

E. M. HERR.
SANDING DEVICE.
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1,382,910.

Patented June 28, 1921.

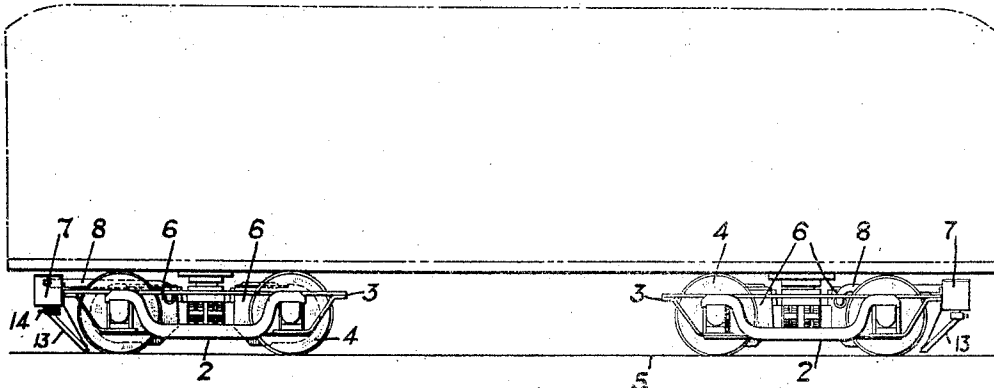


Fig. 1.

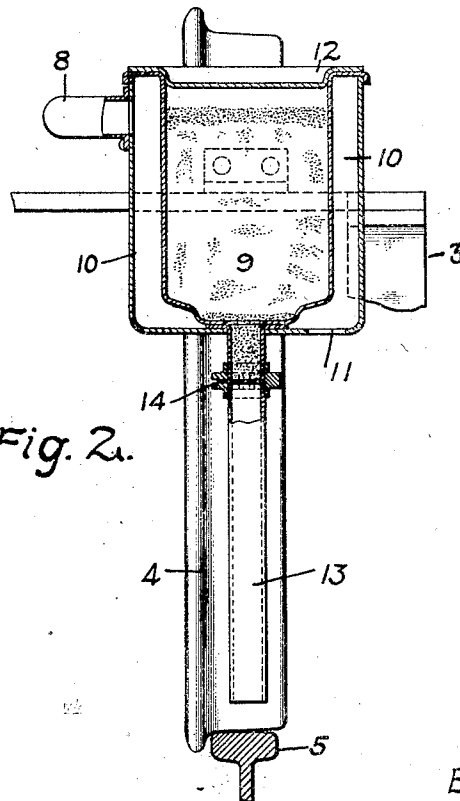


Fig. 2.

WITNESSES:
R. J. Adge.
W. M. McCoy.

INVENTOR
Edwin M. Herr.
BY
Herley & Co.
ATTORNEY

UNITED STATES PATENT OFFICE.

EDWIN M. HERR, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR TO WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

SANDING DEVICE.

1,382,910.

Specification of Letters Patent. Patented June 28, 1921.

Application filed April 5, 1916. Serial No. 89,144.

To all whom it may concern:

Be it known that I, EDWIN M. HERR, a citizen of the United States, and a resident of Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Sanding Devices, of which the following is a specification.

My invention relates to sanding devices and particularly to devices such as are employed to convey sand to the rails immediately in advance of the driving wheels of railway vehicles and the like.

The object of my invention is to utilize heat from electrical apparatus for drying sand used in connection with vehicles of the above-indicated class.

Heretofore, various methods have been proposed for heating the sand used in railway vehicles in order to dry the same and thus insure reliable operation of the sanding devices. Dampness of the sand causes the same to clog the delivery tubes and thus to prevent the proper operation of the sanding devices.

My invention provides means for heating the sand used in vehicles of the above-mentioned class by directing the fluid used for ventilating electrical apparatus upon the sand-containing reservoir and thereby drying the sand contained in the reservoir.

Figure 1 of the accompanying drawing is an elevational side-view of a railway vehicle embodying my invention, and Fig. 2 is an end view, partially in section and partially in elevation, of a portion of the vehicle and the associated sanding device shown in Fig. 1.

The vehicle shown in the drawing comprises a body portion 1 and a plurality of trucks 2 upon which the body portion is mounted. Each of the trucks 2 comprises a frame 3, a plurality of driving wheels 4 mounted upon the frame 3 and adapted to engage rails 5, a plurality of electric propelling motors 6 and an improved sanding device 7 that is adapted to supply sand to the rails immediately in advance of the driving wheels 4. The electric motors 6, or

other heat-generating electrical apparatus using fluid for the ventilation thereof, are each provided with a suitable duct 8 for conducting heated ventilating fluid from the motor to the sanding device 7. The sanding device 7 comprises a reservoir preferably having an inner or sand-containing compartment 9 and an outer or fluid-containing compartment 10 which is adapted to receive heated fluid from the duct 8 and to release the fluid into the atmosphere through a port 11, a suitable top 12 for the reservoir and a delivery tube 13 having a sand valve 14 which is adapted to be controlled from the vehicle and by which the flow of sand from the reservoir to the rails is regulated.

It will be understood that my invention resides in directing fluid, which has absorbed heat from electric apparatus and which would otherwise be directly released into the atmosphere, against a sand-containing reservoir and thus utilizing some of the heat by absorption for drying sand contained in the reservoir. The sanding device may not necessarily be provided with a fluid-confining compartment and may have the heated ventilating fluid blown directly against the sides of the sand-containing reservoir.

Although I have shown my invention in a simple and preferred form, it is not necessarily so limited and I desire, therefore, that only such limitations shall be imposed as are indicated in the appended claim.

I claim as my invention:

In a railway vehicle, the combination with an electric motor adapted to receive fluid for ventilating the same, of a track-sanding device external to said motor, and means comprising a casing surrounding said track-sanding device whereby the heated fluid discharged from said motor is utilized to dry the sand in said sanding device.

In testimony whereof, I have hereunto subscribed my name this 24th day of March, 1916.

EDWIN M. HERR.