

No. 622,186.

Patented Mar. 28, 1899.

C. J. FEDER.
RAILWAY ADVERTISING APPARATUS.

(Application filed Dec. 28, 1898.)

(No Model.)

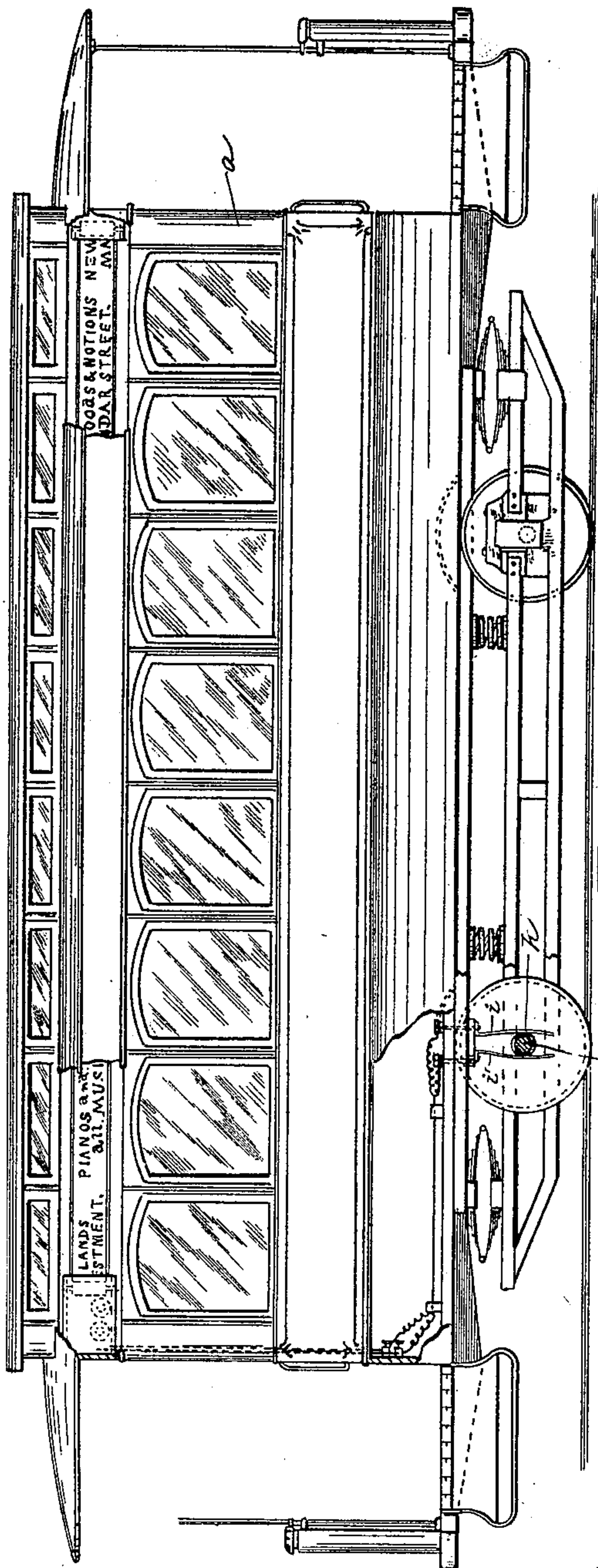


Fig. 1.

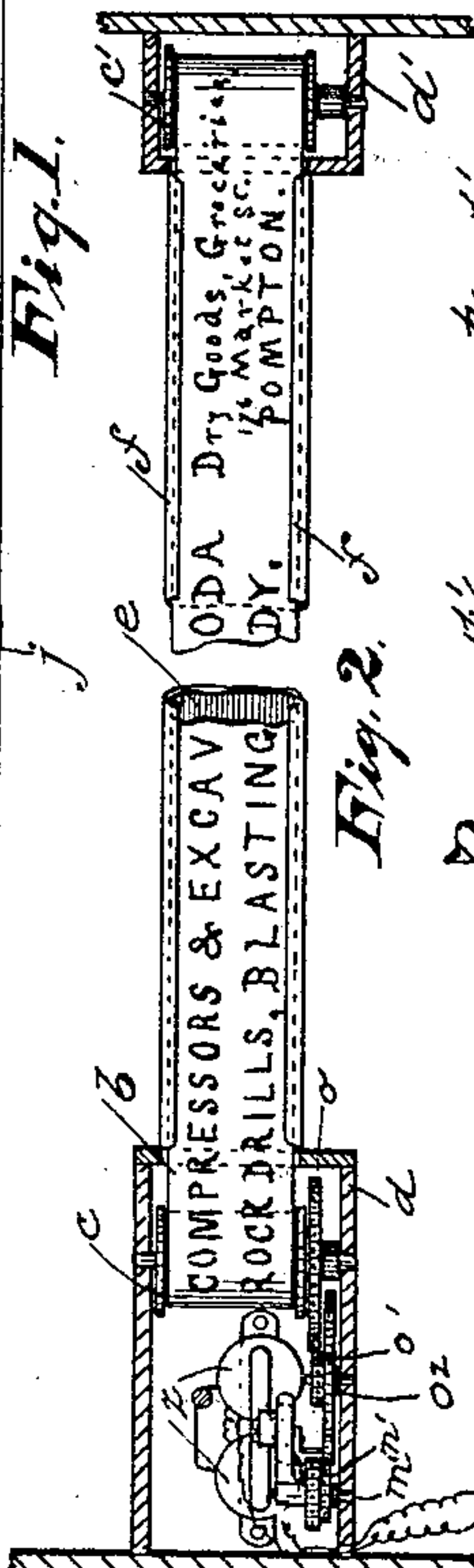


Fig. 2.

