

No. 627,902.

Patented June 27, 1899.

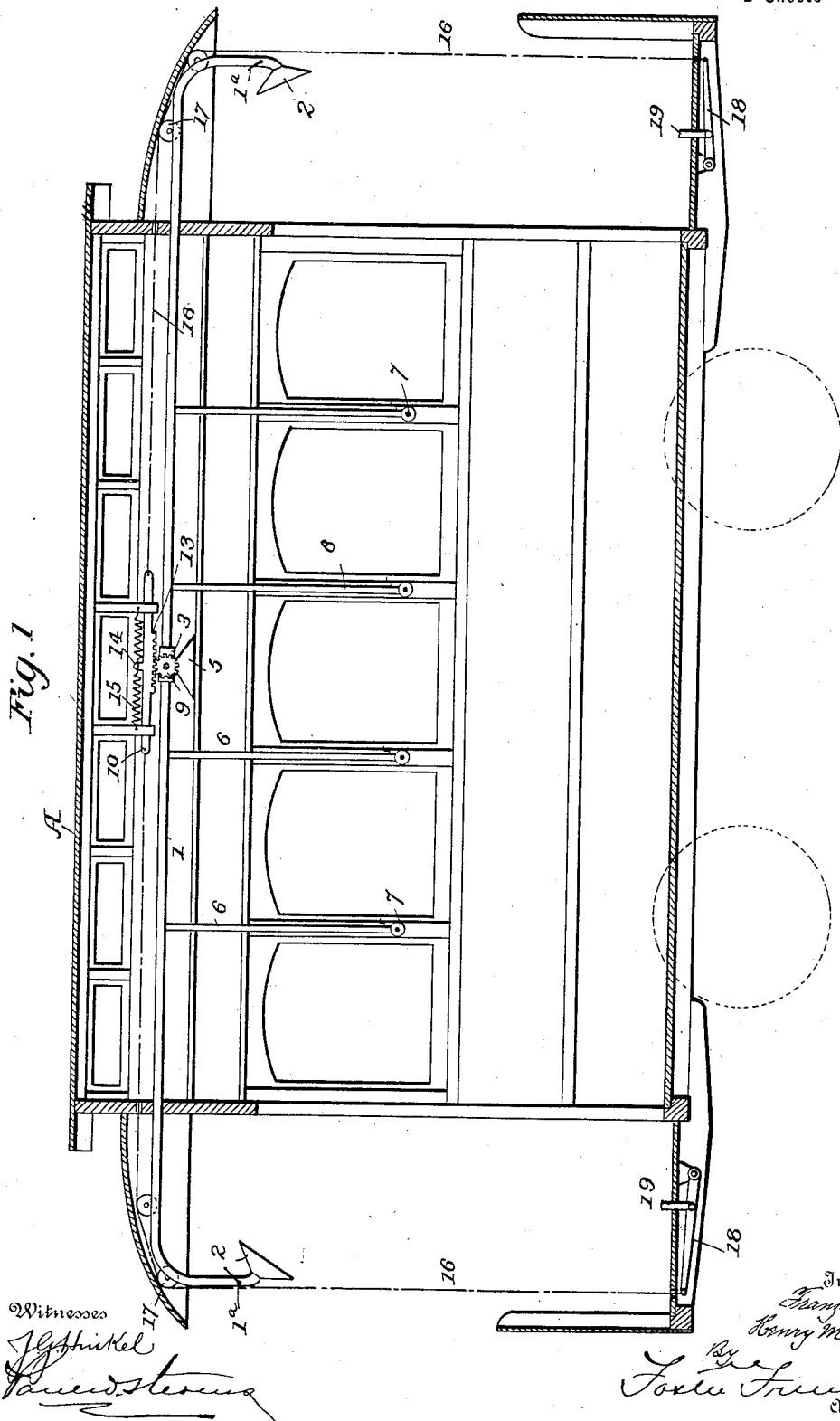
F. BURGER & H. M. WILLIAMS.

ANNUNCIATOR FOR CARS.

(Application filed Sept. 24, 1898.)

(No Model.)

2 Sheets—Sheet 1.



UNITED STATES PATENT OFFICE.

FRANZ BURGER AND HENRY M. WILLIAMS, OF FORT WAYNE, INDIANA; SAID
BURGER ASSIGNOR OF ONE-HALF OF HIS RIGHT TO SAID WILLIAMS.

ANNUNCIATOR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 627,902, dated June 27, 1899.

Application filed September 24, 1898. Serial No. 691,833. (No model.)

To all whom it may concern:

Be it known that we, FRANZ BURGER and HENRY M. WILLIAMS, citizens of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Annunciators for Cars, of which the following is a specification.

This invention relates to certain new and useful improvements in annunciators for street-cars and other conveyances, having for its object to provide simple and efficient means whereby a motorman or conductor may communicate with passengers individually or collectively and whereby the passengers may communicate with the motorman without the necessity of the motorman or driver quitting his station or of the passenger leaving his seat.

A further object of the invention is to so arrange the apparatus that such communication may be effected without the attention of the motorman being diverted from the track in front of the car or from persons desiring to board the car.

With these objects in view the invention consists in the novel construction, combination, and arrangement of the parts hereinafter more particularly described.

