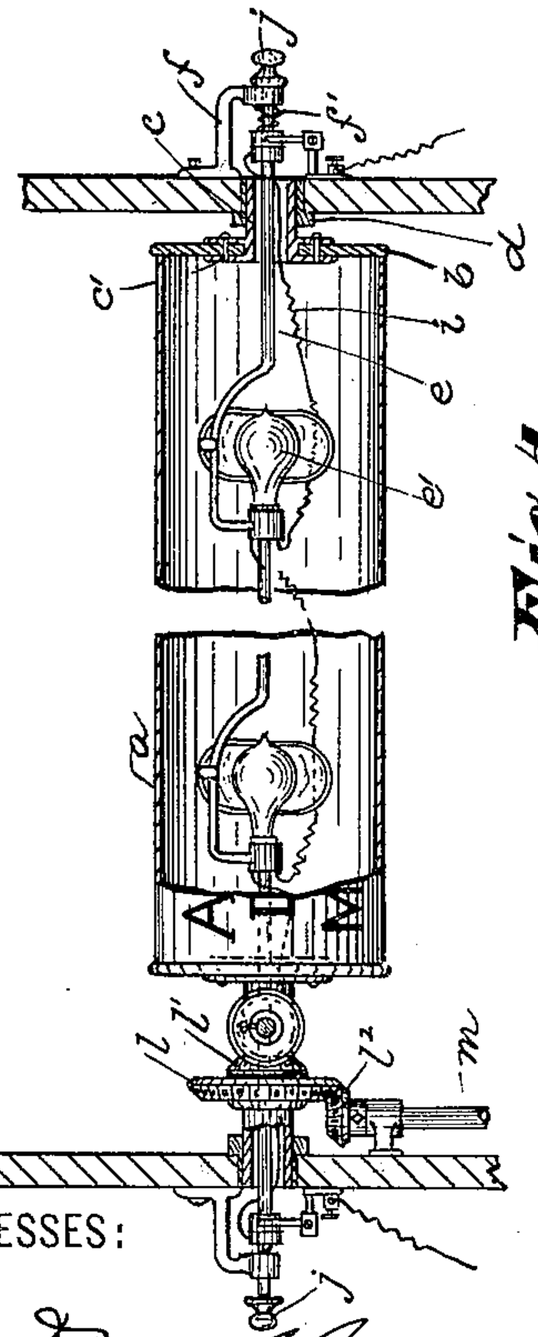

Fig. 4.

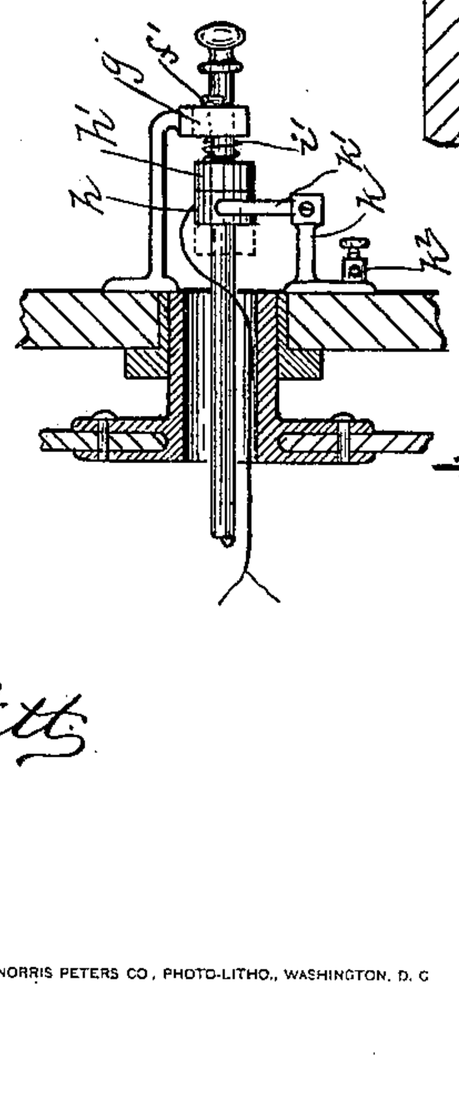

Fig. 5.