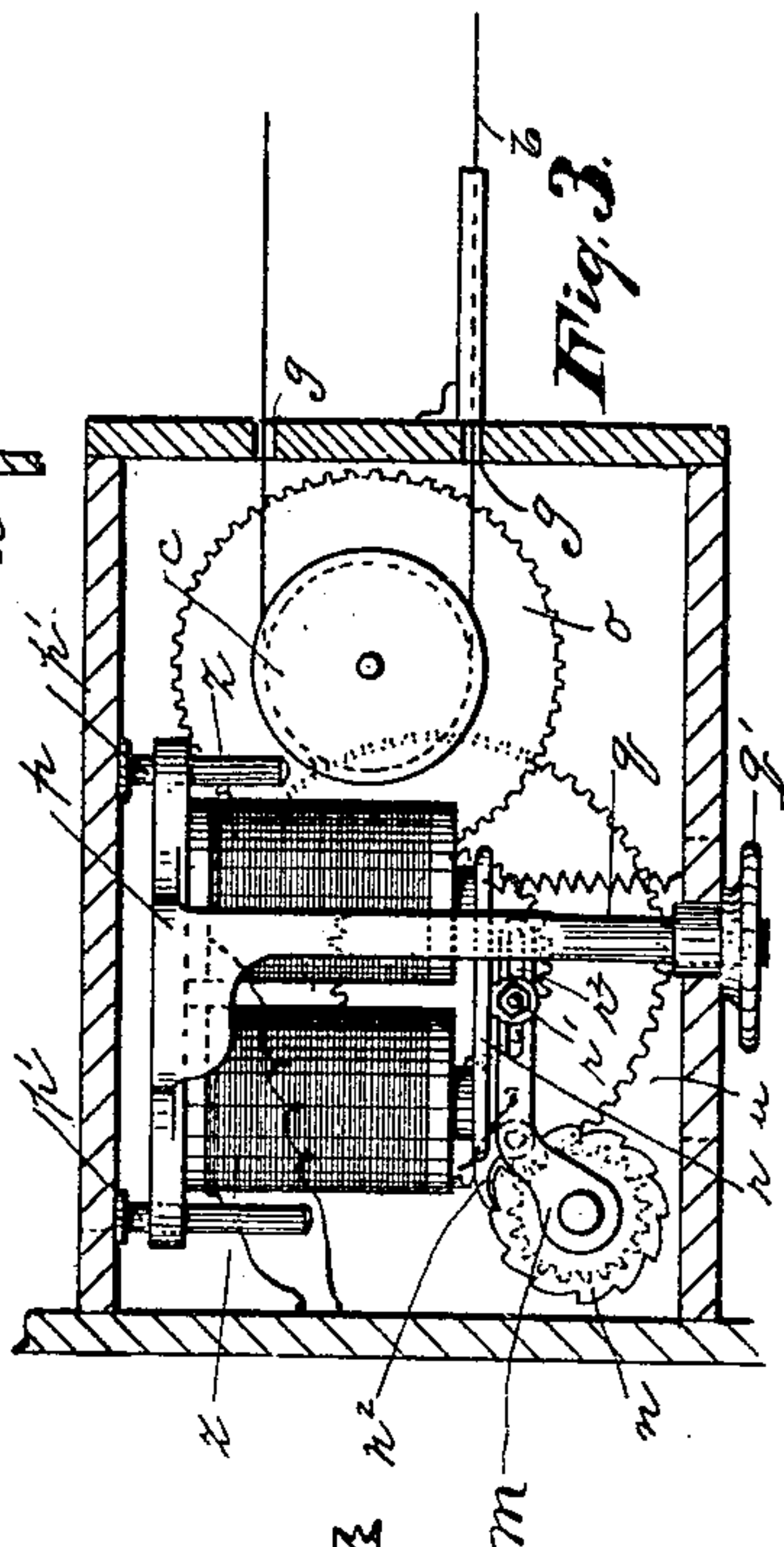


Fig. 3.

WITNESSES:

Jm. Drell.
Robert J. Pollett

INVENTOR

Charles J. Feder,
BY
Gartner & Steward
ATTORNEYS

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. 622,186, dated March 28, 1899.

Application filed December 28, 1898. Serial No. 700,484. (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 vehicles.

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 in the intermittent movements of the sign more or less of the same may be exposed, as desired.