In the accompanying drawings, forming a part of this specification, and in which like letters and numerals of reference designate corresponding parts, Figure 1 is a longitudinal sectional view of a street-car with apparatus embodying the invention applied thereto. Fig. 2 is an enlarged view of the apparatus detached. Fig. 3 is an enlarged detail view of the megaphone and its valve-operating mechanism, and Fig. 4 is a diagrammatic view illustrating the arrangement of the parts.

Referring more particularly to the drawings, A designates a street-car, which may be of any ordinary construction. As shown, the car is adapted to run upon a track in either direction and is provided at each end with a platform. Extending longitudinally through the car, at the top thereof and preferably centrally of its width, is a pipe 1, the said pipe likewise extending beneath the hoods at the opposite ends of the car and having its ends projected downwardly and terminating in megaphones 2, through which sound is both

received and transmitted. These megaphones are so arranged in front of the driver or motorman that it is possible for him to speak directly into the same without the necessity of turning his head or diverting his gaze from the track in front of the car. Within the pipe 1, at points adjacent the megaphones, are valves 1^a, which may be opened or closed at will. Intersecting the pipe 1 about centrally of its length is a valve-casing 3, in which is fitted to rotate a three-way valve 4, and leading from this casing is a megaphone 5, so arranged as to direct sound downwardly in all directions. Likewise intersecting the pipe 1 at separated points are a series of speaking-tubes 6, which extend down the sides of the car into convenient position for passengers to speak through, and at their lower ends said tubes are provided with mouthpieces 7 and with the usual butterfly-valves 8.

The three-way valve 4 is so constructed as to place the opposite ends of the pipe 1 into communication with each other or to place either of said ends into communication with the megaphone 5. Means are provided for automatically maintaining the valve in such position as will place the two ends of the pipe 1 into communication, to the end that a passenger may transmit a message through any one of the speaking-tubes 6 to the motorman. This means may be variously constructed and arranged. That shown, however, is simple and effective and is preferred for this reason. Connected to the valve 4 upon the exterior of the casing 3 is a pinion 9, with which intermeshes a rack-bar 10, guided to reciprocate in guides 12, secured in any suitable manner to the car-frame. Near its opposite ends the rack-bar is cut away to form shoulders 13, which constitute stops adapted to engage with the edges of the guides 12 and to limit the movement of the rack-bar in either direction. Centrally of its length there projects from the rack-bar a lug 14, to which are connected two springs 15, which extend, respectively, to and are secured to the guides 12, the said springs serving normally to hold the rack-bar in its central position, as shown in Fig. 3, and thereby maintain the valve 4 in position to place the two ends of the pipe 1 into communication.

Attached to the ends of the rack-bar 10 are
cords 16, which extend to the opposite ends
of the car and pass over pulleys 17 down-
wardly to the ends of levers 18, to which they
5 are connected. These levers are arranged
beneath the platform of the car and each is
pivoted thereto at one of its ends. Extend-
ing from the levers upwardly through open-
ings in the car-platform into positions con-
10 venient to be pressed upon by the foot of the
motorman or driver are short rods 19, and
these rods when depressed serve to lower the
free ends of the levers 18, thereby pulling
upon the cords 16 and shifting the rack-bar
15 10, causing the valve 4 to be rotated to place
either one end or the other of the pipe 1 into
communication with the megaphone 5, de-
pending, of course, upon which of the levers
18 is operated. If now the motorman speaks
20 into the megaphone 2 in front of him, the
sound will be conducted through the pipe 1
and megaphone 5 and be diffused within the
car, so that it will be audible to all of the
passengers therein.

25 By the employment of the apparatus de-
scribed in the foregoing it will be obvious
that a passenger may readily communicate
with the motorman at all times without the
necessity of leaving his seat and traversing
30 the car and the motorman may send or re-
ceive communications without diverting his
gaze from in front of the car.

Various changes in the construction and
arrangement of the parts shown and described
35 may be made without departing from the
spirit or scope of the invention, since

What we claim is—

1. The combination with a megaphone at
one end of a car upon the exterior thereof and
a second megaphone within the car, of a pipe 40
connecting the two megaphones and extend-
ing lengthwise of the car, and speaking-tubes
upon the interior of the car communicating
with said pipe at separated points, substan-
tially as described.

2. The combination with a pipe extending
45 from opposite ends of a car, of a megaphone
arranged intermediate the ends of the pipe
and communicating therewith, a valve for
controlling such communication, and means 50
for operating the valve, substantially as de-
scribed.

3. The combination with a pipe extending
longitudinally of a car from opposite ends
thereof, of a megaphone upon the interior of 55
the car intersecting said pipe intermediate its
ends, a valve controlling communication be-
tween the pipe and megaphone, means for op-
erating said valve to place the two ends of
the pipe normally into connection, and means 60
for shifting the valve to place either end of
the pipe into communication with the mega-
phone, substantially as described.

In testimony whereof we have signed our
names to this specification in the presence of 55
two subscribing witnesses.

FRANZ BURGER.
HENRY M. WILLIAMS.

Witnesses:

GEO. K. TORRENCE,
JOHN ZIMMERMANN.