

(No Model.)

E. REDMOND.

DUST FENDER FOR RAILWAY TRAINS.

No. 389,246.

Patented Sept. 11, 1888.

Fig. 1.

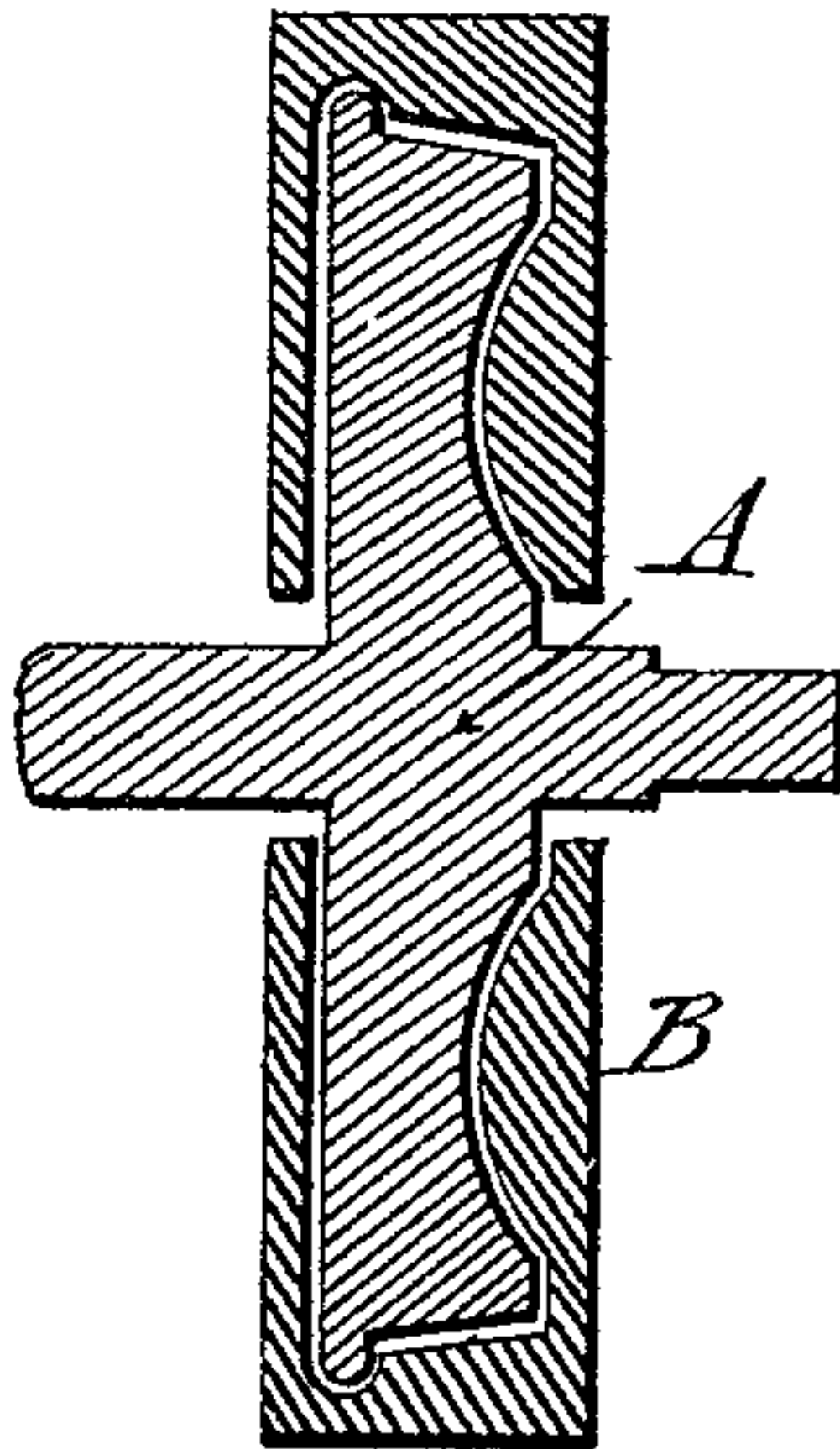
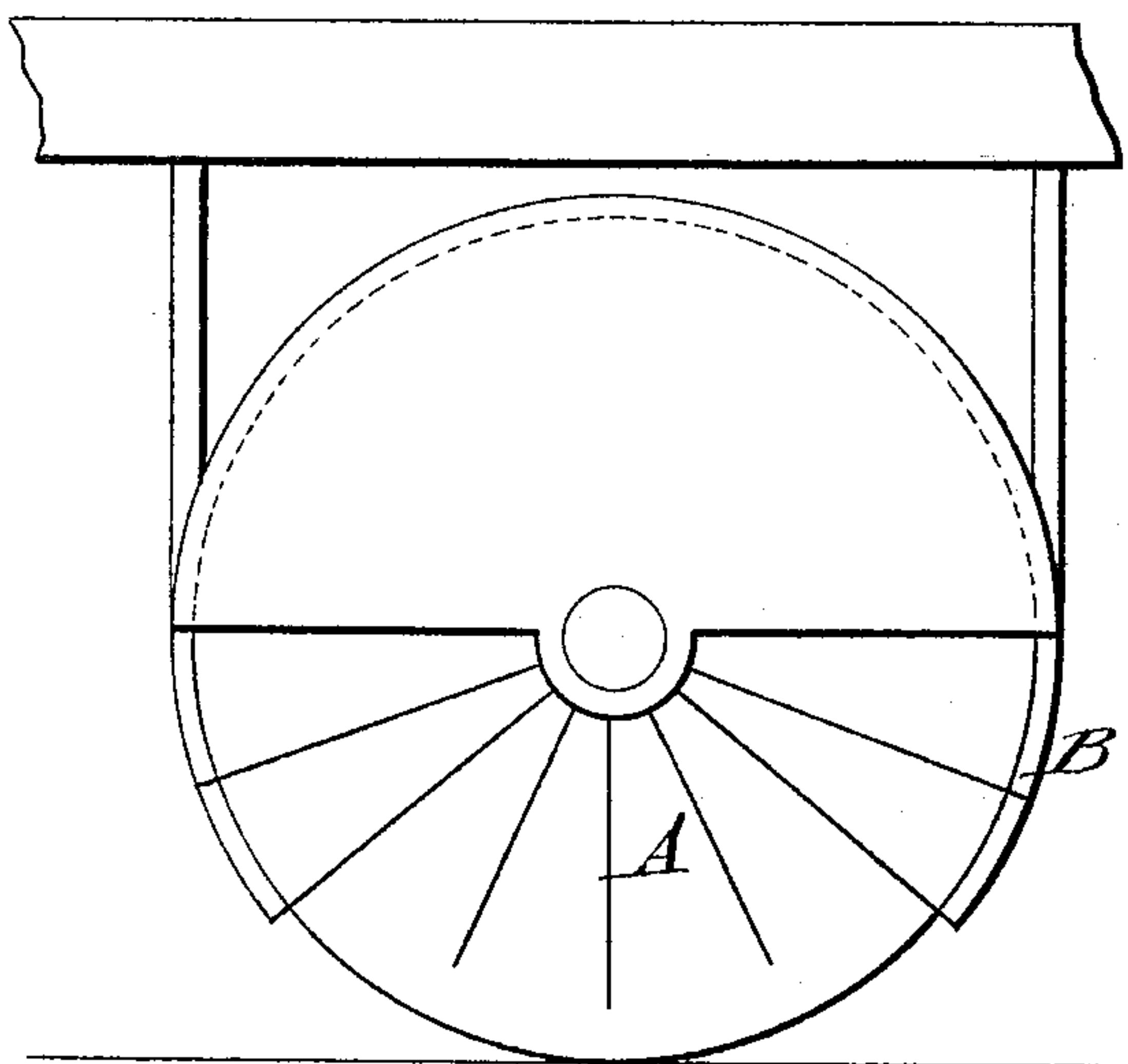


