

S. D. UPHAM.
 COMBINED VENTILATING AND STATION ANNUNCIATING MEANS.
 APPLICATION FILED APR. 10, 1911.

1,017,710.

Patented Feb. 20, 1912.

2 SHEETS—SHEET 1.

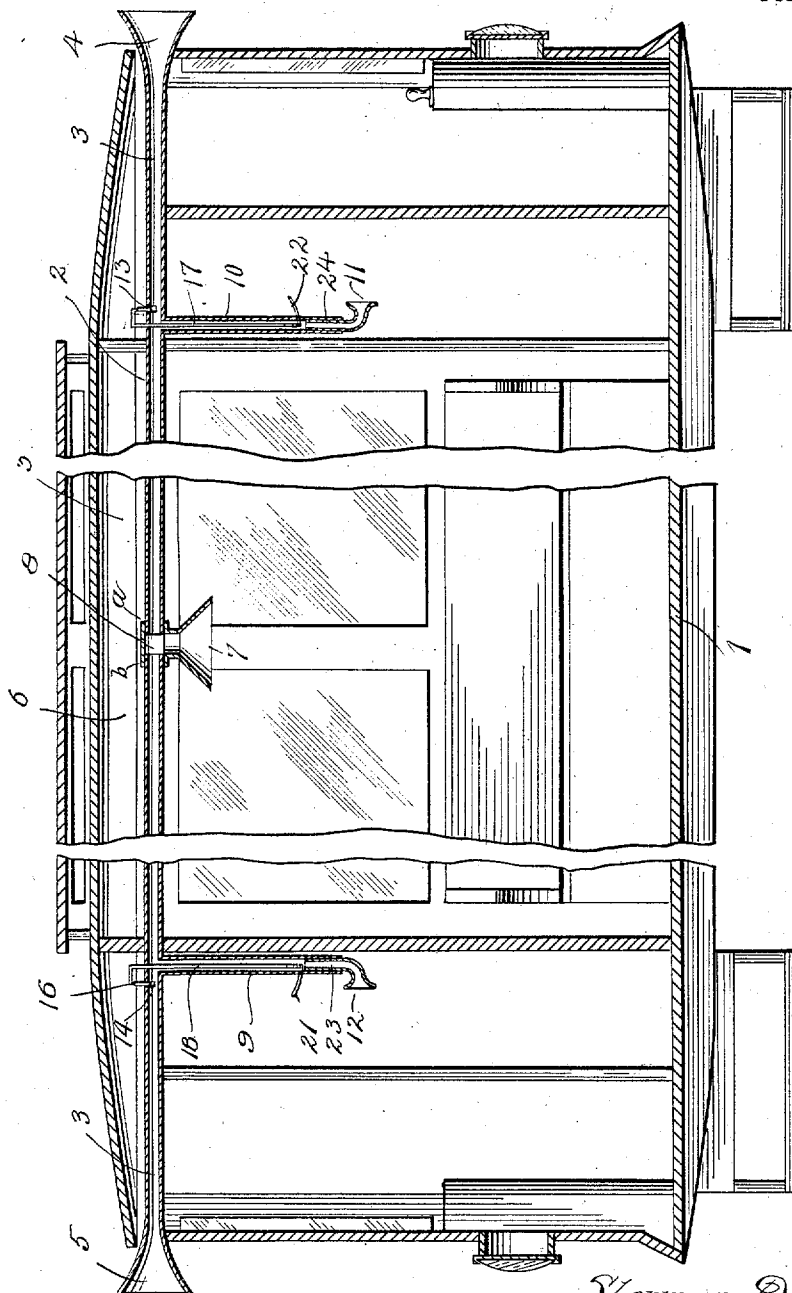


Fig. 1.