The invention consists in the improved automatically-actuated rotating sign, in the means for automatically and intermittently rotating said sign, and in the combination and arrangement of the various parts of the apparatus, including said sign and its actuating means, 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 an enlarged view, partially in section and partially in elevation, of said apparatus. Fig. 3 is an enlarged detail view showing in elevation the construction of a portion of the actuating mechanism for said sign.

In said drawings, *a* indicates a car along each side wall and near the roof of which my improved sign is arranged. The sign proper consists of an endless flexible band *b*, which extends approximately throughout the length of the car and passes over flanged rollers *c c'*,

journaled with their axes vertically disposed in boxes or cases *d d'*, suitably supported at each end of the car. Upon the flexible band is adapted to be placed the advertising matter, and said band is prevented from sagging by means of an elongated plate *e*, suitably secured at each end to the boxes or cases *c c'* and provided along its side edges with overlapping flaps *f*, serving to guide the band *b*. This plate is secured to the boxes at points opposite the apertures *g* in said boxes, through which the band extends. I have only shown one of said flanged plates—that is to say, the one for the exposed portion of the sign; but it is obvious that both the sections of the band that are disposed between the boxes may be supported in this manner.

In the case or box *d* is sustained in a manner hereinafter particularly described a pair of electromagnets *z*, which are connected by wires *h h'* with a pair of brushes *i i'*, secured to and projecting downwardly from the floor of the car. One of the axles *j* of the car is provided with two automatically-opposed insulating-plates *k*, and it is inclosed between and clasped by the brushes *i i'* in such manner that the electrical connection across or through the axle will be intermittently broken as the insulations and the exposed portions of the axle successively come into contact with said brushes. Any source of electrical energy may be included in the circuit of which the wires, the axle, and the electromagnets together form a part.

m is an armature-lever fulcrumed upon the upper end of an arbor *m'*, journaled in one of the walls of the case *d* and carrying a ratchet-wheel *n* and a pinion *n'*, each rigidly connected thereto. The armature-lever is provided with a spring-actuated pawl *n²*, which is adapted to engage the ratchet-wheel and cause the same to rotate when the armature-lever is vibrated.

o designates a pinion secured upon one end of the roller *c* and having its teeth in engagement with the smaller one of two pinions *o' o²*, that are disposed between said pinion *o* and the pinion *n'*, the larger one of these intermediate pinions being in engagement with said pinion *n'*.

The armature-lever is adapted to be actu-

ated when the circuit is closed by the electromagnets, and in order to vary its throw I have provided means for adjusting said magnets relatively to the armature-lever. The means referred to consists of a frame *p*, which carries said magnets and which is penetrated by and adapted to slide upon a pair of pins *p'*, projecting from a wall of the case, and an arm *q*, projecting from said frame in the direction of the opposite wall of the case, which it penetrates, its free end being screw-threaded and carrying an adjusting-nut or thumb-screw *q'*, which takes against said last-mentioned wall.

The armature *r* for the electromagnets is pivotally secured upon the armature-lever in operative disposition relatively to said magnets by means of a bolt *r'*, which extends through a slot *r²* in said armature-lever, thus rendering the armature adjustable longitudinally as well as pivotally upon the armature-lever.

A spiral spring *u* connects the armature-lever and the adjacent wall of the case, so as to retract the former whenever it is released by the electromagnets.

The operation of the device will be apparent without description.

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

1. The combination, with a car or other similar vehicle, of an advertising apparatus carried by said car and consisting of a revoluble sign, an adjustably-mounted electro magnet or magnets, an electric circuit including said magnets, and a revolving member of the running-gear of said car, said member constituting a circuit making and breaking device, an armature-lever, an armature adjustably mounted on said armature-lever and controlled by said magnets and operative connecting means between said armature-lever and the sign, substantially as described.

2. The combination, with a car or other

similar vehicle, of an advertising apparatus carried by said car and consisting of a revoluble sign, an adjustably-mounted electro magnet or magnets, an electric circuit including said magnets, brushes also included in said circuit and bearing upon a revolving member of the running-gear of said car, said member constituting a circuit making and breaking device between said brushes, an armature-lever an armature carried by, and adjustable pivotally and longitudinally on, said armature-lever and controlled by said magnets and operative connecting means between said armature-lever and the sign, substantially as described.

3. The combination, with a car or other similar vehicle, of an advertising apparatus carried by said car and consisting of a case, a pair of pins mounted therein, a frame adjustably mounted on said pins, a revoluble sign, an electro magnet or magnets carried by said frame, an electric circuit including said magnet or magnets, brushes also included in said circuit and bearing upon a revolving member of the running-gear of said car, said member constituting a circuit making and breaking device between said brushes, a suitably-journalled arbor, a ratchet-wheel carried by and revoluble with said arbor, an armature-lever, an armature carried by, and adjustable pivotally and longitudinally on, said armature-lever and controlled by said magnets and fulcrumed on said arbor, a spring-actuated pawl engaging said ratchet-wheel and carried by said armature-lever and operative connecting means between said ratchet-wheel and the sign, 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.