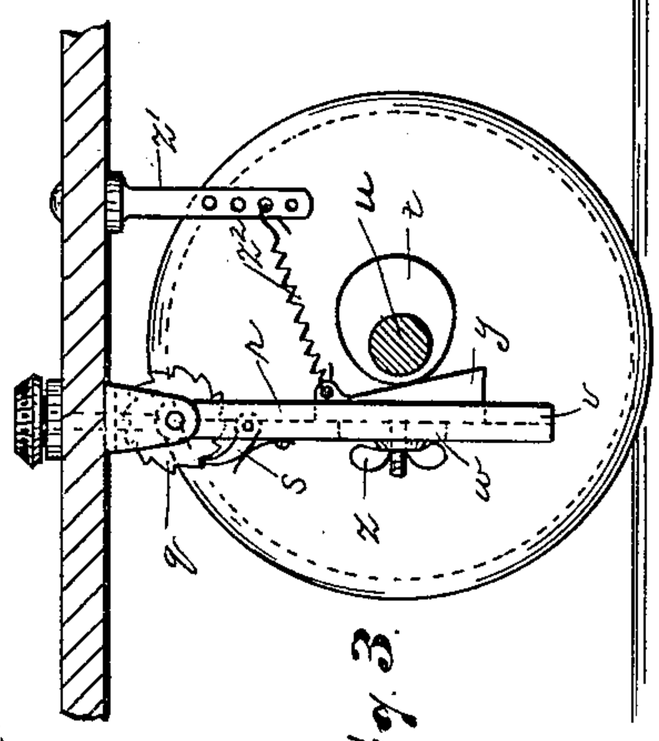

Fig. 3.

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UNITED STATES PATENT OFFICE.

CHARLES J. FEDER, OF PATERSON, NEW JERSEY, ASSIGNOR TO ROSA FEDER, OF SAME PLACE.

RAILWAY ADVERTISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 622,185, dated March 28, 1899.

Application filed December 23, 1898. Serial No. 700,093. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. FEDER, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Railway Advertising Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to rotating signs for vehicles, and it has reference particularly to a device of this nature which is automatically actuated from the running-gear of the vehicle.

The object of the invention is to provide an automatically-rotating sign which shall be simple and durable in construction and effective in operation and the actuating parts of which may be rendered adjustable, so that the intermittent movements of the sign may be effected with more or less frequency, as desired.

A further object of the invention is to provide for use in connection with an apparatus constructed upon the principles of my invention an illuminated sign of improved construction.

The invention consists in the improved automatically-actuated rotating sign, in the peculiar sign proper, in the means for automatically and intermittently rotating said sign, and in the combination and arrangement of the various parts of the apparatus, substantially as will be hereinafter fully described and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 is a view in side elevation of a car provided with my improved rotating sign and the operating mechanism therefor, parts of said car being broken away to show portions of the apparatus involved in my invention. Fig. 2 is a vertical sectional view on the line $x\,x$ of Fig. 1. Fig. 3 is a view in side elevation of one of the car-wheels and of a portion of the actuating means for the sign operatively connected therewith. Fig. 4 is a view partly in side elevation and partly in section of my improved sign proper, showing the means whereby it is supported and illuminated; and Fig. 5 is a sectional detail view of what is shown in Fig. 4.

In said drawings, a indicates the sign, there being one upon and extending along each side of the car near its roof. These signs are preferably cylindrical; but they may be prism-shaped, provided they have a sufficient number of faces so that in effect they are substantially cylindrical. Each sign consists of an elongated hollow body formed of some translucent material, upon which the advertising matter is placed and which is adapted to contain the illuminating devices. Each end of the cylinder is provided with a cap b, which is penetrated by a trunnion c, having flanges c', which embrace and are secured to said cap by rivets or in any other desired manner. Said trunnions are journaled in suitable bearings d, mounted in each end wall of the car, and they are hollow, so as to admit a rod e, which forms a portion of a bracket that extends throughout the length of the sign and supports incandescent electric lamps e'. One end of each rod e is curved or bent about the adjacent lamp, to the socket of which its extremity is secured in any desired manner. It should be remarked that either one of the two end rods of the bracket is simply a straight one. The two end rods are journaled near their free ends in downwardly-bent arms f, which project outwardly from the wall of the car, and each of said arms is, furthermore, provided with a key f', which works in a feather g, formed in the arm f, so that when said key and feather are in alinement the entire bracket may be moved longitudinally in its bearings. Each of said end arms is provided with two collars $h\,h'$, the latter being formed of insulating material and the other having electrical connection through the wire i with the lamps. Between the collar h' and the end of the bent arm f for one of the end rods and surrounding the rod is a spiral spring i', normally acting to hold the bracket inwardly or toward the other end of the car. The free end of each rod is provided with a knob j, whereby it is manipulated.

k designates one of a pair of small brackets carrying a brush k', which is adapted to wipe upon one or other of the collars h h', according to the position thereof, and having a binding-screw k^2 mounted thereon. To the binding-screws k^2 is adapted to be connected the conductor from the source of electrical energy.