Witnesses
 G. D. Upham,
 M. P. McKee

By

Inventor
 Sherman D. Upham

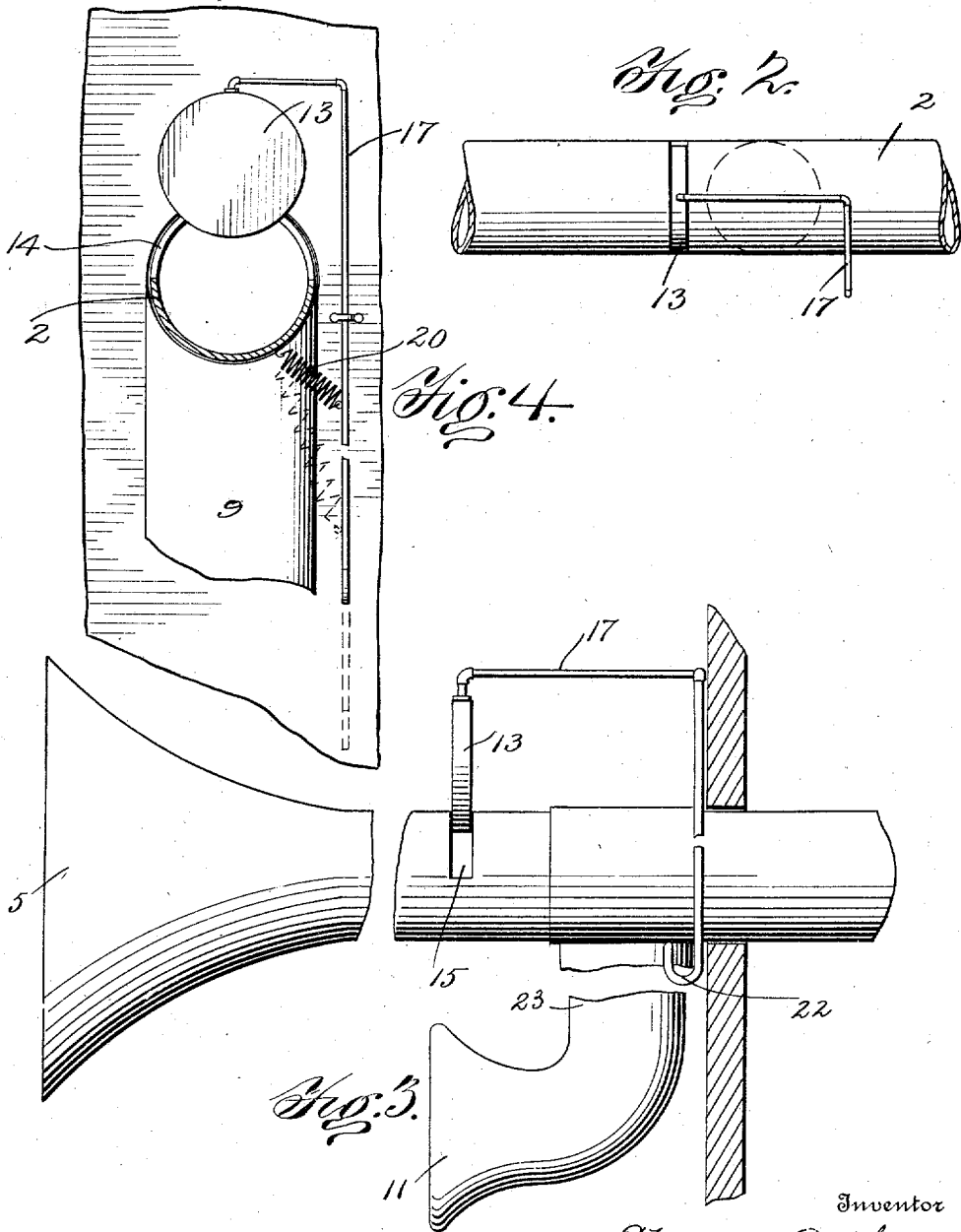
Alex. J. Meddison, Attorney

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SHERMAN D. UPHAM, OF CHICAGO, ILLINOIS.

COMBINED VENTILATING AND STATION-ANNUNCIATING MEANS.

1,017,710.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed April 10, 1911. Serial No. 620,254.

To all whom it may concern:

Be it known that I, SHERMAN D. UPHAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Combined Ventilating and Station-Annunciating Means, of which the following is a specification.

This invention relates to improvements in a combined ventilating means and a station annunciating means and the object of the invention is to provide an inexpensive and effective means for ventilating railway cars in conjunction with a speaking tube and megaphone arrangement for announcing to passengers the streets or railway stations.

With the above and other objects in view, I have invented the device illustrated in the accompanying drawings in which,

Figure 1 is a longitudinal vertical sectional view of a street car partly broken away showing my invention therein. Fig. 2 is a fragmental view of a tube. Fig. 3 is an enlarged fragmental view showing a valve and sectional member, and Fig. 4 is an end view of Fig. 3 taken on line A—A.

