

No. 612,643.

Patented Oct. 18, 1898.

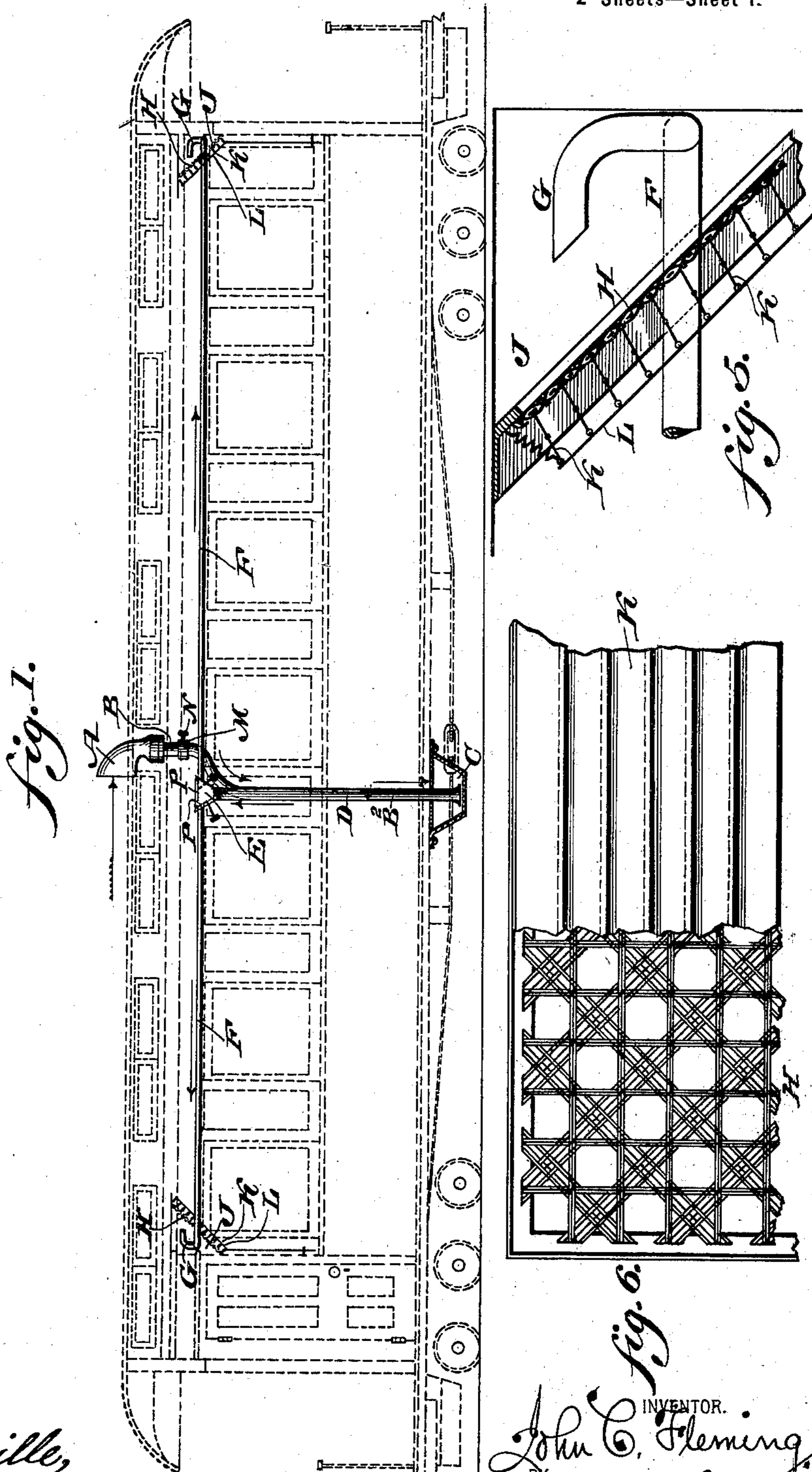
J. C. FLEMING.

VENTILATOR AND AIR SUPPLYING DEVICE FOR CARS.