Fig. 2.



Witnesses.

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DUST-FENDER FOR RAILWAY-TRAINS.

SPECIFICATION forming part of Letters Patent No. 389,246, dated September 11, 1888.

Application filed February 11, 1888. Serial No. 263,749. (No model.)

To all whom it may concern:

Be it known that I, EDMOND REDMOND, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Appliances for Preventing Dust Arising from the Road-Bed During the Progress of a Railroad-Train, of which the following is a specification.

10 The current of air produced by the revolving car-wheel strikes down in front of the wheel and up behind. In front it disturbs the dust on the road-bed in conjunction with the tremor imparted to the ties by the motion of the train, and at the rear of the wheel it carries the dust upward and throws it off at the top of the wheel by centrifugal force. Each successive wheel in a train of cars adds to the amount of dust in the air until the rear end of a fast train is almost concealed from sight by dust on roads where the ballast is sand or earth. Every wheel generates a miniature cyclone. Heretofore canvas has been attached to the sides of passenger-cars, reaching nearly to the ground, for the purpose of preventing dust arising when the car was in motion; but the plan has not come into general use and does not give satisfactory results.

The purpose of my invention is to prevent a moving railroad-train from sucking up dust and snow from the road-bed, and thereby obviate the discomfort to passengers and reduce the friction and wear on the journals, movable parts of the locomotive, &c., caused by dust.

35 In the drawings, Figure 1 is a section of a

car-wheel, showing the guard B set around it. Fig. 2 is a side view of a wheel, A, and dust-guard B.

My invention consists of guards or air current breakers attached to the car or truck-frame, &c., and set around each wheel so close to it as to prevent any material current of air from following the revolution of the wheel. The guards or current-breakers consist of stationary plates or projections set radially or horizontally at the sides of the wheel and across the periphery, at suitable distances apart, the guards conforming to the profile of the wheel, so as to prevent as much as possible all circular motion of the air with the wheel. Whether set radially or horizontally, the guards should reach as near the bottom of the wheel as may be with safety, in order that the disturbance of the dust on the track may be prevented as much as possible. The absence of the cyclonic current that is generated by and follows an unguarded wheel will leave the dust on the road-bed undisturbed.

I claim—

In combination with a railroad-car, the air-current breaker consisting of one or several plates set horizontally or radially at intervals around the car-wheel, attached to a frame, the plane of each plate to be perpendicular, or nearly so, to the greatest diameter of the wheel, but not concealing the wheel from view.

EDMOND REDMOND.

Witnesses:

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