Referring to the accompanying drawings 1 is a street car having a tube in ceiling 3 thereof and passing longitudinally there-through and having its ends 4 and 5 extending to the outside of the car and flaring to a horn shape whereby a draft of air will be forced through the tube when the car is in motion and a natural draft will pass there-through when the car is at a standstill. A megaphone 6 connects with the center of the tube and its flaring mouth 7 projects downward in the middle of the car 1 whereby the fresh air passing through the tube is admitted to the car and the stale air therein sucked out. The air passing in at the front end of the tube strikes the deflector 8 and is thereby deflected into the car through the megaphone as indicated by the arrow *a*. The stale air in the car is drawn out through that part of the tube directed to the rear of the car as indicated by the arrow *b*.

Speaking tubes 9 and 10 connect with the opposite ends of the tube 2 and extend down and are provided with trumpets 11 and 12 whereby a conductor or other person may call out the station, the sound passing from the tube 9 or 10 and the tube 2 strikes the deflector 8 and passes through the megaphone thereby its balance is increased to

such an extent that it may be heard in all parts of the car.

In order that the sound waves of the conductor's voice may not exit through the end openings 4 and 5 of the tube 2, valves 13 and 14, operating in slots 15 and 16 and connected to the valve stems 17 and 18 are normally held out of the tube 2 by springs 19 and 20 which are adapted to be seated in the tube 2 by the conductor while speaking into the trumpets by drawing down on the hook 21 or 22. In very cold weather one end of the springs may be disconnected thus permitting the valves to remain seated in the tube 2, thus preventing the entrance of cold air thereinto.

By the use of this device the conductor may announce the names of the stations from the car platform and without having to open the car door and the announcement may be distinctly heard from all parts of the car and at the same time the device will keep the car thoroughly ventilated without causing a draft to blow upon the occupants of the car.

The mouthpieces 11 and 12 are connected to the tubes 9 and 10 by telescopic connections 23 and 24 whereby the mouthpieces may be raised or lowered according to the height of the person speaking therein.

I claim and desire to secure by Letters Patent:—

1. The combination of a ventilator and annunciator for cars, consisting of a tube extending straight through a car and having its ends flared, speaking tubes on the outer ends of said car connected to said tube and a megaphone centrally located on said tube and means for closing said tube between said flared ends and said speaking tubes.

2. The combination of a ventilator and annunciator for cars, consisting of a tube extending straight through a car and having its ends flared, speaking tubes on the outer ends of said car connected to said tube and a megaphone centrally located on said tube and means for closing said tube between said flared ends and said speaking tubes, said means consisting of valves adapted to be lifted from said tube, and means for lifting said valves.

3. The combination of a ventilator and annunciator for cars, consisting of a tube extending straight through a car and having its ends flared, speaking tubes on the

outer ends of said car connected to said tube and a megaphone centrally located on said tube and means for closing said tube between said flared ends and said speaking tubes, said means consisting of valves adapted to be lifted from said tube, means for lifting said valves, said speaking tubes having telescopic ends.

4. The combination of a ventilator and annunciator for cars, consisting of a tube extending straight through a car and having its ends flared, speaking tubes on the outer ends of said car connected to said tube and a megaphone centrally located on said tube and means for closing said tube between said flared ends and said speaking tubes, said means consisting of valves adapted to be lifted from said tube, means for lifting said valves, said speaking tubes having telescopic ends, a deflector in said tube whereby it is centrally disconnected without closing either part thereof.

5. The combination of a ventilator and

annunciator for cars, consisting of a tube extending straight through a car and having its ends flared, speaking tubes on the outer ends of said car connected to said tube and a megaphone centrally located on said tube and means for closing said tube between said flared ends and said speaking tubes, said means consisting of valves adapted to be lifted from said tube, means for lifting said valves, said speaking tubes having telescopic ends, a deflector in said tube whereby it is centrally disconnected without closing either part thereof, said flared ends being on a line with said tube whereby in-rushing air may have an unobstructed passage therethrough.

In testimony whereof I affix my signature in presence of two witnesses.

SHERMAN D. UPHAM.

Witnesses:

Mrs. JOHN MOYER,
GEORGE J. SILBERMAN.