(Application filed June 11, 1897.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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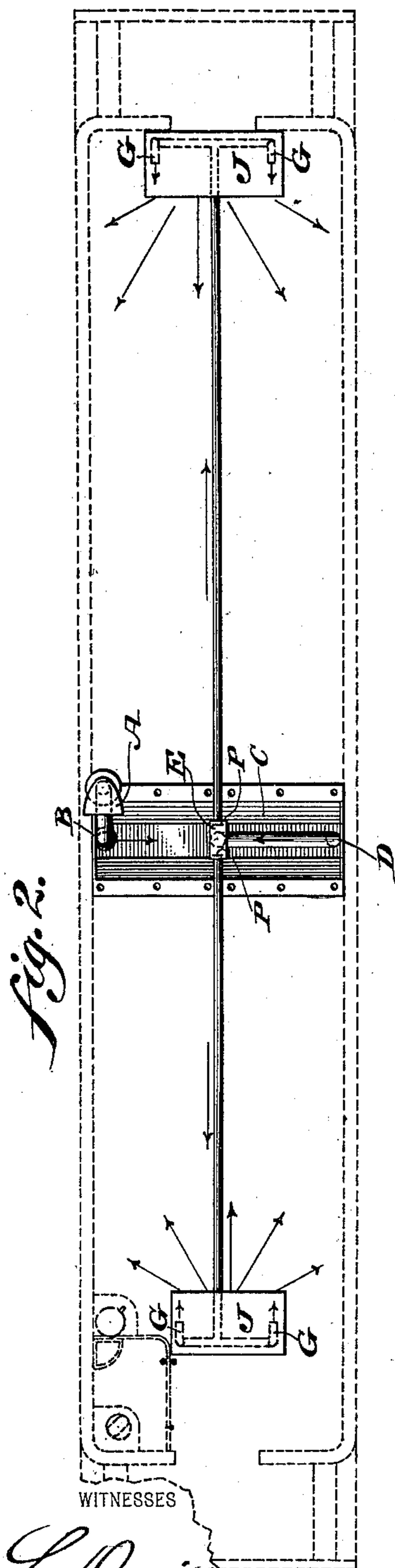
