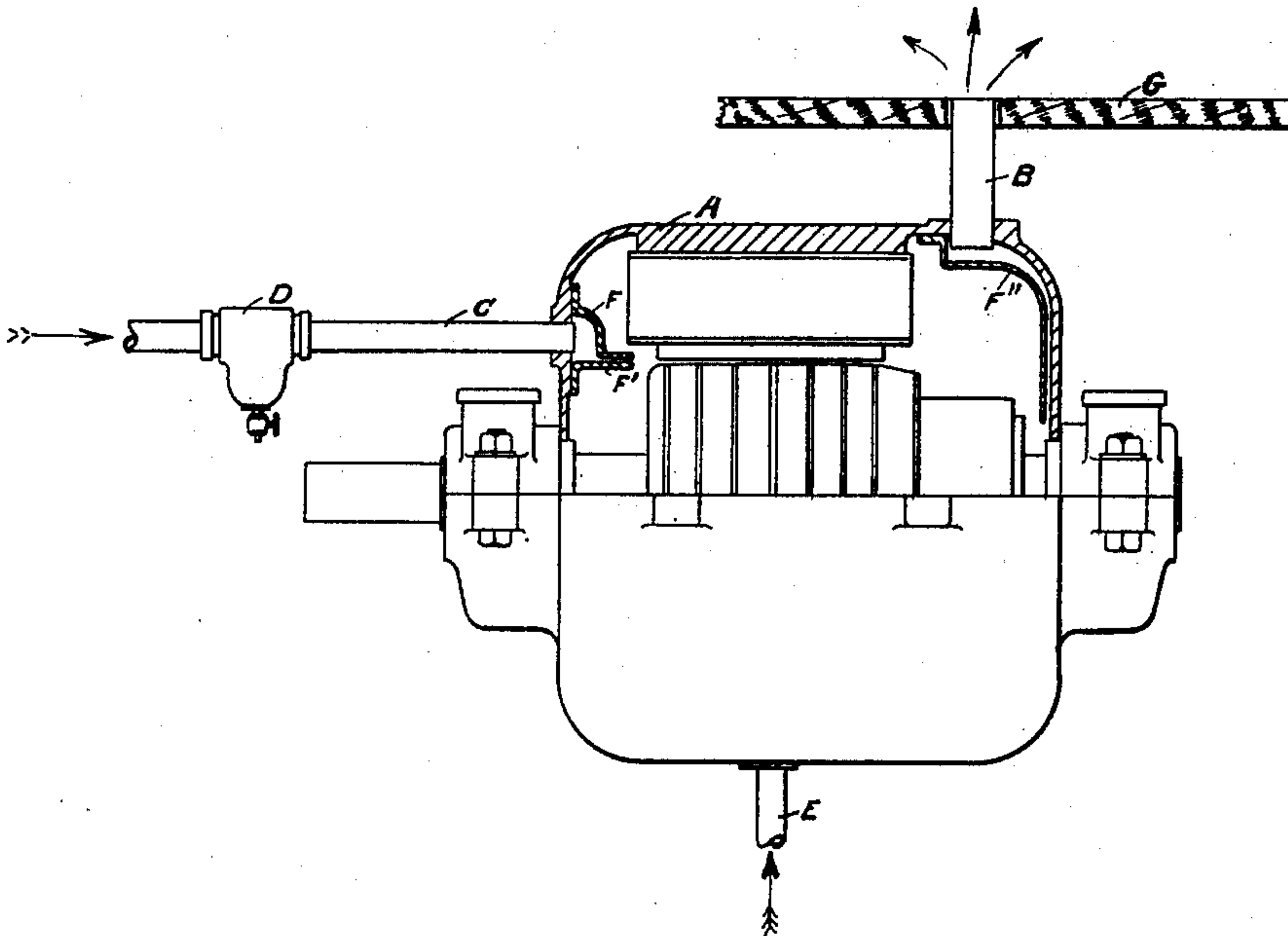


No. 721,877.

PATENTED MAR. 3, 1903.

J. H. FEDELER.
RAILWAY MOTOR VENTILATING SYSTEM.
APPLICATION FILED DEC. 6, 1902.

NO MODEL.



WITNESSES:

Wm. A. Clifford
F. E. Howell

INVENTOR

John H. Fedeler

UNITED STATES PATENT OFFICE.

JOHN H. FEDELER, OF SCHENECTADY, NEW YORK.

RAILWAY-MOTOR-VENTILATING SYSTEM.

SPECIFICATION forming part of Letters Patent No. 721,877, dated March 3, 1903.

Application filed December 6, 1902. Serial No. 134,175. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. FEDELER, a citizen of the United States, and a resident of Schenectady, in the county of Schenectady and State of New York, have invented a certain new and useful Railway-Motor-Ventilating System, of which the following is a specification.

My invention relates to an improved system of air-pipe connections in an electric car or locomotive where air-brakes and electric motors are used.

Heretofore the air after having been used in the air-brakes has been allowed to escape; and my invention consists in utilizing this exhausted air for cooling purposes, such as the inside of a railway-motor, the cylinders of the air-pump, or bearings.

My invention also includes the means by which this air is further used for heating and ventilating the car.

In the accompanying drawing, which forms a part of this specification, I have illustrated a railway-motor, of which the upper half is shown in section.

Pipe C is the exhaust-pipe of the air-brake coupled to a strainer D and then to the frame A of the motor. Plates F F' are guide-plates, and the object of which are to distribute and to direct the air to any part of the fields or armature where the most heat is generated. Plate F'' for the same purpose guides the air from any desirable part of the motor. Pipe B is a connection between the motor and the car, of which G is the floor, and as the body of the car does not rest on the same springs as the motor the connection between the inside of the motor and the car must be made flexible. The air as it enters the motor through pipe C is cold, and as it is directed against the warmest parts of the motor it takes up some of the heat and escapes through pipe B into the car, and is thus made to serve a double purpose.

Pipe E shows a connection to the bottom of the motor, so that the air may be forced through holes in the fields or through a hole in the shaft, as the design may require. This arrangement of connections may be reversed—that is, the suction-pipe of the pump may be connected to the frame, and thus cause a desirable ventilation. I therefore include in the scope of my invention all pipe connections between an air-brake system and a railway-motor for the purpose of ventilating or heating a car and also the connecting of the exhaust of an air-brake system for the cooling of any other mechanism—such as bearings, air-pump cylinders, &c.—and

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a railway-car, an electric motor thereon, a source of compressed air, pipes leading from said source to the motor and pipes from the motor to the interior of said car.

2. The combination with a railway-car and an electric motor thereon, of means for passing air over said motor, and a passage for the air thus heated from the motor to the interior of the car.

3. The combination with a railway-car and an electric motor thereon, of means for passing air through said motor and the passage between the motor and the inside of the car.

4. The combination of a railway-car, an electric motor thereon, a source of compressed air, pipes leading from said source to the motor and the baffle-plates or guide-plates on the inside of the motor.

Signed at Pittsfield, in the county of Berkshire and State of Massachusetts, this 4th day of December, A. D. 1902.

JOHN H. FEDELER.

Witnesses:

CLIFFORD H. DICKSON,
WM. H. CLIFFORD.