One of the hollow trunnions c is somewhat longer than the other and is provided midway between the sign and the side wall of the car with a bevel-pinion l, carrying, rigidly connected therewith, another and smaller bevel-pinion l', and itself engaging still another bevel-pinion l^2, carried upon the upper end of a vertical revoluble shaft m, having suitable bearings in the wall of the car. The two signs in the car are operatively connected by a revoluble transverse shaft n, also having suitable bearings in the wall of the car and having its pinions, one of which is carried on each end, in engagement with a pinion l' on the trunnions of the signs.

The lower end of the shaft m carries another bevel-pinion o, which is in engagement with a smaller pinion upon one end of a suitably-journaled horizontal shaft o', the other end of said last-named shaft being operatively connected through bevel-gearing with a vertical shaft o^2. The shaft o^2 is adapted to be rotated also through bevel-gearing by a short shaft p, journaled in a bifurcated bracket p', suspended from the floor of the car. Between the spaced portions of said bracket p is carried a ratchet-wheel q, which is rigidly secured to the shaft p, and a lever r, freely fulcrumed upon said shaft p and carrying a spring-actuated pawl s, that engages the teeth of the ratchet-wheel q.

The lever is vibrated by means of a cam t, rigidly mounted upon the axle u of one of a pair of wheels of the vehicle. Said lever has a longitudinal channel v, with which a similarly-arranged slot w, forming an opening through said lever, communicates. In said channel is mounted a wedge-shaped block y, carrying a set-screw z, which works in said slot w and by which longitudinal adjustment of the block may be effected. It should be remarked that the block is disposed between the lever and the cam and that the latter therefore bears against it.

The upper end of the block y is connected with a bracket z', which projects downwardly from the floor of the car, by a spiral spring z^2, which normally acts to hold the block against the cam.

It is believed that the operation of the apparatus will be clearly understood without description. It should be noted, however, that by virtue of the adjustability of the block y the frequency of the intermittent rotary movements of the signs is rendered controllable according to the normal speed of the car. It is my purpose to provide the signs with continuous advertisements—that is to say, advertisements each of which will extend at least around the sign—so that each intermittent actuation of the latter will present to the observer only a portion of the advertisements at a time. The number of advertisements will therefore depend only upon the width of each of them and the length of the sign.

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

1. The combination, with a vehicle, of a revoluble sign suitably journaled therein, a ratchet carried by said vehicle, a lever fulcrumed upon a portion of said vehicle in proximity to said ratchet, a spring-actuated pawl carried by the lever and adapted to engage said ratchet, operative connections between said ratchet and the sign, a cam carried by a revolving member of the running-gear and engaging said lever to vibrate the same, and means, disposed between the lever and the cam and adjustably mounted upon the latter, for varying the movement of said lever, substantially as described.

2. The combination, with a vehicle, of a plurality of revolving signs journaled therein, a ratchet carried by said vehicle, a lever fulcrumed upon a portion of said vehicle in proximity to said ratchet, a spring-actuated pawl carried by the lever and adapted to engage said ratchet, operative connections between said ratchets and one of the signs and between the respective signs, a cam carried by a revolving member of the running-gear and engaging said lever to vibrate the same, and a wedge, disposed between the lever and the cam and adjustably mounted upon the latter, for varying the movement of said lever, substantially as described.

3. In an advertising apparatus for vehicles, the combination, of a suitably-journaled translucent cylinder, a hollow trunnion carried on each end of and supporting the same, a lamp-carrying bracket projecting through said cylinder and penetrating said trunnions, suitably-supported arms forming bearings for said brackets, one at each end thereof, a collar or collars on said bracket, a spiral spring disposed between said collar and the arm, and a feather-and-key arrangement between said arm and the bracket, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of November, 1898.

CHAS. J. FEDER.

Witnesses:
JOHN W. STEWARD,
ALFRED GARTNER.