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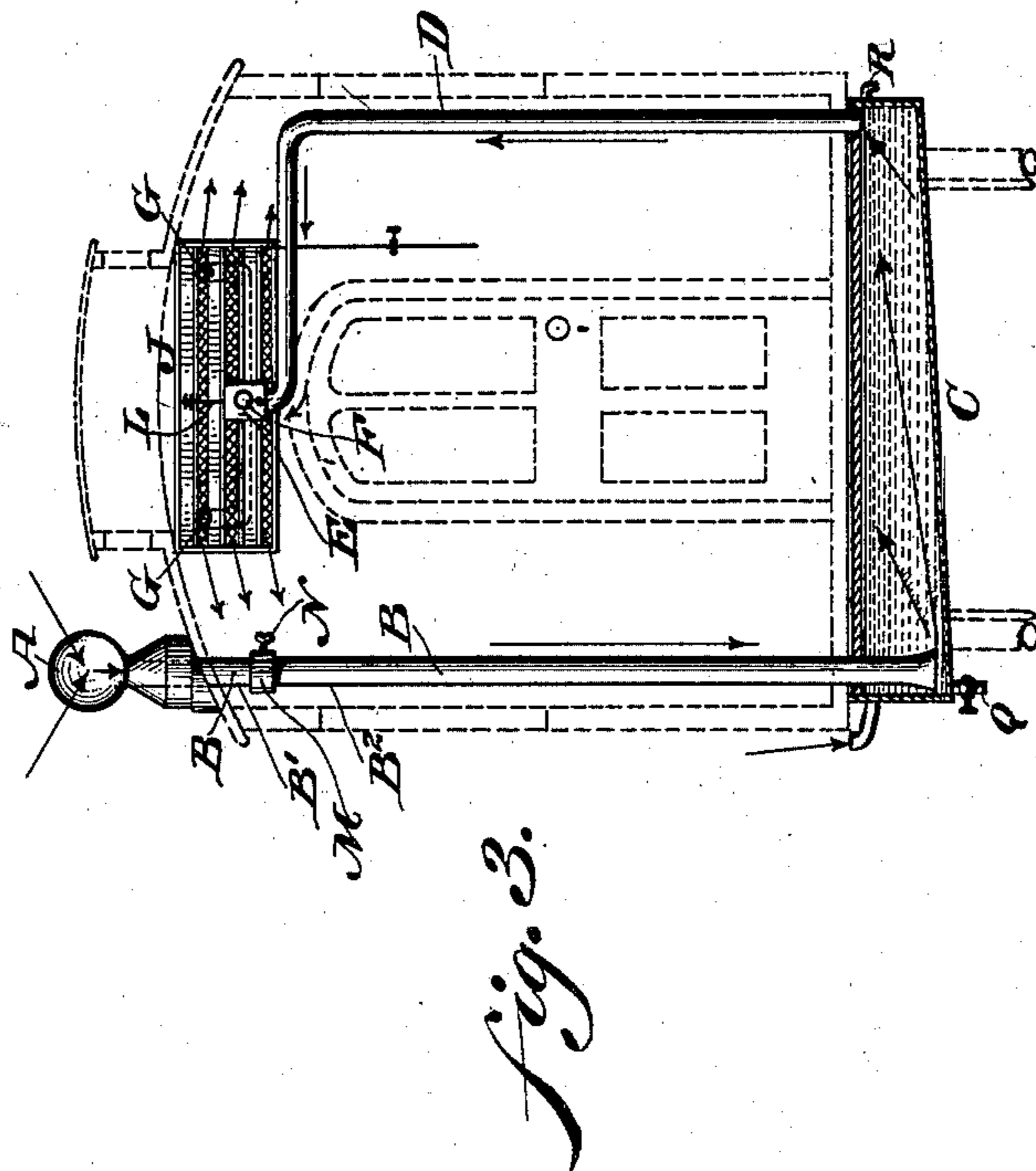
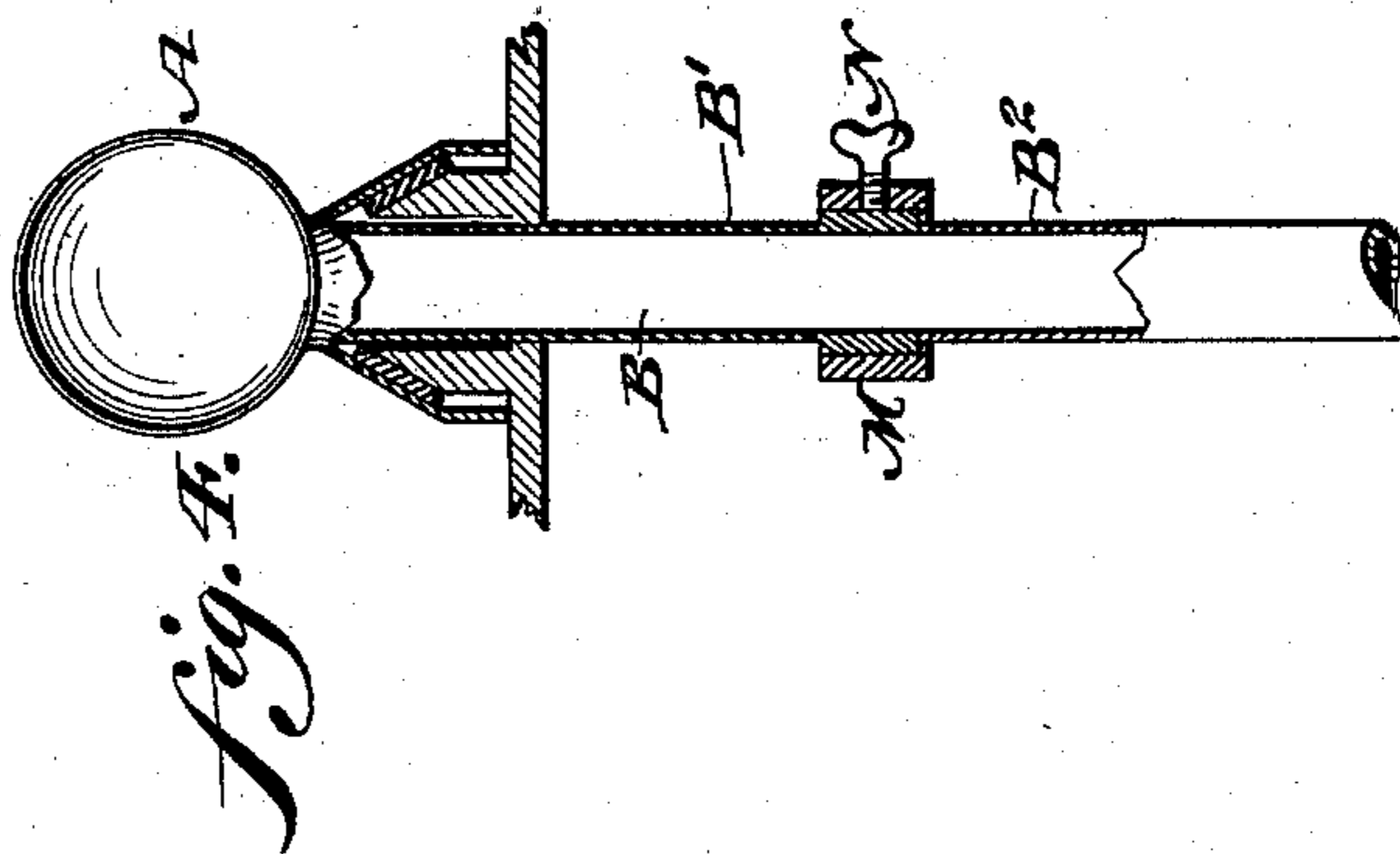
(No Model.)

2 Sheets—Sheet 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN C. FLEMING, OF PHILADELPHIA, PENNSYLVANIA.

VENTILATOR AND AIR-SUPPLYING DEVICE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 612,643, dated October 18, 1898.

Application filed June 11, 1897. Serial No. 640,298. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. FLEMING, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ventilators and Air-Supplying Devices for Cars, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to ventilators for cars; and it consists of the novel combination and arrangement of parts, as hereinafter set forth and claimed.

It also consists of a combination and arrangement of parts hereinafter set forth and claimed.

Figure 1 represents a side elevation of a car-ventilator and air-supplying device embodying my invention. Fig. 2 represents a top or plan view thereof. Fig. 3 represents an end view thereof. Fig. 4 represents a vertical section of a detached portion, on an enlarged scale. Fig. 5 represents a vertical section of another detached portion thereof. Fig. 6 represents a front view of the portion shown in Fig. 5.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a funnel which rises from the vertical pipe B and is open to the atmosphere, said pipe being properly supported in a car and communicating at top with said funnel and at bottom with the box or chamber C, which occupies a position in the present case below the floor of the car, said box containing a fluid into which said pipe dips.

D designates a vertical pipe which is connected at bottom with the box C and at top with the valve-chamber E, to which are attached the branch pipes F, which extend in horizontal directions to the ends of the car, where they open into the same and are deflected toward each other at G.

H designates screens, formed of lattice or open work, which are inclosed in the casings J in front of the open ends of the pipes F G, adjacent to which are the valves K, formed of slats pivotally mounted on the boxes J and connected with the rods L, whereby said valves may be opened and closed and set at

different angles, as most clearly shown in Fig. 5.

The pipe B is formed of sections B' B², connected by the coupling M and set-screw N, whereby the funnel A may be turned to present its open end to the direction in which the car is running.

In the chamber E are two valves P, which are adapted to close the pipes F, so that, according to requirements, one pipe may be placed in communication with the car and the other pipe cut off, or both pipes may be in communication with the car or closed, as desired.

The operation is as follows: The air entering the funnel A is directed into the pipe B and conveyed by the same into the box C, whose outlet is the pipe D. Consequently the air passes through the fluid in the box and is washed by the same, and the dust, &c., is trapped by said fluid. The air in its purified condition enters the pipe D, the chamber E, one of the branch pipes F, and is discharged at the open ends of one of the deflectors G against and through the screens H, whereby it is spread and then directed into the car at angles according to the position of the valves L, thus ventilating the car and supplying the same with air in a purified condition.

The fluid in the box C may be charged with salt, potash, and extract or preparation of pine or other material or medicament, so as to impart to the air the nature of said ingredients, the pine impregnating the air with beneficial effects of air of mountains or pine forests and the salt that of the sea, &c., while if chlorids and similar ingredients are used the car may be disinfected by the use of the same, it being evident that poisonous or deleterious matter in the air may be overcome or neutralized and the car supplied with purified air, to which the beneficial effects of the air of mountains, countries, forests, seas, &c., may be imparted when so desired.

The tank is provided with the draining-cock Q Q and overflow pipe or nozzle R for evident purposes.

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

1. A car-ventilator consisting of a tank adapted to contain a purifying material, a funnel with depending pipe leading into the lower part of said tank, a valve-chamber, a
5 pipe leading from the upper part of said tank upwardly to said valve-chamber, a pipe leading from said valve-chamber a casing at the discharge end of said pipe and a deflector with a screen for said casing at said discharge
10 end.

2. A ventilator and air-supplying device for a car consisting of a funnel, a vertical pipe to which said funnel is adjustably connected, a tank adapted to hold a purifying fluid, and
15 into one end of which the lower end of said pipe dips, a pipe leading upwardly from the opposite end of said tank, a valve-chamber into which the said latter-mentioned pipe leads, pipes leading from said valve-chamber
20 to opposite ends of a car and having ends deflected toward each other and inclined frames

facingsaid deflected end having screens thereon and provided with pivoted deflectors.

3. A car having intermediate of its ends and secured to its under side a purifying-
25 tank, an adjustable funnel extending outside of and above said car intermediate of its ends, a pipe leading downwardly from said funnel into said purifying-tank, a valve-chamber in the upper part of said car, a pipe lead-
30 ing from the upper part of said tank to said valve-chamber, pipes leading in opposite directions from said valve-chamber to the ends of said car their ends opening into casings on the car and deflectors adjacent to said cas-
35 ing receiving the air-discharge from said last-named pipes.

JOHN C. FLEMING.

Witnesses:

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